The following subject catalogs are also available from CRC Press. Visit www.crcpress.com/catalogs or contact your local sales representative for copies.

www.crcpress.com/catalogs

- Agriculture & Life Sciences
- Biomedical Sciences
- Business & Management
- Chemistry & Chemical Engineering
- Civil & Mechanical Engineering
- Computer Science, Information Technology, & Game Development
- Electrical Engineering
- Environmental Science & Engineering
- Ergonomics & Human Factors, Industrial Engineering & Manufacturing
- Food Science & Nutrition
- Forensic Science, Law Enforcement, & Homeland Security
- Mathematics & Statistics
- Medicine & Veterinary Medicine
- Physics & Materials Science

With More Than a Century of Publishing Excellence, as Science Evolves, So Do We

Find More at

www.crcpress.com

- Authoritative STM references that cover the latest developments and emerging trends
- Textbooks with ancillary materials that make teaching easier
- Digital content delivery that provides anywhere, anytime access in multiple formats

Go to www.crcpress.com for detailed information on every book.
Contents

ERGONOMICS & HUMAN FACTORS .............................................................................................................................. 2
  Cognitive Engineering & Decision Making .................................................................................................................. 2
  Communications ......................................................................................................................................................... 3
  Ergonomics & Psychology .......................................................................................................................................... 4
  Human Performance Modeling ................................................................................................................................... 6
  Human-Computer Interaction .................................................................................................................................... 8
  Product Design ............................................................................................................................................................ 11
  Work Design .............................................................................................................................................................. 12

INDUSTRIAL ENGINEERING & MANUFACTURING ...................................................................................................... 13
  Facility Management .................................................................................................................................................. 13
  Management .............................................................................................................................................................. 17
  Manufacturing & Industrial Engineering .................................................................................................................... 31
  Manufacturing & Processing ....................................................................................................................................... 35
  Operations Research .................................................................................................................................................. 40
  Plant Engineering ......................................................................................................................................................... 44
  Product Development ................................................................................................................................................. 45
  Production Systems ...................................................................................................................................................... 46
  Project Management ................................................................................................................................................... 48
  Quality Control & Reliability ...................................................................................................................................... 55
  Supply Chain Management / Logistics ...................................................................................................................... 65
  Systems Engineering .................................................................................................................................................. 69
  Textile Manufacturing ................................................................................................................................................. 76

OCCUPATIONAL HEALTH & SAFETY .......................................................................................................................... 81
  Industrial Hygiene ....................................................................................................................................................... 81
  Safety ........................................................................................................................................................................... 84

GENERAL REFERENCE .............................................................................................................................................. 88
  General .......................................................................................................................................................................... 88

Index ............................................................................................................................................................................... 90
Cognitive Neuroscience of Human Systems
Work and Everyday Life

Chris Forsythe, Huafei Liao, Sandia National Laboratories, Albuquerque, USA, Michael Christopher Stefan Trumbo and Rogelio E. Cardona-Rivera

Series: Human Factors and Ergonomics

While there have been tremendous advances in our scientific understanding of the brain, this work has been largely academic, and often oriented toward clinical publication. This book addresses the relationship between neurophysiological processes and the performance and experience of humans in everyday life. It samples the vast neuroscience literature to identify those areas of research that speak directly to the performance and experience of humans in everyday settings. The book explains the underlying basis for well-established principles from Human Factors, Ergonomics, and Industrial Engineering and Design.

CRC Press
Market: Ergonomics and Human Factors
September 2014: 6-1/8 x 9-1/4: 326pp
Hb: 978-1-466-57057-3: $129.95
ebook: 978-1-466-57058-0
* For full contents and more information, visit: www.crcpress.com/9781466570573

Cognitive Systems Engineering in Health Care

Edited by Ann M. Bisantz, University at Buffalo, New York, USA, Catherine M. Burns and Rollin J. Fairbanks

Cognitive systems engineering has been widely applied in the design of safety critical systems such as nuclear power, aviation, and military command-and-control. More recently, these methods are being applied to the design of health and medical systems, in order to improve health care quality, reduce errors and adverse events, and improve efficiencies. This book provides an overview of cognitive systems engineering principles in the context of healthcare, and uses state-of-the-art examples of applications in health care which can be used and adapted by health care practitioners interested in systematic engineering approaches to systems improvement.

CRC Press
Market: Ergonomics and Human Factors
December 2014: 6-1/8 x 9-1/4: 224pp
Hb: 978-1-466-58796-0: $99.95
ebook: 978-1-466-58798-4
* For full contents and more information, visit: www.crcpress.com/9781466587960

Browse and order online: www.crcpress.com
Complexity and the Human Experience
Modeling Complexity in the Humanities and Social Sciences
Edited by Paul A. Youngman, Washington and Lee University, Lexington, Virginia, USA and Mirsad Hadzikadic
With the increased adoption of natural science tools in economics, anthropology, and political science, to name only a few social scientific fields highlighted in this volume, quantitative methods in the humanities are becoming more common. This book offers a tour of quantitative analyses, models, and simulations of humanities and social science phenomena that have been historically the purview of qualitative methods. This is the first book of its kind that deals with computer modeling in both the humanities and the social sciences, and thus, simultaneously creates and explores new ground.

Mastering Technical Communication Skills
A Student’s Handbook
Peter Wide, Orebro University, Sweden
This handbook provides students with the communication skills they will need to further their careers. It provides self-assessments, a structure for planning, and the skills required for starting a career. The handbook highlights the main issues that have to be taken in consideration when planning a career. More essentially, it provides directions on how to acquire the skills and competences that are needed after completing education at the university.

Pan Stanford
Market: Psychology
May 2014: 6 x 9: 304pp
Hb: 978-9-814-46326-3: $149.95
eBook: 978-9-814-46327-0
* For full contents and more information, visit: www.crcpress.com/9789814463263

Pan Stanford
Market: Communications
October 2015: 6 x 9: 250pp
Hb: 978-9-814-36467-6: $49.95
eBook: 978-9-814-36468-3
* For full contents and more information, visit: www.crcpress.com/9789814364676
Application of Systemic-Structural Activity Theory to Design and Training

Gregory Z. Bedny, Research Associate at Evolute, Inc., Louisville, Kentucky

*Series: Ergonomics Design & Mgmt. Theory & Applications*

This book offers analytical methods for studying human work in ergonomics and psychology that are similar to ones utilized by the engineering sciences. SSAT offers not only new qualitative but also formalized and quantitative methods of analysis. This book will describe quantitative methods of task complexity and reliability assessment, application of queuing theory, etc. The book will also present new data in the area of efficiency of labor force and its evaluation.

CRC Press
Market: Ergonomics & Human Factors
December 2014: 6-1/8 x 9-1/4: 447pp
Hb: 978-1-482-25802-8 $129.95
*For full contents and more information, visit: www.crcpress.com/9781482258028

Applying Systemic-Structural Activity Theory to Design of Human-Computer Interaction Systems

Gregory Z. Bedny, Research Associate at Evolute, Inc., Louisville, Kentucky, Waldemar Karwowski, University of Central Florida, Orlando, USA and Inna Bedny, Evolute, LLC, Louisville, Kentucky, USA

*Series: Ergonomics Design & Mgmt. Theory & Applications* Human–Computer Interaction (HCI) is no longer limited to trained software users. Today people interact with various devices such as mobile phones, tablets, and laptops. How can such interaction be made more user friendly, even when user proficiency levels vary? This book explores methods for assessing the psychological complexity of computer-based tasks. It also presents methods of qualitative and quantitative analysis of exploratory activity during interaction with a computer.

CRC Press
Market: Ergonomics & Human Factors
December 2014: 6-1/8 x 9-1/4: 432pp
Hb: 978-1-482-25804-2 $129.95
*For full contents and more information, visit: www.crcpress.com/9781482258042

Bridging Research and Good Practices towards Patients Welfare

Proceedings of the 4th International Conference on Healthcare Ergonomics and Patient Safety (HEPS), Taipei, Taiwan, 23-26 June 2014

Edited by Yuh-Chuan Shih, National Defense University, Taipei, Taiwan and Sheau-Farn Max Liang, National Taipei University of Technology, Taipei, Taiwan, ROC


CRC Press
Market: Ergonomics & Human Factors
November 2014: 420pp
Hb: 978-1-138-02716-9 $159.95
Ebook: 978-1-315-73628-0
*For full contents and more information, visit: www.crcpress.com/9781138027169

Contemporary Ergonomics

Edited by Pierre Falzon, Conservatoire National des Arts et Métiers, Paris, France

The goal for ergonomics has always been to adapt work, work environments, and machines to man. But is this goal still sufficient? Does it satisfy the needs of the individual, or of societies and organizations as they operate now? This book answers these questions. The goals of ergonomics should be the development of individuals, work situations, and construct know-how competences. This book proposes a new view on ergonomics where the goal of ergonomics is to eliminate the factors and conditions that impede performance and development.

CRC Press
Market: Ergonomics and Human Factors
September 2014: 6-1/8 x 9-1/4: 294pp
Hb: 978-1-482-23562-3 $189.95
Ebook: 978-1-482-23563-0
*For full contents and more information, visit: www.crcpress.com/9781482235623

Contemporary Ergonomics and Human Factors 2014

Proceedings of the international conference on Ergonomics & Human Factors 2014, Southampton, UK, 7-10 April 2014

Edited by Sarah Sharples, University of Nottingham, UK and Steven Shorrock, University of New South Wales, Sydney, Australia

*Series: Contemporary Ergonomics* Presenting papers from the Ergonomics and Human Factors 2014 meeting and providing insight into current practice, presenting new research findings and forming an invaluable reference source. A wide range of topics are covered in these proceedings including workload, human capability, systems, product design, manufacturing systems, behaviour change, health and wellbeing, organisational culture, smart environments and sustainability, transport and musculoskeletal disorders; it will appeal to ergonomists, designers, production engineers, health and safety specialists, applied and industrial psychologists, and applied physiologists.

Taylor & Francis
Market: Ergonomics and Human Factors
April 2014: 512pp
Pb: 978-1-138-02635-3 $119.95
Ebook: 978-1-315-76545-7
*For full contents and more information, visit: www.crcpress.com/9781138026353

Contemporary Ergonomics and Human Factors 2015


Edited by Sarah Sharples, University of Nottingham, UK, Steven Shorrock, University of New South Wales, Sydney, Australia and Patrick Waterson, Loughborough University, Leicester, UK

*Series: Contemporary Ergonomics* Presenting papers from the Ergonomics and Human Factors 2015 meeting and providing insight into current practice, presenting new research findings and forming an invaluable reference source. A wide range of topics are covered in these proceedings including workload, human capability, systems, product design, manufacturing systems, behaviour change, health and wellbeing, organisational culture, smart environments and sustainability, transport and musculoskeletal disorders. It will appeal to ergonomists, designers, production engineers, health and safety specialists, applied and industrial psychologists, and applied physiologists.

Taylor & Francis
Market: Ergonomics and Human Factors
April 2015: 512pp
Pb: 978-1-138-02803-6 $139.95
Ebook: 978-1-315-68573-1
*For full contents and more information, visit: www.crcpress.com/9781138028036

Browse and order online: www.crcpress.com
Ergonomics in the Garment Industry

Edited by Gordana Colovic, College of Textile Design, Technology and Management, Belgrade, Serbia

Series: Woodhead Publishing India in Textiles

The book discusses the importance of ergonomics in the garment industry, with a detailed scientific analysis and examples from the industry. Application of ergonomics through the standardization of micro and macro environments in the garment industry provides an example of how design impacts the present and future processes; increases the efficiency and productivity of production; and improves the health, safety, and comfort of people in the working environment.
## Biomechanics

**Principles and Practices**

Edited by Donald R. Peterson, Texas A&M University, Texarkana, USA and Joseph D. Bronzino, Biomedical Engineering Alliance and Consortium (BEACON), Hartford, Connecticut, USA

This book draws on material from the biomechanics section of The Biomedical Engineering Handbook, Fourth Edition, and includes additional chapters containing highly relevant, cutting-edge material dealing with cellular mechanics. Edited by Donald R. Peterson and Joseph D. Bronzino, it brings together contributions by world-class experts in the field. Offering an overview of major research topics in biomechanics, this is a useful resource for practitioners, scientists, and researchers in biomechanics, as well as biomedical engineering graduate students studying biomechanics, biodynamics, human performance engineering, and human factors.

CRC Press

**Market:** Biomechanics
**December 2014:** 7 x 10: 405pp

Hb: 978-1-466-55962-2: $69.95

ebook: 978-1-466-55969-2: $69.95

* For full contents and more information, visit: www.crcpress.com/9781439870983

---

## Enhancing Surgical Performance

**A Primer in Non-technical Skills**

Edited by Rhona Flin, University of Aberdeen, Aberdeen, UK, George G. Youngson, University of Aberdeen, Aberdeen, UK and Steven Yule, University of Aberdeen, Aberdeen, UK

This book explains why non-technical skills are vital for safe and effective performance in the operating theatre. It provides a full account, with supporting empirical evidence, of the Non-Technical Skills for Surgeons (NOTSS) system and behavioural rating framework, which helps identify the key elements involved in successful operative surgery. The system can be used for training, assessment, self-reflection and event analysis. Because it encourages surgeons to reflect on their own performance and behaviour, the book is suitable for surgeons in all specialties and at all levels.

CRC Press

**Market:** Surgery
**July 2015:** 7 x 9: 2/3: 223pp

Hb: 978-1-482-24632-2: $79.95
ebook: 978-1-482-24633-9

* For full contents and more information, visit: www.crcpress.com/9781482246322

---

## Evaluation of Human Work, Fourth Edition

Edited by John R. Wilson and Sarah Sharples, University of Nottingham, UK

Written by experts with real-world experience in applying ergonomics methodology in a range of contexts, this book explores ergonomics/human factors from a “doing it” perspective. More than a cookbook of ergonomics methods, it encourages readers to think about which methods they should apply, when, and why. This book provides a guide to what ergonomics/human factors can offer to industry, business, or human service professionals, and also acts as a reference for practicing ergonomics. All chapters have been revised and several new ones have been added.

CRC Press

**Market:** Ergonomics & Human Factors
**April 2015:** 7 x 10: 103pp
ebook: 978-1-466-55962-2: $69.95


* For full contents and more information, visit: www.crcpress.com/9781466559615

---

## Human Factors in Lighting, Third Edition

Edited by Peter Robert Boyle, Canterbury, Kent, UK

The availability of electric lighting has changed the lives of people the world over, yet as a major user of electricity it has come under increasing scrutiny in recent years. This third edition of a bestseller restores some balance to the discussion by examining the ways in which people interact with lighting. These interactions influence the ability to perform visual tasks; the perception of people, objects and spaces; human comfort and behaviour as well as human health and safety. It is only by understanding how to use light to achieve these ends, that lighting can be provided effectively and efficiently, to the benefit of all.

CRC Press

**Market:** Ergonomics & Human Factors
**April 2014:** 6-1/8 x 9-1/4: 703pp

Hb: 978-1-466-51185-9: $79.95
ebook: 978-1-466-51184-2: $79.95

* For full contents and more information, visit: www.crcpress.com/9781466511842

---

## Human Thermal Environments

The Effects of Hot, Moderate, and Cold Environments on Human Health, Comfort, and Performance, Third Edition

Edited by Ken Parsons, Loughborough University, Leicestershire, UK

The third edition of this bestseller will continue to be the standard text for the design of environments for humans to live and work safely, comfortably, and effectively, and for the design of materials which help the same people cope with their environments. This book covers hot, moderate, and cold environments, and defines them in terms of six basic parameters: air temperature, radiant temperature, humidity, air velocity, clothing worn, and the person’s activity. It focuses on the principles and practice of human response, which incorporates psychology, physiology and environmental physics with applied ergonomics.

CRC Press

**Market:** Ergonomics & Human Factors
**April 2014:** 6-1/8 x 9-1/4: 630pp

Hb: 978-1-466-59599-6: $112.95
ebook: 978-1-466-59599-6: $112.95

* For full contents and more information, visit: www.crcpress.com/9781466595996

---

---
Intelligent Adaptive Systems
An Interaction-Centered Design Perspective
Ming Hou, Simon Banbury, Looking Glass HF and Université Laval and Catherine Burns
A synthesis of recent research and developments on intelligent adaptive systems from the HF (human factors) and HCI (human-computer interaction) domains, this book provides integrated design guidance and recommendations for researchers and system developers. It addresses a recognized lack of integration between the HF and HCI research communities, which has led to inconsistencies between the research approaches adopted, and a lack of exploitation of research from one field by the other. The book establishes design guidance through the review of conceptual frameworks, analytical methodologies, and design processes for intelligent adaptive systems.
CRC Press
Market: Ergonomics and Human Factors
December 2014: 6-1/8 x 9-1/4: 331pp
Hb: 978-1-466-51724-0: $129.95
ebook: 978-1-466-51725-7
* For full contents and more information, visit: www.crcpress.com/9781466517240

Sports Technology and Engineering
Edited by Qi Luo, School of Sports Engineering and Information Technology, Wuhan University of Sports, Wuhan, China
Series: Advances in Sports Engineering and Technology
The 2014 Asia-Pacific Congress on Sports Technology and Engineering (STE 2014) was held in Singapore, December 8-9, 2014. STE2014 was a comprehensive conference focused on various aspects of advances in Sports Technology and Engineering. Topics covered by the contributions to this proceedings volume include but are not limited to Sports Science, Computer Science, Computer Science in Sports, and Sports Engineering.
CRC Press
Market: Sports Technology
May 2015: 354pp
Hb: 978-1-315-73448-4: $299.95
ebook: 978-1-315-73449-1
* For full contents and more information, visit: www.crcpress.com/9781138026988

TEXTBOOK
Nonlinear Analysis for Human Movement Variability
Edited by Nicholas Stergiou, University of Nebraska-Omaha, USA
This textbook gives engineering and other students the foundation they need in nonlinear analysis for studying movement variability in their practices. It introduces dynamical systems and time series and presents a wide variety of nonlinear tools such as Lyapunov exponent, surrogation, entropy, fractal analysis, and several others. Each chapter provides examples from the literature and the author's lab on how the nonlinear analysis tools can be used to understand real-world applications. The book concludes with a chapter on specific case studies.
CRC Press
Market: Ergonomics and Human Factors
January 2016: 6-1/8 x 9-1/4: 408pp
Hb: 978-1-498-70332-1: $399.95
ebook: 978-1-498-70333-8
* For full contents and more information, visit: www.crcpress.com/9781498703321

Variability in Human Performance
Thomas J. Smith, University of Minnesota, Mendota Heights, USA, Robert A. Henning, University of Connecticut, Storrs, USA, Michael G. Wade, University of Minnesota, Minneapolis, USA and Thomas Fisher, University of Minnesota, Mendota Heights, USA
Series: Human Factors and Ergonomics
This book introduces a comprehensive framework for understanding human performance variability in terms of how human control of behavior is closely tied to design factors in the performance environment. Empirical evidence, as well as practical examples and application areas, introduced in support of this framework. The book provides suggestions on how individuals, groups, and organizations can significantly reduce variability in human performance that often leads to systems failures.
CRC Press
Market: Ergonomics & Human Factor
August 2014: 6-1/8 x 9-1/4: 389pp
Hb: 978-1-466-57971-2: $129.95
ebook: 978-1-466-57972-9
* For full contents and more information, visit: www.crcpress.com/9781466579712

2nd Edition
Safety Differently
Human Factors for a New Era, Second Edition
Sidney Dekker, Griffith University, Nathan Campus, Australia
The previous edition looked critically at the answers human factors would typically provide and compared/contrasted them with current research and insights at that time. Today, the unrelenting pace of technology change and growth of complexity calls for a different kind of safety thinking. This book explains how to turn safety from a bureaucratic accountability back into an ethical responsibility for those who do our dangerous work; how to embrace the human factor not as a problem to control, but as a solution to harness.
CRC Press
Market: Ergonomics and Human Factors
June 2014: 6-1/8 x 9-1/4: 312pp
Pb: 978-1-482-24199-0: $39.95
ebook: 978-1-482-24200-3
* For full contents and more information, visit: www.crcpress.com/9781482241990

Complimentary Exam Copy e-Inspection New in Paperback Companion Website
Adopting Biometric Technology
Challenges and Solutions
Ravindra Das, President, HTG Solutions, IL, USA
This book aims to increase the implementation rates of Biometric Technology in areas of the world where it has been least accepted. It discusses some of the barriers faced and gives practical solutions to overcoming those barriers, eventually showing how its application could be overall advantageous for stakeholders. The author looks at several specific applications of the technology and shows how they could be realistically utilized world-wide, challenging each of the issues faced and offering solutions in overcoming the hurdles.
CRC Press
Market: Computer Science & Engineering
March 2016: 6-1/8 x 9-1/4: 240pp
Hb: 978-1-498-71744-1 $199.95
eBook: 978-1-498-71745-8
For full contents and more information, visit: www.crcpress.com/9781498717441

Assistive Technologies in Smart Environments for People with Disabilities
Edited by Bruno Bouchard
Ambient intelligence, when performed through assistive technologies in the smart home context, can transform and enhance the way people with disabilities perform their activities of daily living, activities that would otherwise be difficult for them to do. Impairments are so diverse that implementing complex technological solutions such as prediction of users’ activities represents a major challenge to universal design. This book fills the need for a reference that assists artificial intelligence researchers in designing smart environments for people with disabilities.
CRC Press
Market: Healthcare
May 2016: 6-1/8 x 9-1/4: 304pp
Hb: 978-1-498-72200-1 $179.95
eBook: 978-1-498-72201-8
For full contents and more information, visit: www.crcpress.com/9781498722001

Cross-Cultural Human-Computer Interaction and User Experience Design
A Semiotic Perspective
Jan Brejcha, Charles University in Prague, Czech Republic
This book describes patterns of language and culture in human-computer interaction (HCI). Through numerous examples, it shows why these patterns matter and how to exploit them to design a better user experience (UX) with computer systems. It provides scientific information on the theoretical and practical areas of the interaction and communication design for research experts and industry practitioners and covers the latest research in semiotics and cultural studies, bringing a set of tools and methods to benefit the process of designing with the cultural background in mind.
CRC Press
Market: Ergonomics & Human Factors
February 2015: 6-1/8 x 9-1/4: 200pp
Hb: 978-1-498-70257-7 $89.95
eBook: 978-1-498-70258-4
For full contents and more information, visit: www.crcpress.com/9781498702577

2nd Edition
Data Visualization
Principles and Practice, Second Edition
Alexandru C. Telea, University of Groningen, The Netherlands
This book explores the study of processing and visually representing data sets. Data visualization is closely related to information graphics, information visualization, scientific visualization, and statistical graphics. This second edition presents a better treatment of the relationship between traditional scientific visualization and information visualization, a description of the emerging field of visual analytics, and updated techniques using the GPU and new generations of software tools and packages. This edition is also enhanced with exercises and downloadable code and data sets.
CRC Press
Market: Computer Science & Engineering
September 2014: 7-1/2 x 9-1/4: 617pp
Hb: 978-1-466-58526-3 $89.95
eBook: 978-1-466-58527-0
Prev. Ed Hb: 978-1-568-81306-6
For full contents and more information, visit: www.crcpress.com/9781466585263

Compositional Interaction Design Thinking
Mikael Wiberg
This book is the first to be published on “Materiality of Interaction” in the field of human-computer interaction. While there have been a great number of papers published on this fast-growing subject, this book fills the need for a consistent, more theoretical look into the topic. In addition to serving as a unifying book in terms of theory, definition and presentations, this book also covers the growing interest in “smart materials” and the development of the internet of things.
CRC Press
Market: Ergonomics & Human Factors
June 2016: 6 x 9: 328pp
Hb: 978-1-498-71910-0 $99.95
eBook: 978-1-498-71911-7
For full contents and more information, visit: www.crcpress.com/9781498719100

Computational Intelligence in Industrial Application
Proceedings of the 2014 Pacific-Asia Workshop on Computer Science in Industrial Application (CIIA 2014), Singapore, December 8–9, 2014
Edited by Yanglv Ling, Wuhan Institute of Technology, China
These proceedings of the 2014 Pacific-Asia Workshop on Computational Intelligence in Industrial Application (CIIA 2014) include 81 peer-reviewed papers. The topics covered in the book include: (1) Computer Intelligence, (2) Application of Computer Science and Communication, (3) Industrial Engineering, Product Design and Manufacturing, (4) Automation and Control, Information Technology and MEMS.
CRC Press
Market: Industrial Engineering
July 2015: 446pp
Hb: 978-1-138-02818-0 $259.00
eBook: 978-1-315-68458-1
For full contents and more information, visit: www.crcpress.com/9781138028180

Browse and order online:
www.crcpress.com
Design and Applications of High Performance Supercomputers

Endong Wang

This book introduces High Performance Supercomputer (HPC) history and systematic classification, the most advanced HPC systems with the petaflops peak performance, the general rules to build a HPC system, and detailed overall design. It explains in depth the development of parallel computing application software, including the most advanced principles for heterogeneous parallel computing, and development, summarizes the HPC applications and outlines the characteristics of the application and methodology. Finally, the HPC development and realization are predicted.

CRC Press
Market: Computer Science & Engineering
June 2016: 6-1/8 x 9-1/4: 304pp
Hb: 978-1-498-74308-2 $199.95
eBook: 978-1-482-24350-5: $149.95

* For full contents and more information, visit: www.crcpress.com/9781482243505

Human–Computer Interface Technologies for the Motor Impaired

Dinesh K. Kumar, RMIT University, Melbourne, Australia and Sridhar Poosapadi Arjunan, RMIT University, Melbourne, Australia

Series: Rehabilitation Science in Practice Series

This book provides insight into the potential interface technologies between humans and computers or computerized machines that are suitable for people who do not have the control of their hands. The book describes the past, present, and future human computer interface (HCI) technologies and the applications of these to better the lives of people living with disabilities and also other applications such as computer gaming and defense. The limitations and current research activities of HCI technologies are highlighted as well.

CRC Press
Market: Healthcare
October 2015: 6-1/8 x 9-1/4: 186pp
Hb: 978-1-482-26266-7 $499.95
ebook: 978-1-482-26267-4

* For full contents and more information, visit: www.crcpress.com/9781482262667

2nd Edition · NEW EDITION


Edited by Woodrow Barfield, Associate Editor, Virtual Reality Journal, USA

The second edition of a bestseller, this book presents broad coverage of the emerging human-computer interface technologies which allow people to access information anywhere and at any time. There are many application areas for this technology, such as medicine, manufacturing, training, and recreation. Much of the new material in this edition focuses on the emerging display technologies which are far less cumbersome. Other new material will focus on applications and interface design issues.

CRC Press
Market: Ergonomics & Human Factors
July 2015: 6-1/8 x 9-1/4: 771pp
Hb: 978-1-482-24350-5: $149.95
ebook: 978-1-482-24351-2

* For full contents and more information, visit: www.crcpress.com/9781482243505

Information and Data Literacy

The Role of the Library

Edited by Joyce Hagen-McIntosh, Consultant, Freedom to Read Foundation, Chicago, Illinois, USA

In an age where data flows non-stop, across all geographic borders and accessible to many, the job of providing information literacy has become much more exciting, more complicated, and more necessary. Information and Data Literacy: The Role of the Library takes a comprehensive look at the changing role of today’s librarians and libraries in an increasingly tech-driven world. You’ll find the authors of this book represent public and academic libraries, countries around the globe, and differences of opinion as to the definition, purpose, charge, and success of providing information and data literacy.

Apple Academic Press
Market: Library & Information Science
December 2015: 6 x 9: 290pp
Hb: 978-1-771-88292-7: $129.95
ebook: 978-1-771-88393-4

* For full contents and more information, visit: www.crcpress.com/9781771882927

MINING USER GENERATED CONTENT

Edited by Marie-Francine Moeus, Katholieke Universiteit Leuven, Belgium, Juanzi Li, Tsinghua University, China and Tat-Seng Chua, National University of Singapore, Singapore

Series: Social Media and Social Computing

This volume is the first focused effort to compile state-of-the-art research and address future directions of UGC. It explains how to collect, index, and analyze UGC to uncover social trends and user habits. The book describes how to mine various media, including social annotation, music information retrieval, and networks, and discusses the mining and searching of different types of UGC, such as Wikis and blogs. It also presents many applications of UGC, including the use of UGC to answer questions and summarize information.

Chapman and Hall/CRC
Market: Ergonomics & Human Factors
January 2014: 6-1/8 x 9-1/4: 474pp
Hb: 978-1-466-55740-6: $124.95
ebook: 978-1-466-55741-3

* For full contents and more information, visit: www.crcpress.com/9781466557406

Complimentary Exam Copy  e-Inspection  New in Paperback  Companion Website
Self-Regulation in Activity Theory
Applied Work Design for Human-Computer and Human-Machine Systems

Gregory Z. Bedny, Research Associate at Evolute, Inc., Louisville, Kentucky, Waldemar Karwowski, University of Central Florida, Orlando, USA and Inna Bedny, Evolute, LLC, Louisville, Kentucky, USA
Series: Ergonomics Design & Mgmt. Theory & Applications
This book provides insight into the application of Applied and Systemic-Structural Activity Theory (SSAT) to the study of human work. There are a number of independent experimental methods and techniques for the study of Human-Computer Interaction and work analysis in general. However there is no integral and unified theory behind the application of these methods and techniques. Until now. This book presents a unified theory and analytical procedure for the study of human work and ergonomic design where predictive models of work behavior are the main tool for design process and work analysis.

CRC Press
Market: Ergonomics & Human Factors
December 2014: 6-1/8 x 9-1/4: 879pp
HB: 978-1-466-56933-1: $239.95
ebook: 978-1-466-56935-5
* For full contents and more information, visit: www.crcpress.com/9781466569331

Usability Testing of Video Games
Multidisciplinary Case Studies

Edited by Miguel Angel Garcia-Ruiz, Algoma University, Sault Ste. Marie, ON, Canada
Usability is about making digital products, such as video games, easier to use and matching them closely to player requirements, needs, and desires. Video games with high usability are generally played more efficiently and frequently and typically experience higher sales volumes. This book presents case studies describing academic research and practical hands-on experience related to usability testing methodologies and techniques with the aim of improving the human/computer interfaces of video games and players’ user experiences.

A K Peters/CRC Press
Market: Computer Game Development
May 2016: 7 x 10: 296pp
HB: 978-1-498-70640-7: $129.95
ebook: 978-1-498-70642-1
* For full contents and more information, visit: www.crcpress.com/9781498706407

Visualization Analysis and Design

Tamara Munzner, University of British Columbia, Vancouver, Canada
Series: AK Peters Visualization Series
This book provides a systematic, comprehensive framework for thinking about visualization in terms of principles and design choices. It features a unified approach encompassing information visualization techniques for abstract data, scientific visualization techniques for spatial data, and visual analytics techniques for interweaving data transformation and analysis with interactive visual exploration. Suitable for both beginners and more experienced designers, the book does not assume any experience with programming, mathematics, human–computer interaction, or graphic design.

A K Peters/CRC Press
Market: Computer Graphics/Visualization
December 2014: 7-1/2 x 9-1/4: 428pp
ebook: 978-1-466-50893-4
Pack - Book and Ebook: 978-1-466-50891-0: $79.95
* For full contents and more information, visit: www.crcpress.com/9781466508910
Human Factors of a Global Society
A System of Systems Perspective
Edited by Tadeusz Marek, Dept. of Neuroergonomics - Jagiellonian University, Krakow, Poland, Waldemar Karwowski, University of Central Florida, Orlando, USA, Marek Frankowicz, Dept. Of Theoretical Chemistry - Jagiellonian University, Krakow, Poland, Jussi Kantola, Dept. of Production - University of Vaasa, Finland and Pavel Zgaga, Dept. of Philosopht of Education and Education Policy - University of Ljubljana, Slovenia
Series: Ergonomics Design & Mgmt. Theory & Applications
This book explores the human factors issues in contemporary global society, with a focus on engineering, technology, business, science, and education from a system of systems viewpoint. It examines the human aspects related to contemporary societal developments in science, engineering, and higher education in the context of unprecedented progress in those areas. The book also discusses new paradigms for higher education, including education delivery, and administration in the coming of the Conceptual Age.
CRC Press
Market: Ergonomics and Human Factors
June 2014: 7 x 10 1177pp
Hb: 978-1-466-57286-7: $149.95
ebook: 978-1-466-57287-4
* For full contents and more information, visit: www.crcpress.com/9781466572867

Kansei Innovation
Practical Design Applications for Product and Service Development
Mitsuo Nagamachi, International Kansei Design Institute, Ltd. Co., Japan and Anitawati Mohd Lokman
Series: Industrial Innovation Series
Thanks to Apple and smart phone phenomenon, almost everyone has realized the emerging trend of user experience in design. Kansei engineering is the method to achieve that. This book defines Kansei and Kansei Engineering, then describes in detail the application and development process. It provides 30 case studies than underscore the concepts and demonstrate their practical application. Also included are examples of manufacturing, implication of worker-oriented philosophy, improvement of working postures, and one-man assembly systems.
CRC Press
Market: Ergonomics & Human Factors
February 2015: 6-1/8 x 9-1/4 129pp
Pb: 978-1-498-70682-7: $79.95
ebook: 978-1-498-70683-4
* For full contents and more information, visit: www.crcpress.com/9781498706827

2nd Edition - NEW EDITION
Usability Testing of Medical Devices, Second Edition
Michael E. Wiklund, P.E., UL-Wiklund, Concord, Massachusetts, USA, Jonathan Kendler, UL-Wiklund, Concord, Massachusetts, USA and Allison Y. Strochlic, UL-Wiklund, Concord, Massachusetts, USA
Since publication of the first edition, the FDA and other organizations and agencies have modified their regulations and expectations regarding how medical device manufacturers should approach usability testing. Reflecting these changes, this second edition provides updated guidance to readers with an interest or direct role in conducting a usability test of a medical device or system. Key updates include guidance pertaining to new FDA and IEC requirements, linking usability test tasks to risk analysis results, and analyzing root causes of use errors that occur during usability tests.
CRC Press
Market: Human Factors Design
January 2016: 6-1/8 x 9-1/4 455pp
Hb: 978-1-466-59588-0: $79.95
ebook: 978-1-466-59589-7
* For full contents and more information, visit: www.crcpress.com/9781466595880

2nd Edition
Light Sources, Second Edition
Basics of Lighting Technologies and Applications
Spiros Kitsinelis, University of France, Toulouse and Spyridon Kitsinelis, University of France, Toulouse
The second edition of this highly praised bestseller presents an overview of the three main technologies that have produced the numerous families of lighting products on the market today: electrical incandescence, electrical gas discharges, and semiconductor LEDs. This edition incorporates enhanced material on LEDs, a new chapter on matching lighting technology with the appropriate applications, a new chapter on light and health, and new case studies on indoor and outdoor lighting for security and safety.
CRC Press
Market: Lighting Technology
May 2015: 6-1/8 x 9-1/4 295pp
Hb: 978-1-482-24367-3: $149.95
ebook: 978-1-482-24369-7
* For full contents and more information, visit: www.crcpress.com/9781482243673
Designing Service Excellence

People and Technology

Brian Hunt, Mahidol University, Bangkok, Thailand and Toni Ivergard, Royal Institute of Technology, Sweden

The moment of truth—that instant when consumers experience and judge service quality—often decides business success. This research-driven book provides practical information on the design, management and organization of many different types of service industries, such as hotels, restaurants, banks and financial institutions, retail, and public sector service delivery. The book investigates the consumers experience and judgment on service quality, which ultimately determines the success or failure of the service. It considers people, usability, technology in the automation of high quality service.

* For full contents and more information, visit: www.crcpress.com/9781439840467
Above Ground Storage Tanks
Practical Guide to Construction, Inspection, and Testing
Sunil Pullaricot, Kuwait Oil Company
There has long been a need for a book that deals with all aspects subsequent to the design of storage tanks, explaining construction methodology to meet international standards. This book deals with every aspect that needs to be known upon receipt of an order to construct a storage tank at a site, in line with the requirements spelled out in international standards. It describes all activities that are to be carried out in a sequential manner, to ensure adequate quality for the constructed storage tank.

Automated Diagnostics and Analytics for Buildings
Edited by Barney L. Capehart, Ph.D., C.E.M., University of Florida, Gainesville, USA and Michael R. Brambley, Ph.D.
The purpose of this book is to share information with a broad audience on the state of automated fault detection and diagnostics for buildings applications; the benefits of those applications, emerging diagnostic technology, examples of field deployments, the relationship to codes and standards, automated diagnostic tools presently available, guidance on how to use automated diagnostics, and related issues.

Harry R. Taplin, Jr., P.E., Retired, Thousand Oaks, California, USA
The book has been upgraded with ten new checklists with over 100 ways to improve performance with 50 additional illustrations to communicate specific information about applying these technologies. The new checklists serve as a handy reference for designing an energy plan for your plants. Understanding that funds for energy come directly from your bottom line, this book has been designed for those tasked with increasing profits by reducing fuel costs while also reducing pollution and carbon footprints with attention to plant safety. The author presents many complex boiler-related topics in a simple and understandable way to simplify the decision-making process.

Creating a Strategic Energy Reduction Plan
Scott Offermann, CEM, CFM, MBIFM
This book outlines a simple and easy-to-follow process for auditing building operation to identify and reduce energy consumption. It explains the operational and cost-based opportunities, assessing the current conditions, analyzing the opportunities, and reporting the findings and documenting the plan. The book discusses the different building components and systems and how they affect energy efficiency and describes the operational energy efficiencies that can be gained by implementing no cost changes or alternate maintenance activities already funded. Capital improvement opportunities, and evaluating Return on Investment and life cycle replacement of equipment are also covered.

Energy and Analytics
BIG DATA and Building Technology Integration
John J. "Jack" McGowan, CEM, The McGowan Group
This book details how to leverage big data style analytics to manage and coordinate the key issues in both energy supply and demand. It presents a detailed explanation of the underlying systems technology that enables big data in buildings and how this technology provides added cost benefit from efficiency, onsite solar, and electricity markets. It is a primer on Building Automation Systems Standards, web services and electricity markets and programs plus a complete tutorial on energy analytics hardware, software, and Internet-enabled offerings that energy managers must understand today.

Edited by Kenneth E. Heselton, PE, KEH Energy Engineering, Joppa, Maryland, USA
This book was written specifically for boiler plan operators and supervisors who want to learn how to lower plant operating costs, as well as how to operate plants of all types and sizes more wisely. It is newly revised with guidelines for HRSGs, combined cycle systems, and environmental effects of boiler operation. Also included is a new chapter on refrigeration systems that addresses the environmental effects of inadvertent and intentional discharges of refrigerants.

3rd Edition
Harry R. Taplin, Jr., P.E., Retired, Thousand Oaks, California, USA
The book has been upgraded with ten new checklists with over 100 ways to improve performance with 50 additional illustrations to communicate specific information about applying these technologies. The new checklists serve as a handy reference for designing an energy plan for your plants. Understanding that funds for energy come directly from your bottom line, this book has been designed for those tasked with increasing profits by reducing fuel costs while also reducing pollution and carbon footprints with attention to plant safety. The author presents many complex boiler-related topics in a simple and understandable way to simplify the decision-making process.

Creating a Strategic Energy Reduction Plan
Scott Offermann, CEM, CFM, MBIFM
This book outlines a simple and easy-to-follow process for auditing building operation to identify and reduce energy consumption. It explains the operational and cost-based opportunities, assessing the current conditions, analyzing the opportunities, and reporting the findings and documenting the plan. The book discusses the different building components and systems and how they affect energy efficiency and describes the operational energy efficiencies that can be gained by implementing no cost changes or alternate maintenance activities already funded. Capital improvement opportunities, and evaluating Return on Investment and life cycle replacement of equipment are also covered.

Energy and Analytics
BIG DATA and Building Technology Integration
John J. "Jack" McGowan, CEM, The McGowan Group
This book details how to leverage big data style analytics to manage and coordinate the key issues in both energy supply and demand. It presents a detailed explanation of the underlying systems technology that enables big data in buildings and how this technology provides added cost benefit from efficiency, onsite solar, and electricity markets. It is a primer on Building Automation Systems Standards, web services and electricity markets and programs plus a complete tutorial on energy analytics hardware, software, and Internet-enabled offerings that energy managers must understand today.

Edited by Kenneth E. Heselton, PE, KEH Energy Engineering, Joppa, Maryland, USA
This book was written specifically for boiler plan operators and supervisors who want to learn how to lower plant operating costs, as well as how to operate plants of all types and sizes more wisely. It is newly revised with guidelines for HRSGs, combined cycle systems, and environmental effects of boiler operation. Also included is a new chapter on refrigeration systems that addresses the environmental effects of inadvertent and intentional discharges of refrigerants.
Energy Centered Management
A Guide to Reducing Energy Consumption and Cost

Marvin T. Howell

This book provides a guide to planning, developing, and implementing an energy reduction and management program. It is designed to achieve energy reduction deployment including top management for employees and onsite contractors. Energy reduction deployment (ERD) can be implemented by itself and render significant savings; however, for even greater savings, this book shows how to implement energy centered management systems (ECMS) which can be in congruence with ISO 50001. This book assists in finding energy waste and is designed to thoroughly cover ECMS and addresses what additions are necessary to have ECMS conform to ISO 50001 Energy Management System (EnMS).

Fairmont Press
Market: Energy Engineering
May 2016: 6 x 9: 265pp
Hb: 978-1-498-73692-3: $119.95
*For full contents and more information, visit: www.crcpress.com/9781498736923

Energy Resilient Buildings and Communities
A Practical Guide

Brian Levite, Hitachi Consulting, New York, New York, USA and Alex Rakow, Hitachi Consulting, Washington, District of Columbia, USA

This book is written as a practical guide to those interested in the pursuit of energy resilience at a local scale. Energy resilience is defined as the relative ability of an institution to carry out its mission during a shock to the energy system and approach the concept on the level of a single site occupied by a single community or institution. Examples are drawn from four key community types: military bases, healthcare campuses, educational campuses, and municipal governments. The book then describes a framework for developing an energy resilience plan that applies to each.

Fairmont Press
Market: Environmental Engineering
March 2015: 6 x 9: 200pp
Hb: 978-1-498-72959-8: $109.95
*For full contents and more information, visit: www.crcpress.com/9781498729598

Forest Value Chain Optimization and Sustainability

Edited by Sophie D’Amours, Universite Laval, Quebec, Canada

This book provides a global perspective on the various issues that the industry has to face as well as to provide some key global strategies that can help coping with those global challenges, such as collaboration, strategic value chain planning, and interdependency analyses. It presents literature reviews, strategic research orientations, assessment of some current key issues, and state-of-the-art methodologies.

CRC Press
Market: Environmental Science
June 2016: 6-1/8 x 9-1/4: 336pp
Hb: 978-1-482-25317-7: $129.95
ebook: 978-1-498-70486-1
* For full contents and more information, visit: www.crcpress.com/9781498704861

Green Power
Perspectives on Sustainable Electricity Generation

Edited by Joao Neiva de Figueiredo and Mauro F. Guillén, The Wharton School, University of Pennsylvania, USA

This book provides a systematic overview of the current state of green power and renewable electrical energy production around the world. Presenting eight in-depth case studies of green power production and dissemination, it describes the experiences and best practices of various countries on this topic of critical importance. The case studies provide readers with policy, business, and societal perspectives. The case studies illustrate the differences in each country’s natural endowments, cultural make-up, technological development, public-policy concerns, and institutional incentive structures.

Productivity Press
Market: Business & Management
February 2014: 6-1/8 x 9-1/4: 600pp
Hb: 978-1-466-59048-9: $109.95
ebook: 978-1-466-59049-6
* For full contents and more information, visit: www.crcpress.com/9781466590489

Lean Waste Stream
Reducing Material Use and Garbage Using Lean Principles

Marc Jensen

Although there are many books available on personal efforts to reduce garbage, none exist that focus on business garbage. Filling this need, this book describes how to use garbage analysis as a tool to identify the problems in process flow that produced the garbage. It also explains how to look downstream for options to reuse, repurpose, and recycle garbage to minimize landfill impact and costs. The text includes practical exercises with step-by-step instructions, as well as real-world examples that demonstrate how specific wastes have been dealt with profitably by various organizations.

Productivity Press
Market: Business & Management
September 2014: 6-1/8 x 9-1/4: 182pp
Pb: 978-1-482-25317-7: $29.95
ebook: 978-1-482-25317-9
* For full contents and more information, visit: www.crcpress.com/9781482253177

Browse and order online:
www.crcpress.com
**Lighting & Controls**

*Transitioning to the Future*

Stan Walerczyk, CLEP, HCLP, LC, Consultant

This book helps you make good lighting decisions and will be a very useful hands-on tool for anyone involved with engineering, maintenance, purchasing, specification, retrofits, remodels, and new construction for interior or exterior lighting applications. It gives very practical ways to maintain and update existing lighting systems and how to plan for the future. Key points include LED lighting, maintenance costs, achieving low power density, disadvantages of LED T8s, and human centric lighting.

Farran Press

**Market**: Electrical Engineering

March 2014: 6 x 9: 250pp

Hb: 978-1-482-23683-5: $119.95

*For full contents and more information, visit: www.crcpress.com/9781482236835*

---

**Management Science in Hospitality and Tourism**

*Theory, Practice, and Applications*

Edited by Muzaffer Uysal, Virginia Tech, Blacksburg, USA, Zvi Schwartz, University of Delaware, Newark, USA, and Ercan Sirakaya-Turk, University of Delaware, Newark, USA

**Series**: Advances in Hospitality and Tourism

This book goes beyond revenue management topics and presents a broad range of topics in management science applications as they relate to hospitality and tourism cases. It covers data analytics, e-commerce and technology, revenue and yield management, optimization methods, resource allocation, goal programming, dynamic programming, Markov chain models, trends analysis and detection, measuring potential and attractiveness in tourism development, performance measures, and use of indices in hospitality and tourism, and more. There is a heightened interest in these areas of business applications in today’s data-driven business environment, and this book addresses that interest.

Apple Academic Press

**Market**: Hospitality and Tourism

January 2016: 6-1/8 x 9-1/4: 475pp

Hb: 978-1-926-89567-3: $129.95

ebook: 978-1-482-22349-1

* For full contents and more information, visit: www.crcpress.com/9781926895673

---

**Managing Sustainability in the Hospitality and Tourism Industry**

*Paradigms and Directions for the Future*

Edited by Vinnie Jauhari

**Series**: Advances in Hospitality and Tourism

As the world’s natural resource base is limited, the world is looking for solutions in the domains of energy, water, alternate building materials, resource redevelopment, and sustainable livelihoods as well. The tourism and hospitality industry is a large deployer of natural and created resources. The book discusses constituents of the hospitality sector and analyzes each of those from a sustainability standpoint. The book includes case studies that are global in nature and that show how sustainable applications can be used and how concerns can be addressed.

Apple Academic Press

**Market**: Business Management

April 2014: 6 x 9: 522pp

Hb: 978-1-926-89572-7: $129.95
ebook: 978-1-18-22366-8

* For full contents and more information, visit: www.crcpress.com/9781926895727

---

**Sustainability, Social Responsibility, and Innovations in the Hospitality Industry**

Edited by H. G. Parsa, University of Denver, Colorado, USA, and Vijaya (Vi) Narapareddy

A reference on sustainability, social responsibility, and green practices in hospitality and tourism, this book presents innovative research methods in sustainability, state-of-the-art research by leading internationally recognized scholars. It provides an excellent source of quality research and several new ways to pursue research in sustainability. The book covers sustainability in the context of public policy and ethics, a popular topic with universal appeal to many disciplines beyond hospitality. It includes case studies and addresses sustainability issues from hotels, restaurants, tourism, travel, meetings, and others, with authors from all five continents.

Apple Academic Press

**Market**: Business Management

April 2015: 6-1/8 x 9-1/4: 370pp

Hb: 978-1-926-89569-7: $149.95
ebook: 978-1-482-22343-6

* For full contents and more information, visit: www.crcpress.com/9781926895697

---

**Restaurant Franchising**

*Concepts, Regulations and Practices, Third Edition*

Mahmood A. Khan, Pamplin College of Business, Falls Church, Virginia, USA

Since the late 1800s, when the idea was first conceived, the restaurant franchise has become a worldwide phenomenon. Opportunities abound for restaurateurs and food service professionals with the know-how to dive into and stay afloat in the growing, ever-changing sea of franchise operations. With the help of vignettes and case histories, this completely updated new edition explains how to operate a successful franchise, from developing a winning franchise concept to demystifying the legal intricacies of franchise agreements.

Apple Academic Press

**Market**: Business Management

October 2014: 7 1/2 x 9 1/2: 618pp

Hb: 978-1-926-89568-0: $149.95
ebook: 978-1-482-22340-6

* For full contents and more information, visit: www.crcpress.com/9781926895680

---

**Strategic Winery Tourism and Management**

*Building Competitive Winery Tourism and Winery Management Strategy*

Edited by Kyuho Lee, Sonoma State University, Rohnert Park, California, USA

**Series**: Advances in Hospitality and Tourism

The book presents cutting-edge knowledge and research related to strategic winery tourism and winery management. It highlights the major theories on strategic winery tourism and winery management and encompasses a variety of topics ranging from strategic winery tourism development to winery tasting room management. With chapters written by academic researchers and winery industry professionals, the purpose of the book is to explore the theoretical foundations of winery tourism and winery management.

Apple Academic Press

**Market**: Business Management

November 2015: 6 x 9: 340pp

Hb: 978-1-926-89567-3: $149.95
ebook: 978-1-482-22341-7

* For full contents and more information, visit: www.crcpress.com/9781926895673

---

**Winery Franchising**

*Theory, Practice, and Applications*

Edited by Mahmood A. Khan

Market: Hospitality and Tourism

May 2015: 6 x 9: 384pp

Hb: 978-1-926-89571-0: $129.95
ebook: 978-1-482-22347-7

* For full contents and more information, visit: www.crcpress.com/9781926895710

---

**Winery Franchising**

*Theory, Practice, and Applications - 3rd Edition*

Edited by Mahmood A. Khan

Market: Hospitality and Tourism

September 2015: 6 x 9: 270pp

Hb: 978-1-926-89568-0: $149.95
ebook: 978-1-482-22340-6

* For full contents and more information, visit: www.crcpress.com/9781926895680
Theory and Practice in Hospitality and Tourism Research

Edited by Salleh Mohd Radzi, Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Malaysia, Mohd Faeez Saiful Bakhtiar, Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Malaysia, Zurinawati Mohi, Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Malaysia, Mohd Salehuddin Mohd Zahari, Universiti Teknologi MARA, Selangor, MALAYSIA, Norzuwana Sumarjan, Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Malaysia, C.T. Chik, Universiti Teknologi MARA, Selangor, Malaysia and Faiz Izwan Anuar, Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Malaysia

Covering a comprehensive range of topics, including: Hospitality management; Hospitality & tourism marketing; Tourism management; Technology & innovation in hospitality & tourism; Foodservice & food safety; Gastronomy, the book will be of interest to postgraduate students, academics and professionals involved in the fields of hospitality and tourism.

CRC Press
Market: Tourism management
August 2014: 624pp
Hb: 978-1-138-02706-0: $229.00
eBook: 978-1-315-73735-5

* For full contents and more information, visit: www.crcpress.com/9781138027060
The "Success or Die" Ultimatum
Saving Companies with Blended, Long-Term Improvement Formulas
Steven Boris, Productivity Jigsaw, Ltd. and Daniel Boris, Daniel Boris & Associates Ltd, Canada
This book details a proven recipe for applying Lean, Six Sigma, and the Theory of Constraints in a manner that will maximize return on investment, cash flow, and net profits. The book presents a collection of stories that illustrate best practices for finding and fixing common issues found in today’s organizations. In-depth case studies illustrate a range of scenarios at a call center, pharmaceutical company, automotive parts supplier, and metal distributor and processor. The book covers simple, yet effective, statistics and explains how Minitab can be used to simplify and speed up data analysis.

The 12 Principles of Manufacturing Excellence
A Lean Leader’s Guide to Achieving and Sustaining Excellence, Second Edition
Larry E. Fast, Founder and President, Pathways to Manufacturing Excellence, LLC
Following in the tradition of its bestselling predecessor, The 12 Principles of Manufacturing Excellence, Second Edition outlines a comprehensive, proven process for delivering world-class performance while also creating the right culture through leadership, mentoring, and hourly employee involvement. While most books on continuous improvement focus on specific tools and methods, this book details a top-down strategy and proven process that Lean leaders can use to implement and sustain manufacturing excellence. It outlines a clear pathway to excellence via the 12 Principles of Manufacturing Excellence and provides a method for tracking progress.

The 5S Playbook
A Step-by-Step Guideline for the Lean Practitioner
Chris A. Ortiz, Kaizen Assembly, Inc., Bellingham, Washington, USA
Series: The LEAN Playbook Series
This new book in The LEAN Playbook Series supplies step-by-step guidelines on how to properly implement 5S (Sort, Set in Order, Scrub, Standardize, Sustain) and the visual workplace. This book is ideal for Lean practitioners and facilitators looking for a training tool and a guideline that can be used to facilitate successful 5S kaizen events. This playbook includes color images from actual 5S implementations. In addition to the images, a combination of short paragraphs and bulleted descriptions walk you through each step of effective 5S implementation.

5S Made Easy
A Step-by-Step Guide to Implementing and Sustaining Your 5S Program
David Visco, President — The 5S Store, LLC
For decades, 5S practitioners have struggled with exactly how to implement and sustain a 5S program in their workplaces. While there are many books available on the organization methods suggested by 5S, few provide easy-to-understand, step-by-step guidance on how to set up and sustain successful 5S implementations. 5S Made Easy fills this need. Written by an expert whose focus for the last decade has been nothing but 5S, the book supplies in-depth guidance on how to implement and sustain each of the 5S pillars—sort, set in order, shine, standardize, and sustain.

Agile Strategy Management
Techniques for Continuous Alignment and Improvement
Soren Lyngso, Lyngso Informatique
Series: ESI International Project Management Series
This book details what it takes to initiate, develop, implement, and govern a strategy that delivers the benefits expected by all stakeholders. It presents insights gained by the author’s organization over the last 25 years helping their clients succeed with their strategic initiatives. It illustrates wide-ranging situations where the author’s company helped clients reach important business objectives. Readers can use the book to look up examples that describe the various ways to use agile methods and techniques for critical business functions, including stakeholder identification, team building, project and program quality management, and procurement of resources.
Andy & Me and the Hospital
Further Adventures on the Lean Journey
Pascal Dennis, Lean Pathways Inc., Toronto, Canada
This book continues the fictional story follows Tom Pappas’s relationship with Andy Saito, a reclusive retired Toyota guru. Tom is now a consultant working with healthcare organizations and we see the power of Toyota Production System (TPS) in this setting. On this journey, the reader learns that TPS is more than just a collection of tools; it entails a new way of thinking and behaving.

Productivity Press
Market: Business & Management
May 2016: 6-1/8 x 9-1/4: 245pp
Pb: 978-1-498-74033-3: $19.95
Ebook: 978-1-498-74034-0
* For full contents and more information, visit: www.crcpress.com/9781498740333

The Basics of Process Improvement
Tristan Boutros, Senior Vice President, Technology Operations, Process Improvement & Chief Program Officer -- Warner Music Group, NY, USA and Jennifer Cardella
Implementing a high level of process maturity is the key that unlocks performance potential in organizations. Most companies, though, attempt to build organizational maturity without a formal framework, process or strategy. This book serves as a basic Process Improvement primer that focuses on building process improvement knowledge in a structured but easy to read format, leading to reader self-sufficiency, simple understanding, greater sustainability, higher quality and overall speed to value realization that improves one’s competitive advantage in the marketplace.

Productivity Press
Market: Business & Management
May 2016: 6-1/8 x 9-1/4: 192pp
Pb: 978-1-498-71988-9: $19.95
Ebook: 978-1-498-71989-6
* For full contents and more information, visit: www.crcpress.com/9781498719889

Applied Engineering Sciences
Proceedings of the 2014 AASRI International Conference on Applied Engineering Sciences, Hollywood, LA, USA
Edited by Wei Deng
Series: Advances in Engineering & Applied Science
This proceedings volume contains selected papers presented at the 2014 AASRI International Conference on Applied Engineering Sciences, held in Hollywood, LA, USA. Contributions cover the latest developments and advances in the field of Applied Engineering Sciences.

CRC Press
Market: Applied Engineering
January 2015: 194pp
Pb: 978-1-498-71248-4: $29.95
Ebook: 978-1-498-71249-1
* For full contents and more information, visit: www.crcpress.com/9781138026490

Beyond the Lean Office
A Novel on Progressing from Lean Tools to Operational Excellence
Kevin J. Duggan, Founder, The Institute for Operational Excellence
Beyond the Lean Office uses a compelling novel format to illustrate what it takes to create and sustain flow and Operational Excellence in the office. Readers learn as they follow the main character through his initial attempts to correct late responses to a primary customer and his evolution to an approach based on Operational Excellence. The story illustrates the day-to-day issues that most organizations face in their pursuit of Operational Excellence. Complete with reflection questions and pictures of actual offices in each chapter, the book includes links to websites with more information about the topic at hand.

Productivity Press
Market: Business & Management
February 2016: 6-1/8 x 9-1/4: 136pp
Pb: 978-1-498-71990-2: $29.95
* For full contents and more information, visit: www.crcpress.com/9781498712484

The Basics of Hoshin Kanri
Randy K. Kesterson, General Dynamics ATP, Charlotte, North Carolina, USA
This book uses an easy-to-follow story format to simplify and explain Hoshin Kanri. Supplying clear explanations of the steps of Hoshin Kanri, it advocates using Hoshin as an important tool for improving the existing planning and execution system while simultaneously moving the culture of the organization forward. The book provides readers with a new conceptual understanding of Hoshin Kanri as a powerful deployment system for strategic planning. Identifying a different path to success, it outlines a method for measuring overall business effectiveness that can help readers determine the focus of their corporate strategy.

Productivity Press
Market: Business & Management
August 2014: 6-1/8 x 9-1/4: 165pp
Pb: 978-1-482-21869-5: $19.95
Ebook: 978-1-482-21867-9
* For full contents and more information, visit: www.crcpress.com/9781482218695

Bringing Jobs Back to the USA
Rebuilding America's Manufacturing through Reshoring
Tim Hutzel, President, Tim Hutzel Advisory Board Services, Oxford, Ohio, USA and Dave Lippert, President, Hamilton Caster & Mfg. Co., Hamilton, Ohio, United States
A follow-up to Tim Hutzel’s previous book, Keeping Your Business in the USA: Profit Globally While Operating Locally, this book tells the stories of companies that have sent their jobs outside of the USA and the negative effects this had on the quality of their products and services, employees, supply chain providers, and customers. The book reveals the motivation these companies had to off-shore their jobs and the errors of omission they made by not understanding the true cost of offshoring.

Productivity Press
Market: Business & Management
June 2014: 6-1/8 x 9-1/4: 245pp
Pb: 978-1-466-55756-7: $49.95
Ebook: 978-1-482-28352-8
* For full contents and more information, visit: www.crcpress.com/9781466557567
Building a Global Learning Organization
Using TWI to Succeed with Strategic Workforce Expansion in the LEGO Group

Patrick Graupp, TWI Institute, Liverpool, New York, USA, Gitte Jakobsen and John Vellema, Business Through People, Kolding, Denmark

This book describes how a multinational company developed a global structure for learning around the TWI program in order to create and sustain standardized work across multiple language and cultural platforms. Shingo Prize-winning author Patrick Graupp collaborates with two practitioners who performed the planning and implementation of LEGO’s worldwide Learning Organization. Complete with the organization and implementation models used by the LEGO Group, this book describes the critical elements that made the implementation a success as well as the stumbling blocks encountered and how they were overcome.

Productivity Press
June 2014: 7 x 10: 237pp
Ps: 978-1-482-21363-8: $49.95
ebook: 978-1-498-70064-1
* For full contents and more information, visit: www.crcpress.com/9781482213638

Business Excellence
Exceeding Your Customers’ Expectations Each Time, All the Time

Suresh Patel, Indian Institute of Management, Vastrapur, Ahmedabad, Gujarat, India

An organization seeking to sustain and continually improve its competitive performance over many years must have a strategy – a Business Excellence Strategy. This book guides and illustrates the strategic journey to excellence, from major initiatives through everyday improvement programs, and helps the reader achieve of important strategic objectives and goals. This business excellence program will unite employees, internal and external customers, and suppliers through a common set of goals. It will help your organization improve at a pace that will ouperform the competition and will elevate your company’s reputation and marketplace.

Productivity Press
Market: Business & Management
June 2016: 6-1/8 x 9-1/4: 176pp
Hb: 978-1-498-75124-7: $49.95
ebook: 978-1-498-75125-4
* For full contents and more information, visit: www.crcpress.com/9781498751247

Building Network Capabilities in Turbulent Competitive Environments
Business Success Stories from the BRICs

Paul Hong, University of Toledo, Ohio, USA and YoungWon Park
Series: Resource Management
Brazil, Russia, India, and China (BRIC) are among the largest and fastest-growing economies in the world. This book presents strategies for recognizing the challenges and optimizing the opportunities for building network capabilities and competitive advantage within the context of these emerging markets. It provides a thorough review of the literature and unparalleled abundance of fascinating case studies featuring Japanese, Korean, and indigenous business examples. The information is presented within a fully formulated theoretical framework of technological competence, customer competence, and linkage competence, as well as covering the concepts of product architecture and supply chain management.

CRC Press
Market: Business Management / Supply Chain Management
December 2014: 6-1/8 x 9-1/4: 244pp
Hb: 978-1-466-51575-8: $79.95
ebook: 978-1-466-51576-5
* For full contents and more information, visit: www.crcpress.com/9781466515758

Card-Based Control Systems for a Lean Work Design
The Fundamentals of Kanban, ConWIP, POLCA and COBACABANA

Matthias Thurer, Jinan University, Zhuhai, Guangdong, People’s Republic of China, Mark Stevenson, Lancaster University, United Kingdom and Charles Protzman, Business Improvement Group, LLC., Towson, Maryland, USA

In the past, many shops have simplified their production control by using simple card-based control systems such as Kanban and Constant Work-in-Process. These systems provide a simple, visual approach to controlling production on the shop floor. However, many shops struggle with failed implementations or below expected results which can be attributed to missing fit between the actual control problem and the solution applied. This book starts with the problem then recommends the appropriate solution. The book discusses traditional card-based control systems and is the first to discuss COBACABANA (Control of Balance by Card Based Navigation), a system developed for high-variety shops.

Productivity Press
Market: Business & Management
February 2016: 7 x 10: 194pp
Hb: 978-1-498-74694-6: $39.95
ebook: 978-1-498-74697-7
* For full contents and more information, visit: www.crcpress.com/9781498746946

TEXTBOOK

Business Analytics for Decision Making

Steven Oria Kimbrough, The Wharton School, University of Pennsylvania, Philadelphia, USA and Hoong Chuiu Lau, School of Information Systems, Singapore Management University, Singapore

If you want to solve a problem, strip the problem of nonessentials, simplify, and specialize without sacrificing its core. This book highlights this spirit using concrete, specific, simple examples pertaining to business analytics. Offering examples in thorough detail and designed to illuminate topics that often remain to great complexity in practice, it associates concepts through generalizations and refers the interested to further sources. This book establishes a national syllabus for an emerging first course at an MBA level in Business Analytics.

Chapman and Hall/CRC
Market: Business & Management
January 2016: 7 x 10: 332pp
Hb: 978-1-482-22176-3: $99.95
ebook: 978-1-482-22177-0
* For full contents and more information, visit: www.crcpress.com/9781482221763

Case Studies in Strategic Planning

Hakan Butunere, IMECO Industrial Management & Engineering, Istanbul, Turkey

This book shows how systematic strategic planning can be used in real-life cases, regardless of a person’s level of expertise. The simplified version of this methodology and its analysis tools, based on fundamentals, are easily understood and universally applied to any type of business for developing strategic plans. More importantly, this methodology guides readers in identifying the circumstances in which they might use particular tools, use them effectively, and target them directly at achieving effective results.

Auerbach Publications
Market: Business & Management
January 2016: 6 x 9: 199pp
Hb: 978-1-482-75122-3: $79.95
ebook: 978-1-482-75123-0
* For full contents and more information, visit: www.crcpress.com/9781482751223
Change Management
Manage the Change or It Will Manage You
Frank Voehl, Strategy Associates Incorporated, Coral Springs, Florida, USA and H. James Harrington, Harrington Associates, Los Gatos, California, USA
Series: Management Handbooks for Results
This book presents core guidance for Change Management practitioners. It shows how the Change Management process works with the three management systems—quality, project, and daily work management—as critical disciplines that are applied to a variety of organizational change interventions to improve the likelihood of success and return on investment. Ultimately, the goal of Change Management is to improve the organization by altering how work is done.
Productivity Press
Market: Business Management
January 2016: 6-1/8 x 9-1/4: 398pp
Pb: 978-1-482-21418-5
$49.95
* For full contents and more information, visit: www.crcpress.com/9781482214185

Clausewitz Talks Business
An Executive’s Guide to Thinking Like a Strategist
Norton Paley, Norton Paley & Associates, Falls Church, Virginia, USA
Clausewitz Talks Business: An Executive’s Guide to Thinking Like a Strategist distills the wisdom of Carl von Clausewitz’s monumental 1832 classic On War—considered by many eminent scholars as the most distinguished Western work on war ever written. This book transposes Clausewitz’s most enduring concepts on leadership and strategy to help today’s executives and managers think like strategists. Tapping into the universal lessons of strategy, the book uncovers potential solutions to some of the most obstinate competitive problems.
Productivity Press
Market: Business & Management
May 2014: 6-1/8 x 9-1/4: 264pp
Pb: 978-1-482-22027-8
$62.95
ebook: 978-1-482-22028-5
* For full contents and more information, visit: www.crcpress.com/9781482220278

Consider a Spherical Patent
IP and Patenting in Technology Business
Joseph E. Gortych, Opticus IP Law PLLC, Sarasota, Florida, USA
Using examples of actual patents and patent portfolios of real technology businesses, this practical and engaging book provides key insights and perspectives on the reality of how patents are used and abused in the technology business. It explains often misunderstood patent phenomena, such as how and why invalid patents are issued by the patent office, and covers important topics frequently ignored or glossed over, including provisional patent applications, independent inventors, obviousness, and the dynamic interplay between infringeability and patent validity.
CRC Press
Market: Business Management
February 2014: 6-1/8 x 9-1/4: 267pp
Pb: 978-1-439-88800-6
$59.95
ebook: 978-1-439-88806-3
* For full contents and more information, visit: www.crcpress.com/9781439888063

Developing a Turnaround Business Plan
Leadership Techniques to Activate Change Strategies, Secure Competitive Advantage, and Preserve Success
Norton Paley, Norton Paley & Associates, Falls Church, Virginia, USA
Developing a Turnaround Business Plan is ideal for managers facing a competitive crisis as well as those who wish to avert one and must set a turnaround plan in motion before the situation results in irreversible losses. Whereas the book helps readers develop a sound turnaround plan, the focus of the book is on the actual process that contributes to the development and implementation of that plan. The book details how to identify the root causes that triggered the competitive crisis and how to initiate remedial actions before the turnaround plan begins.
Productivity Press
Market: Business & Management
June 2015: 6-1/8 x 9-1/4: 262pp
Pb: 978-1-498-70591-2
$49.95
ebook: 978-1-498-70590-5
* For full contents and more information, visit: www.crcpress.com/9781498705905

Educating Scientists and Engineers for Academic and Non-Academic Career Success
James Speight, CD&W Inc., Laramie, Wyoming, USA
Series: Chemical Industries
This text focuses on the structure of the current educational system and describes the transformations needed to ensure the adequate education of future science and engineering students. It describes how university faculty can make the necessary changes to teach a broader range of skills, technical proficiency, teamwork, adaptability, and versatility within the undergraduate and postgraduate curriculum. Also covered are approaches to provide a broader exposure to experiences desired by both academic and non-university employers to prepare students for an increasingly interdisciplinary, collaborative, and global job market.
CRC Press
Market: General Engineering & Technology
December 2014: 6-1/8 x 9-1/4: 192pp
Pb: 978-1-466-55356-9
$49.95
ebook: 978-1-466-55357-6
* For full contents and more information, visit: www.crcpress.com/9781466553569

3rd Edition
Creating a Lean Culture
Tools to Sustain Lean Conversions, Third Edition
David Mann, Principal, David Mann Lean Consulting, Michigan, USA
The new edition of this Shingo Prize-winning bestseller explains how to implement a Lean transformation that works by developing a culture that builds success from the top down and the bottom up at the same time. This edition provides expanded coverage of executive responsibilities, 21 new case studies, and new examples from the healthcare and process industries. A must-read for any leader undergoing or considering a Lean transformation, this edition also includes expanded coverage of Lean management applications in complex cross-functional value stream process improvement projects.
Productivity Press
Market: Business & Management
October 2014: 7 x 10: 407pp
Pb: 978-1-482-24323-9
$49.95
ebook: 978-1-482-24325-3
* For full contents and more information, visit: www.crcpress.com/9781482243239

Developing a Turnaround Business Plan
Leadership Techniques to Activate Change Strategies, Secure Competitive Advantage, and Preserve Success
Norton Paley, Norton Paley & Associates, Falls Church, Virginia, USA
Developing a Turnaround Business Plan is ideal for managers facing a competitive crisis as well as those who wish to avert one and must set a turnaround plan in motion before the situation results in irreversible losses. Whereas the book helps readers develop a sound turnaround plan, the focus of the book is on the actual process that contributes to the development and implementation of that plan. The book details how to identify the root causes that triggered the competitive crisis and how to initiate remedial actions before the turnaround plan begins.
Productivity Press
Market: Business & Management
June 2015: 6-1/8 x 9-1/4: 262pp
Pb: 978-1-498-70591-2
$49.95
ebook: 978-1-498-70590-5
* For full contents and more information, visit: www.crcpress.com/9781498705905

Educating Scientists and Engineers for Academic and Non-Academic Career Success
James Speight, CD&W Inc., Laramie, Wyoming, USA
Series: Chemical Industries
This text focuses on the structure of the current educational system and describes the transformations needed to ensure the adequate education of future science and engineering students. It describes how university faculty can make the necessary changes to teach a broader range of skills, technical proficiency, teamwork, adaptability, and versatility within the undergraduate and postgraduate curriculum. Also covered are approaches to provide a broader exposure to experiences desired by both academic and non-university employers to prepare students for an increasingly interdisciplinary, collaborative, and global job market.
CRC Press
Market: General Engineering & Technology
December 2014: 6-1/8 x 9-1/4: 192pp
Pb: 978-1-466-55356-9
$49.95
ebook: 978-1-466-55357-6
* For full contents and more information, visit: www.crcpress.com/9781466553569

For more information, visit: www.crcpress.com
Education Management and Management Science
Proceedings of the International Conference on Education Management and Management Science (ICEMMS 2014), August 7-8, 2014, Tianjin, China
Edited by Dawei Zheng, International Research Association of Information and Computer Science, Beijing, China
Series: IRACS Proceedings
This proceedings volume contains selected papers presented at the 2014 International Conference on Education Management and Management Science (ICEMMS 2014), held August 7-8, 2014, in Tianjin, China. The objective of ICEMMS2014 is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Education Management and Management Science.

Effective Portfolio Management Systems
Christopher F. Voehl, President, Seven Sigma Solutions, Inc., Tallahassee, Florida, H. James Harrington, CEO, Harrington Management Systems, Los Gatos, California and William S. Ruggles, Managing Partner, Ruggles & Ruggles, New York City, NY
Series: The Little Big Book Series
With an estimated 70 percent of new projects failing to add value to the organization, reducing project failure rate represents one of the biggest improvement opportunities available today. This book highlights proven approaches designed to separate the successful projects from the potential losers before the projects are started. This represents huge savings in manpower, money, and time. The book shows you how to reduce project cycle time and apply resources effectively to maximize results and project success rates.

Engineering Management and Industrial Engineering
Edited by A. Leung, Advanced Science and Industry Research Center, Hong Kong
Innovative ideas and studies on education and training, industrial management, and decision analysis are presented in this volume, which is much of interest to professionals and academicians involved in engineering management and industrial engineering.

2nd Edition
Epiphanized
A Novel on Unifying Theory of Constraints, Lean, and Six Sigma, Second Edition
Bob Sproull, Focus and Leverage Consulting, USA and Bruce Nelson, Focus and Leverage Consulting, USA
Updating the tools, principles, and methods presented in the bestselling first edition, this second edition explains how to implement the authors’ proven improvement methodology that unifies the Theory of Constraints with Lean and Six Sigma. The book uses a compelling novel format to demonstrate how to achieve superior on-time delivery along with unprecedented levels of profitability. Besides explaining how to implement the authors’ improvement methodology, the book details a proven method for convincing management that using the improvement methodology outlined in the text will lead to higher levels of profitability.

The Field Guide to Achieving HR Excellence through Six Sigma
Daniel Bloom, Daniel Bloom & Associates, Inc., Largo, Florida, USA
This book presents a roadmap for implementing the concepts found in “Achieving HR Excellence through Six Sigma.” It looks at HR and the human resources professional as a series of widgets centered in the various processes that demonstrate what HR delivers to the organization so that it is intertwined with the overall corporate strategy. The professional is taken through how the methodology works, looking at specific examples of organizations that used Six Sigma within HR to successfully improve their organizations.

Focus and Leverage
The Critical Methodology for Theory of Constraints, Lean, and Six Sigma (TLS)
Bruce Nelson, Focus and Leverage Consulting, USA and Bob Sproull, Focus and Leverage Consulting, USA
Presented in an engaging business novel format, Focus and Leverage is a sequel to the authors’ bestselling book, Epiphanized. Second Edition. The primary characters remain the same, but this time the storyline features two different industries: Maintenance, Repair, and Overhaul (MRO) and Healthcare (hospital) environments. This book expands and highlights the two improvement methods first introduced in Epiphanized: the Interference Diagram (ID)/Intermediate Objectives (IO) map (ID/IO Simplified Strategy) and Multiple-Drum-Buffer-Rope (M-DBR).
The Guide to Entrepreneurship
How to Create Wealth for Your Company and Stakeholders

Michael Szycher, Ph.D. Sterling Biomedical, Inc., Lynnfield, Massachusetts, USA

This how-to guide to intrapreneurship and entrepreneurship explores what constitutes entrepreneurial timber and the leadership skills required to raise all the needed capital. Demystifying the process of founding a firm from scratch, the book provides aspiring entrepreneurs with concrete action plans and detailed guidance written in plain English. Identifying the unique set of characteristics that are shared by successful entrepreneurs, this guide will be especially helpful to those seeking to start new ventures that require a high degree of scientific knowledge.

Productivity Press
Market: Business & Management
August 2014: 7 x 10: 427pp
Pb: 978-1-482-20907-5: $49.95
ebook: 978-1-482-20908-2
* For full contents and more information, visit: www.crcpress.com/9781482209075

A Guide to Innovation Processes and Solutions for Government

Gregory C. McLaughlin, DBA, Innovation Processes and Solutions, LLC, California, USA and William R. Kennedy, DBA, Innovation Processes and Solutions Consulting, LLC, California, USA

This book provides a roadmap for successful implementation of innovation for organizations working as subcontractors or suppliers for the federal government. With a focus on the federal sector, it details tools and processes that can make significant improvements in how the federal sector handles innovation opportunities. Presenting insights that can help readers bridge the gap between supplier and customer, the book includes many examples and a case study that illustrate the application of the methodology. It also includes process flowcharts, tools, and strategies for innovation within an agency or organization.

CRC Press
Market: Business & Management
August 2015: 6-1/8 x 9-1/4: 254pp
Pb: 978-1-482-24620-9: $59.95
ebook: 978-1-482-24621-6
* For full contents and more information, visit: www.crcpress.com/9781482246209

Implementing Standardized Work

Process Improvement

Alain Patchong

This book, the third in a series dedicated to Standardized Work, focuses on process improvement. It begins by explaining why standardization and process improvement both depend on each other to achieve true sustainability. The text explains how to use Standardized Work forms to identify immediate opportunities for process improvement. It also provides simple tools and forms that can help readers generate quick improvements to keep morale high and sustain motivation during the work ahead. Covering the essential knowledge using a compelling story format, the book includes numerous examples and illustrations that demonstrate proper application.

Productivity Press
Market: Industrial Engineering and Management
April 2014: 6-1/8 x 9-1/4: 101pp
Pb: 978-1-466-56358-2: $19.95
ebook: 978-1-466-56359-9
* For full contents and more information, visit: www.crcpress.com/9781466563582

A Guide to Publishing for Academics
Inside the Publish or Perish Phenomenon

Edited by Jay Liebowitz, Harrisburg University of Science and Technology, Pennsylvania, USA

Most academics still wrestle with the “publish or perish” phenomenon. Based on Dr. Liebowitz’s 25 years serving as the editor-in-chief of a leading international journal, along with insights from some of the most knowledgeable journal editors, this book shares key lessons learned to help new professors, doctoral students, and practitioner-scholars increase their chances of being published in selective, refereed international journals. It focuses on the key practices needed to ensure journal publication, with interesting cases and helpful tips sprinkled throughout the book.

Auerbach Publications
Market: Business & Management
April 2015: 6-1/8 x 9-1/4: 223pp
Pb: 978-1-482-25632-0: $59.95
ebook: 978-1-482-25627-7
* For full contents and more information, visit: www.crcpress.com/9781482256260

Implementing Standardized Work
Training and Auditing

Alain Patchong

Standardized Work refers to the process of finding and applying the best operational methods that will lead to cost reduction, better product quality, and increased operator safety. This book, the latest in a series dedicated to Standardized Work, focuses on operator training and auditing. It describes the methods and tools used to train operators and then check their work against the standards defined in Standardized Work forms. It also discusses how to introduce these tools in the most effective way.

Productivity Press
Market: Business & Management
December 2015: 6-1/8 x 9-1/4: 89pp
Pb: 978-1-466-56363-6: $19.95
ebook: 978-1-466-56364-3
* For full contents and more information, visit: www.crcpress.com/9781466563636

Impact Analytics
Making Every Decision Count

Ryan Burge

Business impact analysis is an essential component of an organization’s business continuance plan. This book presents proven methodologies to help business leaders understand the impact of their decisions now and into the future. The authors share valuable methods, coupled with real cases, interviews, and other strategic insights that all business leaders can use to improve their decision-making ability. This book implements the fundamentals of operations research, cost budgeting, risk management planning, Six Sigma, and data visualization. Each chapter highlights best practices, as well as case studies from government and the private sector.

Productivity Press
Market: Business & Management
August 2016: 7 x 10: 225pp
Pb: 978-1-482-24620-9: $69.95
ebook: 978-1-482-24621-6
* For full contents and more information, visit: www.crcpress.com/9781482246209

Impact Analytics
The Guide to Innovation Processes and Solutions for Government
Implementing Standardized Work
A Guide to Publishing for Academics
Implementing Standardized Work
Impact Analytics
A Guide to Entrepreneurship
Implementing Standardized Work
The Innovation Factory
Gilles Gare!, Conservatoire National des Arts et Métiers, Paris, France and Elmar Mock, Creaholic, Biel/Bienne, Switzerland

Elmar Mock, the creative engineering force behind the Swatch, passionately tells how he helped to create this revolutionary product that saved the Swiss watch industry in the mid-1980s. Gilles Gare!, a professor of management, relates this tale of epic innovation to C-K (concept-knowledge) theory. And both convincingly argue that organizations can channel creativity to develop breakthrough innovations that disrupt markets.

Auerbach Publications
Market: Business & Management
July 2016: 6-1/8 x 9-1/4: 170pp
Hb: 978-1-498-74021-0 $49.95
ebook: 978-1-482-24528-8
* For full contents and more information, visit: www.crcpress.com/9781498740210

The International Manager
A Guide for Communicating, Cooperating, and Negotiating with Worldwide Colleagues
Frank Garten

Currently, internationally dispersed teams are commonplace among global companies. Managers are often aware conceptually of the different dimensions of culture, yet struggle to translate these concepts into their daily activities. This book goes beyond simply matching managers’ insight into specific techniques they can use to better manage their intercultural teams and deal with partners, suppliers, and customers from other countries. It gives practical strategies for how to apply popular management models in other cultures.

Productivity Press
Market: Business & Management
May 2015: 6-1/8 x 9-1/4: 424pp
Hb: 978-1-466-59217-9 $49.95
ebook: 978-1-466-59217-9
* For full contents and more information, visit: www.crcpress.com/9781466592179

Innovation Project Management Handbook
Dr. Gregory C. McLaughlin, Innovation Processes and Solutions Consulting, LLC, California, USA and Dr. William R. Kennedy, Innovation Processes and Solutions Consulting, LLC, California, USA

Globalization, resulting in a competitive environment, requires frequent innovation to remain profitable. An organization that creates or sustains innovative products, processes and people has a distinct competitive advantage. This workbook provides a strategy for implementing innovation projects following the ENOWALE methodologies: envision the need, nominate, objectify, validate, align and adopt, link and execute. It includes detailed steps in the process, templates, exercises and discussion questions. The authors also use business examples that describe their philosophy, strategic elements and success criteria.

Productivity Press
Market: Business & Management
January 2016: 8-1/2 x 11: 232pp
Pb: 978-1-498-72571-2 $59.95
ebook: 978-1-482-25921-6
* For full contents and more information, visit: www.crcpress.com/9781498725712

Inventing the Paradox of Excellence
How Companies Use Variations for Business Excellence and How Enterprise Variations Are Enabled by SAP
Vivek Kale, Corporate IT Strategy Consultant, Thane (West), India

Drawing lessons from one of the best models of success, the evolutionary model, this book explains why an organization must actively monitor the market environment and competitors to ascertain excellence and reconfigure and reframe continuously. It introduces the patterns and anti-patterns of excellence and includes detailed case studies based on different variations, including structure variations, shared values variations, and staff variations. The book includes case history segments from Toyota, Acer, eBay, Cisco, Blackberry, Samsung, Volvo, Charles Schwab, McDonalds, Starbucks, Google, Disney, and NUMMI; as well as detailed case histories of GE, IBM, and UPS.

Productivity Press
July 2014: 7 x 10: 442pp
Pb: 978-1-466-59217-9 $59.95
ebook: 978-1-466-59217-9
* For full contents and more information, visit: www.crcpress.com/9781466592179

The Innovative Lean Machine
Synchronizing People, Branding, and Strategy to Win in the Marketplace
Anthony Sgroi, Jr., Director of R&D, Unger Enterprises

Businesses require three optimized core components to run effectively: strategy, effective people, and branding. This book uses Lean principles along with graphics, charts, and tables to explain these three important components for every business. It presents a series of visual frameworks that allow readers to readily apply the format with little or no difficulty. With the aid of many examples, illustrations, tables, and graphics, the book details methods for transforming any business into a more effective business.

Productivity Press
Market: Business & Management
September 2014: 7 x 10: 264pp
Hb: 978-1-498-74021-0 $59.95
ebook: 978-1-482-24528-8
* For full contents and more information, visit: www.crcpress.com/9781498740210

TEXTBOOK
An Introduction to the Mathematics of Planning and Scheduling
Geza Paul Bottlik, University of Southern California, Los Angeles, USA

Complex software systems have been designed to efficiently handle large numbers of variables. In manufacturing, variables affect every part of the supply chain from inventory to production to delivery. This book provides a comprehensive explanation of the mathematical foundations to solving these complex planning and scheduling requirements which goes beyond simply matching the problem with the necessary software. The industrial engineer who understands the underlying models can more expertly navigate software applications and can apply sophisticated solutions to project management.

CRC Press
July 2016: 7 x 10: 300pp
Pack- Book and CD: 978-1-482-25921-6 $79.95
* For full contents and more information, visit: www.crcpress.com/9781482259216

TEXTBOOK
An Introduction to the Mathematics of Planning and Scheduling
Geza Paul Bottlik, University of Southern California, Los Angeles, USA

Complex software systems have been designed to efficiently handle large numbers of variables. In manufacturing, variables affect every part of the supply chain from inventory to production to delivery. This book provides a comprehensive explanation of the mathematical foundations to solving these complex planning and scheduling requirements which goes beyond simply matching the problem with the necessary software. The industrial engineer who understands the underlying models can more expertly navigate software applications and can apply sophisticated solutions to project management.

CRC Press
July 2016: 7 x 10: 300pp
Pack- Book and CD: 978-1-482-25921-6 $79.95
* For full contents and more information, visit: www.crcpress.com/9781482259216

TEXTBOOK
An Introduction to the Mathematics of Planning and Scheduling
Geza Paul Bottlik, University of Southern California, Los Angeles, USA

Complex software systems have been designed to efficiently handle large numbers of variables. In manufacturing, variables affect every part of the supply chain from inventory to production to delivery. This book provides a comprehensive explanation of the mathematical foundations to solving these complex planning and scheduling requirements which goes beyond simply matching the problem with the necessary software. The industrial engineer who understands the underlying models can more expertly navigate software applications and can apply sophisticated solutions to project management.

CRC Press
July 2016: 7 x 10: 300pp
Pack- Book and CD: 978-1-482-25921-6 $79.95
* For full contents and more information, visit: www.crcpress.com/9781482259216
The Kanban Playbook
A Step-by-Step Guideline for the Lean Practitioner

Chris A. Ortiz, Kaizen Assembly Inc., Bellingham, Washington, USA

Series: The LEAN Playbook Series

A scheduling system for Lean and just-in-time production, Kanban is a proven tool for reducing waste, inventory, and lead times. The Kanban Playbook provides step-by-step guidance on proper Kanban implementation. In addition to color images from actual Kanban implementations, it uses a combination of short paragraphs and bulleted points to walk readers through each step of Kanban implementation. After reading this book, readers will understand how to make effective use of Kanban Card Systems, 2-Bin Systems, and In-Process Kanban.

Productivity Press
Market: Business & Management
September 2015: 8-1/2 x 11: 71pp
Pb: 978-1-482-24679-7: $39.95
ebook: 978-1-482-24680-1

* For full contents and more information, visit: www.crcpress.com/9781482246797

Knowledge, Service, Tourism & Hospitality

Edited by Ford Lumban Gaol, Bina Nusantara University, Jakarta, Indonesia

This proceedings volume contains papers presented at the 2015 International Conference on Management and Technology in Knowledge, Service, Tourism & Hospitality (SERVE 2015), covering a wide range of topics in the fields of knowledge and service management, web intelligence, tourism and hospitality. This overview of current state of affairs and anticipated developments will be of interest to researchers, entrepreneurs and students alike.

CRC Press
Market: Hospitality
February 2016: 250pp
Hb: 978-1-138-02920-0: $229.95

* For full contents and more information, visit: www.crcpress.com/9781138029200

The Lean Anthology
A Practical Primer in Continual Improvement

Rebecca Goldberg, Goldberg Productions, Inc., Richmond, Virginia, USA and Elliott N. Weiss, University of Virginia, Darden School of Business, Charlottesville, USA

This book features a series of operations management case studies that illustrate everyday scenarios for a Lean process improvement journey. Each Lean case study helps the reader to understand and apply a different approach to the strategic elimination of waste. The case studies are organized into a framework for implementing a Lean transformation called The Five Cs: Customer, Capability, Control, Coordination, and Context/Culture. This collection offers a relevant and interesting approach to the challenges and opportunities involved with a Lean journey.

Productivity Press
Market: Business & Management
November 2014: 6-1/8 x 9-1/4: 248pp
Pb: 978-1-482-24679-7: $29.95
ebook: 978-1-482-24680-1

* For full contents and more information, visit: www.crcpress.com/9781482246797

Leadership Basics for Frontline Managers
Tips for Raising Your Level of Effectiveness and Communication

Bill Templeman

Focused on interpersonal management skills, Leadership Basics for Frontline Managers explains what it takes to improve how readers communicate and relate to employees, customers, and bosses. Each chapter dissects a different management skill and concludes with bullet points to help readers take action immediately. Illustrating key concepts with scenarios drawn from actual work situations, this is an ideal reference for anyone new management, experienced managers who want to sharpen their leadership skills, and anyone who finds themselves managing a diverse group of employees.

Productivity Press
Market: Business & Management
March 2014: 6-1/8 x 9-1/4: 151pp
Pb: 978-1-482-21995-1: $29.95
ebook: 978-1-482-21996-8

* For full contents and more information, visit: www.crcpress.com/9781482219951

Lean Execution
The Basic Implementation Guide for Maximizing Process Performance

Clifford Fiore

This book highlights Lean methods/tools that maximize process performance, and is based on first-hand implementation. Methods/tools are explained, but the focus is the guidelines, process conditions, and tips for ensuring successful implementation (many books explain how to construct a value stream map but few explain the conditions necessary to ensure successful completion). Concepts are explained succinctly (the concept of flow/TOC is reviewed using a garden hose analogy). Simple calculations/examples reinforce key concepts for determining production rates and process variation. It concludes with a summary outlining a blueprint for maximizing success using Lean methods.

Productivity Press
Market: Business & Management
June 2016: 7 x 10: 128pp
Pb: 978-1-498-75274-9: $39.95
ebook: 978-1-498-75275-6

* For full contents and more information, visit: www.crcpress.com/9781498752749
The Lean Expert
Educa ting and Elevating Lean Practitioners Throughout Your Organization

Joseph Niederstadt, Gates Corporation, Suzhou, China

This book provides a method to help organizations engage associates and help them become Lean experts in specific areas, including standardized work, value stream mapping, and TPM. By implementing the Lean Discipline Expert process, companies will demonstrate that they believe their associates are their greatest assets and will also empower their associates to make lasting improvements to the organization. The book details a method with defined steps for the development of Lean-minded people working towards the achievement of “expert status” in their specific Lean discipline.

Productivity Press
Market: Business & Management
December 2014: 7 x 10: 172pp
Pb: 978-1-482-25365-8: $39.95
ebook: 978-1-482-25366-5
* For full contents and more information, visit: www.crcpress.com/9781482253658

Lean for the Cash-Strapped Leader
The Path to Growth and Profitability

John E. Madigan, Madigan & Associates, Wisconsin, USA, Todd C. Maher and Mohammad Ali

Created by Lean practitioners with real-world, results-proven track records, this book is designed to help struggling managers and leaders, interested in the benefits of Lean but bereft of budgets to hire full-time consultants, start substantial change in their enterprises and begin to reap the benefits of Lean. At once a how-to manual and a strategic management guide, the book lays out, in simple English, all the steps for implementing Lean, from formulating a strategy and managing organizational change, to establishing a kanban-driven, level-loaded production system.

Productivity Press
Market: Business & Management
January 2016: 7 x 10: 229pp
Pb: 978-1-482-25366-5: $39.95
ebook: 978-1-482-25367-2
* For full contents and more information, visit: www.crcpress.com/9781482253665

Lean for the Long Term
Sustainment is a Myth, Transformation is Reality

William H. Baker, Jr. and Kenneth Rolfes

Creating a continuous improvement culture can become a challenge when management changes often, unless it has become an institutionalized company-branded business management system for the organization. Lean for the Long Term presents a Lean management system model that encompasses leadership, process, and growth as the model to drive performance. Until now, there have been few books to supply in-depth discussions on Lean as a strategy and management system. Filling this need, this book will help readers move toward a broader, more strategic use of Lean principles in their organizations.

Productivity Press
Market: Business & Management
April 2015: 7 x 10: 226pp
Pb: 978-1-482-25716-4: $39.95
ebook: 978-1-482-25717-1
* For full contents and more information, visit: www.crcpress.com/9781482257168

Lean Human Performance Improvement

Jerry L. Harbour, Vector Resources, Inc., Trinidad, Colorado, USA

Organized in three sections, this book covers understanding human performance, analyzing and improving work productivity, and analyzing and improving quality and safety. The author first develops a fundamental and basic understanding of human performance, then couples that understanding with learning how to analyze and improve human-related work productivity and quality and safety. He also discusses how knowledge and skills transfer from one work setting to another.

Productivity Press
Market: Business & Management
November 2014: 7 x 10: 240pp
Pb: 978-1-482-29882-6: $39.95
ebook: 978-1-482-29882-6
* For full contents and more information, visit: www.crcpress.com/9781482298826

The Lean Leader
A Personal Journey of Transformation

Robert B. Camp, Burlington Medical Supplies Inc., Newport News, Virginia, USA

This book uses a compelling novel format to tackle the nuts and bolts of leading a Lean transformation. Readers follow along as the characters face real crises and what seem to be unreasonable deadlines. After reading this book, readers will learn how to shed the decision-making tasks that have cluttered their days and delegate those decisions to employees who are closer to the action. Readers will learn how to look over the horizon to define and communicate a new course of action and compel others to follow.

Productivity Press
Market: Business & Management
January 2015: 6-1/8 x 9-1/4: 167pp
Pb: 978-1-498-70075-7: $29.95
ebook: 978-1-498-70077-1
* For full contents and more information, visit: www.crcpress.com/9781498700757

The Lean Management Systems Handbook


Series: Management Handbooks for Results

This handbook presents a first-of-its-kind approach that describes critical components for sustainable Lean management. It explains how managers at all levels of the organization can integrate Lean into their daily management activities. It also defines the Lean philosophy, beliefs, and behaviors required to develop a thriving Lean company culture. Packed with detailed examples and step-by-step instructions, it’s an ideal reference guide to help managers and leaders make the transition from theory to successful application in the field. Each chapter features brief summaries and examples of the most important tools in Lean management systems development.

Productivity Press
Market: Business & Management
July 2014: 6-1/8 x 9-1/4: 549pp
Hb: 978-1-466-56435-0: $79.95
ebook: 978-1-466-56435-0
* For full contents and more information, visit: www.crcpress.com/9781466564350

**Complimentary Exam Copy**
**e-Inspection**
**New in Paperback**
**Companion Website**
The Lean Practitioner’s Field Book
Proven, Practical, Profitable and Powerful Techniques for Making Lean Really Work
Charles Protzman, Business Improvement Group, LLC, Towson, Maryland, USA, Fred Whiton, DRS Technical Services, Towson, Maryland, USA, Joyce Kerchar, Christopher Lewandowski, Steve Stenberg and Patrick Grounds
This book outlines a true learning path for anyone seeking to understand essential Lean principles. It presents a plethora of examples drawn from the personal experiences of its many well-respected and award-winning contributors. These experts break down Lean concepts to their simplest terms to make everything as clear as possible for Lean practitioners. A refresher for some at times, the text provides thought-provoking questions with examples that will stimulate learning opportunities. The book details the five distinct Lean Practitioner levels and includes quizzes and criteria for each level.
Productivity Press
Market: Process Improvement
December 2015: 7 x 10: 158pp
Hb: 978-1-466-57087-6: $99.95
ebook: 978-1-466-57088-3
* For full contents and more information, visit: www.crcpress.com/9781466570883

3rd Edition · NEW EDITION
Lean Production Simplified, Third Edition
A Plain-Language Guide to the World’s Most Powerful Production System
Pascal Dennis, Lean Pathways Inc., Toronto, Canada
Following in the tradition of its Shingo Prize-winning predecessors, Lean Production Simplified, Third Edition gives a clear overview of the structure and tools of the Lean production system. Written for the practitioner by a practitioner, it delivers a comprehensive insider’s view of Lean management. The author helps readers grasp the system as a whole, as well as the factors that animate it by organizing the book around an image of a house of Lean production. This edition deepens and extends the second edition with case studies on Lean outside the factory—in settings such as healthcare, IT, finance, design, engineering, and beyond.
Productivity Press
Market: Business & Management
September 2014: 6-1/8 x 9-1/4: 265pp
Hb: 978-1-482-23564-7: $62.95
ebook: 978-1-482-23565-4
* For full contents and more information, visit: www.crcpress.com/9781482235647

Lean Today, Rich Tomorrow
Succeeding in Today’s Globalization Chaos
Joe Bichai
This book tells the story of an actual Lean transformation that took place in a 100-year-old North American manufacturer’s factory. Lean Today, Rich Tomorrow: Succeeding in Today’s Globalization Chaos describes how an obsolete factory destined for closure was transformed into the most productive North American manufacturer in its field. It describes how the company eliminated the bad habits associated with its antiquated push system and transformed its factory into a JIT/Lean philosophy-driven plant with one-piece flow, U-shaped production lines, and productivity sharing.
Productivity Press
Market: Business & Management
September 2014: 6-1/8 x 9-1/4: 219pp
Hb: 978-1-482-23566-1: $62.95
ebook: 978-1-482-23565-4
* For full contents and more information, visit: www.crcpress.com/9781482235661

Lean Transformation
Cultural Enablers and Enterprise Alignment
Suresh Patel, Indian Institute of Management, Vastapur, Ahmedabad, Gujarat, India
Part 1 of the book explains why Lean Implementation usually fails—managers should focus more on “early adopters” than trying to convert “resistors.” The best roadmap to implement Lean uses the Shingo Process, which describes the guiding principles and how to implement them. Part 2 is about the Lean Tools and how they can be deployed for continuous improvement, such as across plants and distribution centers. Part 3 is about the Lean Performance Measures and how to assess the Lean performance. Assessment of the Lean system tools is enables organizations to remain focused on the standardization of the Lean System and boost the organization’s sustainability efforts.
Productivity Press
Market: Business & Management
May 2016: 6-1/8 x 9-1/4: 224pp
Hb: 978-1-486-74336-7: $49.95
ebook: 978-1-486-74337-4
* For full contents and more information, visit: www.crcpress.com/9781486743365

Making the Case for Change
Using Effective Business Cases to Minimize Project and Innovation Failures
Christopher F. Voehl, President, Seven Sigma Solutions, Inc., Tallahassee, Florida, H. James Harrington, CEO, Harrington Management Systems, Los Gatos, California and Frank Voehl, Strategy Associates Incorporated, Coral Springs, Florida, USA
Series: The Little Big Book Series
Making the Case for Change provides executive teams and project managers with the information required to decide whether proposed projects should have resources applied to them. The book supports the development of strong business cases that link investments with program results and, ultimately, with the strategic outcomes of an organization. Ideal for executives and project/initiative managers seeking approval of an activity, initiative, program, or project, the book presents proven tips, advice, suggestions, templates, case studies and recommended courses of action on developing effective business cases.
Productivity Press
Market: Business & Management
September 2014: 6-1/8 x 9-1/4: 265pp
Hb: 978-1-466-58051-0: $29.95
ebook: 978-1-466-58052-7
* For full contents and more information, visit: www.crcpress.com/9781466580510

Maximizing Value Propositions to Increase Project Success Rates
H. James Harrington, CEO, Harrington Management Systems, Los Gatos, California and Brett Trusko, Strategy Associates Incorporated, Coral Springs, Florida, USA
Series: The Little Big Book Series
In order to thrive in today’s increasingly competitive global environment, all sources of new and creative ideas within an organization must be considered. Value propositions allow innovators, who may otherwise be intimidated to voice their ideas, to prepare a document that outlines the potential value of their ideas. This book explains how to foster creativity in employees and encourage them to actively search for and document ideas that will add value to their organizations. Focusing on the necessary data collection efforts, it supplies readers with the understanding to create value propositions that separate profitable from unprofitable ideas.
Productivity Press
Market: Business Management
April 2014: 6-1/8 x 9-1/4: 220pp
Hb: 978-1-466-57075-7: $25.95
ebook: 978-1-466-57076-4
* For full contents and more information, visit: www.crcpress.com/9781466570757

Browse and order online: www.crcpress.com
Nine Practices of 21st Century Leadership
A Guide for Inspiring Creativity, Innovation, and Engagement
Gary A. DePaul
To help improve your organization’s culture, engagement, and leadership practices, this book describes nine 21st Century Leadership practices that Gary DePaul derived by analyzing some of the best contemporary writers and thinkers on leadership. Explaining the nine practices, DePaul summarizes insightful leadership principles, beliefs, and practices, which includes tactics, tools, and resources that anyone at any career level can immediately begin using. The book demystifies the leadership concept, helps you avoid harmful traditional leadership assumptions, and provides a leadership development roadmap.

Out of the Box Thinking for Successful Managers
Laying the Foundation for Lean
Drew Willis, Womick Foods, Cincinnati, Ohio, USA
Most 5S activities are conducted quickly with no employee involvement other than the implementation. What is needed for successful 5S is proper implementation with employee engagement as well as effective sustainment systems. Management must follow a standard to manage Plan Do Check Act (PDCA). Following PDCA, this book outlines how to Plan the 5S activity, Do the 5S initiative, and Check daily if the original Plan is sufficient. During the Check phase, you determine whether you should continue following the original Plan, or if not, Act in changing the plan, and repeat the PDCA cycle. This book shows how to attain an stability for a proper Lean Foundation (with 5S through standard work).

Organizational Behavior and Virtual Work
Arvind K. Birdie, Oxford Brooks University, Gurgaon, India and Madhu Jain, University of Rajasthan, Jaipur, India
Organizational Behavior and Virtual Work: Concepts and Research shows the enormous impact of technology and globalization on employment relationships and also predicts how they will contribute to the changing dimensions of organizations in the future. With a unique blend of theory and application in the real world of virtual workers, the book presents the most recent research and developments in the relatively new and still emerging area of virtual work. It takes an in-depth critical look into the key factors affecting the virtual work environment with practical inputs of suggestions and recommendations.

One-Piece Flow vs. Batching
A Guide to Understanding How Continuous Flow Maximizes Productivity and Customer Value
Charles Protzman, Business Improvement Group, LLC., Towson, Maryland, USA, Joe McNamara and Dan Protzman
A silent productivity killer, batching is an extremely difficult mindset to overcome and, as a result, numerous Lean initiatives have been destroyed by it. This book argues the case for one piece flow over batching. It identifies the eight root causes of batching, the wastes created from batching, how batching drives the eight wastes, and the advantages of one piece flow. The book provides concrete arguments as to why batching is usually not the most efficient solution for most processes.

Process Implementation Through 5S
Kevin J. Duggan, Founder, The Institute for Operational Excellence and Tim Healey
This book presents nine guidelines for creating flow in any office environment. Each chapter describes one guideline using text, illustrations, and examples to provide an understanding of why creating flow in the office is essential and how to achieve it. The book details a step-by-step methodology for leveraging traditional value stream flow to create Operational Excellence. It also describes “self-healing” flow, where employees are capable of identifying and fixing flow problems without management intervention.

Operational Excellence in Your Office
A Guide to Achieving Autonomous Value Stream Flow with Lean Techniques
William F. Roth, Kutztown University and DeSales University, Pennsylvania, USA
Through decades of teaching management theory, the author has frequently questioned many modern-day management practices. This book explains, in a user-friendly and humorous manner, why these practices are based on worn out logic that needs to be rethought. The book reviews a range of management theories, including Six Sigma, downsizing, and management by objective. After showing where the holes lie, it offers alternative approaches that have proven effective in a growing number of private and public sector organizations, including some that enable a more positive workplace culture.
The Process Mind
New Thoughtware* for Designing Your Business on Purpose

Philip Kirby, Organization Thoughtware International Inc., Canada

Business performance is rooted in your processes, and superior performance depends on the way you think about and run these processes. To improve and sustain performance, you need a process mind. With game-changing thinking, thought-provoking principles, and eye-opening examples, this book brings to life the operating intelligence of a process mind. The author’s track record is so exceptional that by following the proven concepts discussed in this book, you can expect a 50 percent improvement in performance.

Productivity Press
Market: Business & Management
October 2014: 6-1/8 x 9-1/4: 315pp
Hb: 978-1-482-22895-3: $49.95
ebook: 978-1-482-22896-0
* For full contents and more information, visit: www.crcpress.com/9781482228953

Program Information Management for Public Sector
Shami Dugal

This book applies the principles of program management to project management with an emphasis on programs in public and nonprofit sectors. It explains how to structure and implement the lifecycle of a program, how to interface with other departments, agencies, and the public, and how to set performance and accountability standards. It also covers elements of business intelligence, such as IT considerations when creating business vision and the public; and how to set performance and accountability standards. It also covers implementing the lifecycle of the program; how to interface with other departments, agencies, and the public; and perpetuate an organizational model no longer adequate for the complexity of the current business world. Leading managers must acquire a whole-system perspective for their organizations to be sustainable. This book provides the overview, knowledge and tools to create a practical shift for 21st century management. The “Theory of everything” for management; an evolved and more scientific Fifth Discipline plus field book for contemporary managers. It follows on from Deming and Goldratt. The Decalogue that continues to sell today and is based on over ten years of implementation.

Productivity Press
Market: Business & Management
July 2014: 6-1/8 x 9-1/4: 223pp
Hb: 978-1-482-21630-1: $49.95
ebook: 978-1-482-21631-8
* For full contents and more information, visit: www.crcpress.com/9781482216301

Project Leadership
Creating Value with an Adaptive Project Organization

Barry L. Cross, Queen’s University, Kingston, Ontario, Canada and M. Kathryn Brohman

Today’s organizations need to introduce new products and enhance existing services faster in order to remain competitive. The common cause of project failure is that leadership fails to appreciate the extent of uncertainty and complexity in a project and therefore doesn’t adapt their management structure accordingly. This book highlights how successful projects rely not just on the project team, but on the culture of executive leadership. Concepts are presented in an anecdotal manner that will suit today’s leaders. The book offers straight-forward takeaways and solutions to provide executives with the tools to implement an effective project environment.

Productivity Press
Market: Project Management
July 2014: 6-1/8 x 9-1/4: 234pp
Hb: 978-1-482-22895-3: $49.95
ebook: 978-1-482-22896-0
* For full contents and more information, visit: www.crcpress.com/9781482228953

Quality, Involvement, Flow
The Systemic Organization

Domenico Lepore, Intelligent Management Inc., Victoria, Canada, Angela Montgomery, Intelligent Management Inc., Victoria, Canada and Giovanni Siepe, Intelligent Management Inc., Victoria, Canada

Current organizations underperform due to silo thinking. Artificial barriers frustrate efforts and perpetuate an organizational model no longer adequate for the complexity of the current business world. Leading managers must acquire a whole-system perspective for their organizations to be sustainable. This book provides the overview, knowledge and tools to create a practical shift for 21st century management. The “Theory of everything” for management; an evolved and more scientific Fifth Discipline plus field book for contemporary managers. It follows on from Deming and Goldratt. The Decalogue that continues to sell today and is based on over ten years of implementation.

Productivity Press
Market: Business & Management
July 2016: 7 x 10: 256pp
Hb: 978-1-498-75589-4: $69.95
* For full contents and more information, visit: www.crcpress.com/9781498755897

Reflections on Hoshin Planning
Guidance for Leaders and Practitioners

Lisa Boisvert, Business Converted Learning, LLC

This book picks up where Hoshin “How-To” books sometimes leave off and provides practical ideas and tools for overcoming some of the messier obstacles faced by today’s executives and planning professionals when they conduct their strategic planning: working with unions, planning during an acquisition, dealing with measurement fatigue. Boisvert faces these and other issues head-on and with a candid, practical, and compassionate eye.

Productivity Press
Market: Public Administration & Public Policy
January 2016: 7 x 10: 210pp
Hb: 978-1-482-29978-6: $39.95
ebook: 978-1-482-29979-3
* For full contents and more information, visit: www.crcpress.com/9781482299786

The Results Facilitator
Expert, Manager, Mentor

Marvin T. Howell

This book explains and outlines the new role and characteristics of today’s facilitator. Discussing the tools and techniques that facilitators need to master to be successful, it illustrates the use of critical success factors (CSFs) for measuring progress towards achieving the objectives of a long-term program. The book examines the planning, conducting, and completing of meeting responsibilities in explicit detail and also highlights important factors not covered in the International Association of Facilitators (IAF) certification process.

Productivity Press
Market: Business & Management
December 2014: 7 x 10: 234pp
Hb: 978-1-482-25235-4: $39.95
ebook: 978-1-482-25236-1
* For full contents and more information, visit: www.crcpress.com/9781482252354
Selecting and Validating Successful Innovation Projects for the Asian Marketplace
Gregory C. McLaughlin, Innovation Processes and Solutions Consulting, LLC, California, USA and William R. Kennedy, Innovation Processes and Solutions Consulting, LLC, California, USA
An organization that creates or sustains innovative products and processes will have a distinct competitive advantage in today’s global market. Important to the innovative process is the influence of culture specific to the organization whether in the U.S., Europe or Asia. This book describes the need for an innovative environment and business eco-system for sustained success particular to organizations doing business in Asia. Included is a 7-step validated process for choosing and approving innovation projects. The book also includes templates, exercises, and discussion questions. The authors also use numerous case studies to teach the material from an Asian perspective.
Productivity Press
Market: Business & Management
August 2016: 6-1/8 x 9-1/4: 326pp
Hb: 978-1-498-73325-0: $79.95
* For full contents and more information, visit: www.crcpress.com/9781498733250

Standardized Work with TWI
Eliminating Human Errors in Production and Service Processes
Bartosz Misiurek, Lean Enterprise Institute, Polska, Poland
A collection of the author’s experiences implementing work standardization in 150 companies such as: Volvo, Cadbury Rolls Royce, Twinings, Oriflame, Whirlpool, Electrolux, and Colgate. Managers intuitively create wrong standards for work that then translates into poorly guided instructions, which may cause human errors. The book shows how to implement standardized work, what to look for, and where the mistakes are most frequently made. It contains clearly delineated key points with the reasons why these specific key points have consistently caused problems and misunderstandings in many major companies. It explains how the TWI Job Instruction program universally eliminated these problems.
Productivity Press
Market: Business & Management
April 2016: 8-1/2 x 11: 168pp
Pb: 978-1-498-73356-7: $49.95
* For full contents and more information, visit: www.crcpress.com/978149873356-2

Strategic Project Management
Contemporary Issues and Strategies for Developing Economies
Edited by Corlaine Barclay and Kewute-Muata Osei-Bryson, Virginia Commonwealth University, Richmond, USA
This book presents the challenges and best practices of project management within the context of developing countries. The book covers the foundations of project management, highlighting the particular strategies for developing nation contexts. The book also includes a section of chapters on project success criteria and performance evaluation techniques; one section covers government projects with case studies; there is a section on stakeholder management; a section on portfolio management; and a final section on applications by industry such as ICT and healthcare.
CRC Press
Market: Public Administration & Public Policy
August 2015: 6-1/8 x 9-1/4: 349pp
Hb: 978-1-482-22512-9: $79.95
* For full contents and more information, visit: www.crcpress.com/9781482225129

Sustainable Bridge Structures
Proceedings of the 8th New York City Bridge Conference, 24-25 August, 2015, New York City, USA
Edited by Khaled Mahmoud, Bridge Technology Consulting, NYC, USA & Bridge Engineering Association, NYC, USA
The ever-increasing traffic demands, coupled with deteriorating condition of bridge structures, present great challenges for maintaining a healthy transportation network. The sustainability aims at minimizing the cost of bridge construction projects and the associated environmental impact on the society, while maintaining healthy economic development. This volume contains a selection of papers that were presented at the 8th NYC Bridge Conference, August 2015. The peer-reviewed papers are valuable contributions to the state of the art in bridge engineering and of archival quality.
CRC Press
Market: Structural Engineering
August 2015: 334pp
Hb: 978-1-482-7876-4: $169.95
* For full contents and more information, visit: www.crcpress.com/9781138028784

The Tactical Guide to Six Sigma Implementation
Suresh Patel, Indian Institute of Management, Vastrapur, Ahmedabad, Gujarat, India
While there are many Six Sigma books on the market, this book’s objective is to clarify and focus on the important aspects now that it’s been applied in many industries. It seeks to simplify a complex subject and remove the intimidation of using statistics. This book takes readers through the five phases of the Six Sigma methodology—Define-Measure-Analyze-Improve-Control (DMAIC)—in five clearly written and easy-to-understand chapters. The reader acutely learns the purpose of each phase and what activities to perform in each. Numerous practical figures, charts, formulae and forms are included throughout the book and all statistics are described to the exact level of understanding necessary.
Productivity Press
Market: Business & Management
May 2016: 6-1/8 x 9-1/4: 200pp
Hb: 978-1-498-7543-8: $49.95
* For full contents and more information, visit: www.crcpress.com/9781498754383

Techniques and Sample Outputs that Drive Business Excellence
H. James Harrington, CEO, Harrington Management Systems, Los Gatos, California and Chuck Mignosa, Business Systems Architects, Santa Clara, California, USA
Series: The Little Big Book Series
This book in the Little Big Book series discusses the most common set of tools and methodologies used in managerial, strategic planning, project selection and organizational improvement projects that are referred to throughout The Little Big Book series. It presents the concepts and techniques that must be mastered by anyone managing an improvement project. Covering a large number of tools and techniques, the book supplies concise operating guidance that is adequate to help readers understand how to use that tool. It also includes examples of how the tools are used.
Productivity Press
Market: Business & Management
January 2016: 6-1/8 x 9-1/4: 326pp
Pb: 978-1-466-57728-2: $29.95
* For full contents and more information, visit: www.crcpress.com/9781466577282
The TWI Facilitator's Guide
How to Use the TWI Programs Successfully
Donald A. Dinero, TWI Learning Partnership, Rochester, New York, USA
There are many books on TWI but they don’t include any new material. Practitioners have altered the programs without understanding the underlying principles. These changes have made the programs less effective. This book will identify/explain the main principles of the TWI Programs. Knowing these principles will enable modification of the programs to fit organizations’ needs/cultures without losing any effectiveness — Practitioners will know what to change and how to make those changes. This book reviews WHAT the programs are and then explains HOW to use them. It tells WHY we do certain aspects of each program. When we know WHY we do something, we won’t stop doing it for the wrong reason.
Productivity Press
Market: Business & Management
June 2016: 6 x 10: 248pp
Pb: 978-1-498-75484-2: $49.95
ebook: 978-1-498-75485-9
* For full contents and more information, visit: www.crcpress.com/9781498754842

You're the Boss
Growing and Selling a Successful Consulting Firm
Raj Aseervatham, Origin Energy, Sustainable Development and Communities, Brisbane, Queensland, Australia
Written in a warmly conversational way (making it accessible to novice consultants as well as seasoned professionals), this book is aimed at small to medium business consulting entrepreneurs who want to achieve these three goals: (1) To work for themselves; to be their own bosses; (2) To grow their business and have others working for them; and (3) To sell that business and become financially independent.
Productivity Press
Market: Business & Management
May 2016: 6-1/8 x 9-1/4: 232pp
Hb: 978-1-498-75189-6: $39.95
ebook: 978-1-498-75190-2
* For full contents and more information, visit: www.crcpress.com/9781498751896

2nd Edition - NEW EDITION
The TWI Workbook
Essential Skills for Supervisors, Second Edition
Patrick Graupp, TWI Institute, Liverpool, New York, USA and Robert J. Wrona, TWI Institute, Liverpool, New York, USA
The second edition of the Shingo Prize-winning The TWI Workbook: Essential Skills for Supervisors has been completely updated to the latest terminology and practice, revised forms and tools, and new examples to demonstrate current TWI practice. It features an entirely new section on Job Safety, a fourth TWI module that was developed in Japan using the identical TWI methodology of the original three programs introduced in the original work. A new chapter on TWI Problem Solving is also included.
Productivity Press
Market: Business & Management
December 2015: 8-1/2 x 11: 318pp
Pb: 978-1-498-70396-3: $59.95
ebook: 978-1-498-70400-7
* For full contents and more information, visit: www.crcpress.com/9781498703963

Written English
A Guide for Electrical and Electronic Students and Engineers
Steve Hart, English Language Editor and Resource Writer, Cambridge, UK
This book covers all aspects of English grammar relevant to electrical and electronic engineers. It discusses working with numbers and algebra, including correct formatting procedures (both body citations and references). The book addresses vocabulary and stylistic issues, describes the level of writing expected in the field, reveals often-made mistakes, and indicates areas where engineers should focus their efforts. The text also offers unique insight into problems students and academics face on a day-to-day basis when writing in a language that is not their mother tongue.
CRC Press
Market: Engineering - Electrical
December 2015: 200pp
Pb: 978-1-498-73962-7: $39.95
ebook: 978-1-498-73963-4
* For full contents and more information, visit: www.crcpress.com/9781498739627

Browse and order online: www.crcpress.com
The Customer-Driven Organization
Employing the Kano Model
Lance B. Coleman, Sr., The Tech Group, 504 S. Madison Drive, Tempe, AZ 85281, USA

Which organizations provide customer satisfaction or inspire customer loyalty? Which is more important? This book gives detailed examples of how to deploy the Kano model of customer service excellence in a manufacturing setting, as well as in service and other environments. Readers will learn how to directly apply Kano principles in their own business environments, establish priorities, increase efficiency, improve communication, and expand on business relationships.

Productivity Press
Market: Business & Management
December 2014: 7 x 10: 116pp
Pb: 978-1-482-21710-1 $39.95
ebook: 978-1-482-21711-2 * For full contents and more information, visit: www.crcpress.com/9781482217100

Inventive Engineering
Knowledge and Skills for Creative Engineers
Tomasz Arciszewski, George Mason University, USA

Inventive engineering is an emerging engineering science focused on the conceptual designing processes whereby creative designs are developed. Its core concepts are too often unknown and even surprising, but they are also feasible and can be learned leading to potentially patentable designs. The book has its roots in engineering, psychology, history, systems engineering, political science, and computer science. It includes a general outline of inventive engineering and the conceptual designing process and guidance on several inventive designing methods.

CRC Press
Market: General Engineering
March 2016: 6-1/8 x 9-1/4: 400pp
Pb: 978-1-498-71124-1 $59.95
ebook: 978-1-498-71125-8 * For full contents and more information, visit: www.crcpress.com/9781498711241

The Cell Manufacturing Playbook
A Step-by-Step Guideline for the Lean Practitioner
Chris A. Ortiz, Kaizen Assembly, Inc., Bellingham, Washington, USA

Series: The LEAN Playbook Series

The Cell Manufacturing Playbook provides step-by-step guidance on how to implement effective work cells. It includes color pictures, examples, and 3D models from actual work cell implementations. In addition to the images, a combination of short paragraphs and bulleted points walk readers through the process of implementing effective cell manufacturing. Although the book wastes little time on high-level theory, it does include an introductory portion that provides readers with the foundation in the 8 Wastes and Lean metrics needed to fully benefit from this playbook.

Productivity Press
Market: Business & Management
January 2016: 8-1/2 x 11: 744pp
Pb: 978-1-498-74170-5 $39.95
ebook: 978-1-498-74171-2 * For full contents and more information, visit: www.crcpress.com/9781498741705

The Green Factory
Creating Lean and Sustainable Manufacturing
Andrea Pampanelli, GKN Driveline, Brazil, Neil Trivedi, The Perfect Process Company Ltd. and Pauline Found, University of Buckingham

This book proposes a new model, the Lean and Green Business Model (L&GBM), where the environmental aspect of sustainability is integrated with Lean thinking to create a way of thinking that contributes to and balances the three sustainability dimensions of people, profit, and planet. The model presented uses a kaizen approach for improving mass and energy flows in manufacturing environments that already possess a deployment level in applying Lean. The book tells the story of how a major British multinational corporation developed and implemented an L&GBM in two of its automotive facilities in Brazil.

Productivity Press
Market: Business & Management
August 2015: 6-1/8 x 9-1/4: 165pp
Pb: 978-1-482-21710-0 $49.95
ebook: 978-1-482-21711-2 * For full contents and more information, visit: www.crcpress.com/9781482217110

Grow Your Factory, Grow Your Profits
Lean for Small and Medium-Sized Manufacturing Enterprises
Timothy McLean

Using case studies, practical examples, illustrations, charts, and pictures from real small to medium-sized enterprise (SME) manufacturers, this book provides practical solutions to the issues facing every growing manufacturing business. The book details how SMEs differ from large organizations and why the approach to Lean Manufacturing must also be different. Covering the complete life cycle of small and medium-sized manufacturers, this book addresses a different SME manufacturing issue in each chapter—enabling readers to tackle issues at their own pace and in their order of priority.

Productivity Press
Market: Business & Management
December 2014: 7 x 10: 175pp
Pb: 978-1-482-21710-0 $39.95
ebook: 978-1-482-21711-2 * For full contents and more information, visit: www.crcpress.com/9781482217100

Industrial Biotechnology
Sustainable Production and Bioresource Utilization
Edited by Devarajan Thangadurai, Karnataka University, Dharwad, India and Jayabal Sangeetha, Karnataka University, Dharwad, India

The goal of industrial biotechnology is to develop new techniques and technologies to transform renewable raw materials into chemicals, materials, and fuels by the substitution of fossil fuels. With the increase in the world’s population and the resultant growing energy demand, the need for more energy can be successfully met with the advancements in industrial biotechnology. This important new book covers recent advancements, innovations, and technologies in industrial biotechnology, specifically addressing the application of various biomolecules in industrial production and in cleaning and environmental remediation sectors.

Apple Academic Press
Market: Biotechnology
December 2015: 6-1/8 x 9-1/4: 395pp
Pb: 978-1-771-88262-0 $49.95
ebook: 978-1-771-88263-7 * For full contents and more information, visit: www.crcpress.com/9781771882637
Industrial Engineering and Management Science

Edited by Garry Lee
Series: Communications in Information Engineering
The 2014 International Conference on Industrial Engineering and Management Science (IEMS 2014) was held August 8-9, 2014, in Hong Kong. This proceedings volume assembles papers from various professionals, leading researchers, engineers, scientists, and students and presents innovative ideas and research results focused on Industrial Engineering and Management Science. The papers in this book group around the following topics: Information Technology, Industrial Development and Industrial Engineering and Performance Evaluation.

CRC Press
Market: Industrial Engineering
October 2014: 122pp
Hb: 978-1-138-02647-6: $149.95
ebook: 978-1-315-75221-4
* For full contents and more information, visit: www.crcpress.com/9781138026476

Lean for High-Mix-Low-Volume Manufacturers
Integrating the Toyota Production System with Group Technology and Cellular Manufacturing
Shahrukh Irani
The book integrates techniques from the Toyota Production System (TPS) that apply to high-mix low-volume with the science of Group Technology and Cellular Manufacturing (GT/CM) to replace those parts of the TPS that pertain solely to high-volume, repeatable processes. GT/CM is the technical solution to Lean for high-mix low-volume. Toyota provides the tools to sustain GT/CM, especially the workforce culture and Lean leadership aspects.

Productivity Press
Market: Business & Management
August 2016: 7 x 10: 352pp
Pb: 978-1-498-74067-2: $59.95
ebook: 978-1-315-76223-4
* For full contents and more information, visit: www.crcpress.com/9781498740672

Industrial Engineering Non-Traditional Applications in International Settings
Edited by Bopaya Bidanda, University of Pittsburgh, Pennsylvania, USA, Ihsan Sabuncuoglu, Abdullah Gul University, Turkey and Bahar Y. Kara, Bilkent University, Ankara, Turkey
Series: Industrial Engineering
The rapid growth of the IE profession and academic departments outside the United States has led to a significant body of knowledge being developed, but this body of knowledge often does not find the appropriate archival outlets. This book focuses on two key aspects of the industrial engineering discipline – non-traditional settings and international environments. It clearly illustrates how IE based tools and techniques have been applied to a diversity of environments, many of which can be found in this book.

CRC Press
Market: Engineering - Industrial & Manufacturing
November 2014: 6-1/8 x 9-1/4: 214pp
Hb: 978-1-482-22687-4: $99.95
ebook: 978-1-482-22688-1
* For full contents and more information, visit: www.crcpress.com/9781482226874

Industrial Engineering Applications in Emerging Countries
Edited by Ihsan Sabuncuoglu, Abdullah Gul University, Kayseri, Turkey, Bahar Y. Kara, Bilkent University, Ankara, Turkey and Bopaya Bidanda, University of Pittsburgh, Pennsylvania, USA
Series: Industrial Engineering
The second volume of a three-volume series on global logistics management, this book focuses on recent developments and implementations of operations research techniques on selected logistic problems in emerging countries. The book covers topics ranging from quality management in pharmaceutical supply chains to risk analysis of maritime ports and identifies quality management practices that impact supply chain performance using empirical data from pharmaceutical manufacturing sector in Pakistan. It provides case studies and discusses the application of IE tools.

CRC Press
Market: Engineering - Industrial & Manufacturing
January 2015: 6-1/8 x 9-1/4: 310pp
Hb: 978-1-138-02660-5: $209.95
ebook: 978-1-482-28268-9
* For full contents and more information, visit: www.crcpress.com/9781138026605

Industrial Engineering and Manufacturing Technology
Proceedings of the 2014 International Conference on Industrial Engineering and Manufacturing Technology (ICIEMT 2014), July 10-11, 2014, Shanghai, China

Edited by Dawei Zheng, International Research Association of Information and Computer Science, Beijing, China
Series: IACIS Proceedings
The 2014 International Conference on Industrial Engineering and Manufacturing Technology (ICIEMT 2014) was held July 10-11, 2014 in Shanghai, China. The objective of ICIEMT 2014 was to provide a platform for researchers, engineers, academicians, and professionals from all over the world to present their research results and development activities in Industrial Engineering and Manufacturing Technology. The program consisted of invited sessions and technical workshops and discussions with eminent speakers, and contributions to this proceedings volume cover a wide range of topics in Industrial Engineering and Manufacturing Technology.

CRC Press
Market: Industrial Engineering
February 2015: 218pp
Hb: 978-1-138-02660-5: $189.95
ebook: 978-1-315-75221-1
* For full contents and more information, visit: www.crcpress.com/9781138026605

For more information, visit: www.crcpress.com
Lean Six Sigma
International Standards and Global Guidelines, Second Edition

Terra Vanzant Stern, PhD
International Lean Six Sigma (LSS) practitioners must understand the dynamics of LSS, along with its cultural aspects and regulations. This book provides this understanding. It defines many of the terms popularized by process improvement programs, such as center of excellence and business transformation. It documents these practices and explains how to perform future activities in accordance with the recorded practices. Illustrating the synergies between Lean and Six Sigma and how they partner with other process improvement programs and initiatives, this book is an ideal study guide for those preparing to take the LSS Black Belt certification exam.

Productivity Press
Market: Business & Management
November 2015: 7 x 10: 280pp
Pb: 978-1-498-73960-3: $39.95
ebook: 978-1-498-73961-0

For full contents and more information, visit: www.crcpress.com/9781498739603

The Quality Improvement Field Guide
Achieving and Maintaining Value in Your Organization

Matthew A. Barsalou, BorgWarner Turbo Systems Engineering, Kirchheimbolanden, Germany
The Quality Improvement Field Guide covers the key aspects that quality professionals need to know to attain mastery in their field. After reading this book, readers will not only gain an understanding of the key quality improvement concepts, but will also gain the practical insight required to implement them correctly. Describing each quality method with sufficient detail so that readers can immediately apply them, this book is an ideal guide for anyone new to the field of quality as well as experienced quality professionals who need a quick overview.

Productivity Press
Market: Business & Management
November 2015: 7 x 10: 190pp
Pb: 978-1-498-74574-1: $39.95
ebook: 978-1-498-74575-8

For full contents and more information, visit: www.crcpress.com/9781498745741

Mastering Complexity
Adding Coherence Throughout Your Business with Dependency Structure Spreadsheets

Stephen Denker, Managing Partner, Business Process Architects, Inc.
This book is designed to help readers develop and maintain logical, adaptable solutions to business problems. It demonstrates how to visualize business dependency connections with a square spreadsheet called a Dependency Structure Matrix (DSM). Once the links representing dependencies are visualized in a DSM, it can be used to improve the business. The book focuses on simple practices that the reader can easily understand to solve business problems on his or her own.

Productivity Press
February 2015: 6-1/8 x 9-1/4: 143pp
Pb: 978-1-498-70079-5: $29.95
ebook: 978-1-498-70080-1

For full contents and more information, visit: www.crcpress.com/9781498700795

New JIT, New Management Technology Principle

Kakuro Amasaka, Aoyama Gakuin University, Tokyo, Japan
This book contains the previously published, updated, and new works of renowned scientist, scholar, and consultant Kakuro Amasaka. This book advances the Just-in-Time quality management strategy, bringing global readers into the cutting edge of a new management technology principle that surpasses what traditional JIT has accomplished. The new JIT principle contains hardware and software systems, and next generation technical principles for transforming management technology into management strategy. This comprehensive work covers traditional JIT, innovation and evolution, the full new JIT and its applications along with case studies.

Productivity Press
Market: Business and Management
December 2014: 6-1/8 x 9-1/4: 490pp
Hb: 978-1-466-57502-8: $79.95
ebook: 978-1-466-57503-5

For full contents and more information, visit: www.crcpress.com/9781466575028

The Quick Changeover Playbook
A Step-by-Step Guideline for the Lean Practitioner

Chris A. Ortiz, Kaizen Assembly, Inc., Bellingham, Washington, USA
Series: The LEAN Playbook Series
This book will be the most comprehensive work on how to implement the concept of Total Quick and Changeover and Setup Reduction. It is a hands-on implementation guide to be used out in the work area as a guideline to facilitate effective Setup Reduction projects. It will cover the four steps of a setup, data collection, internal and external work, one-turn methods, intermediate tooling, and standard work. It will be unique in that it will feature color pictures, detailed guidelines, and specific bulleted points as direction.

Productivity Press
Market: Business & Management
March 2016: 8-1/2 x 11: 60pp
Pb: 978-1-498-74164-4: $39.95
ebook: 978-1-498-74165-1

For full contents and more information, visit: www.crcpress.com/9781498741644

RSM Simplified

Mark J. Anderson, Stat-Ease Inc, Minneapolis, Minnesota, USA and Patrick J. Whitcomb, Stat-Ease, Inc., Minneapolis, Minnesota, USA
This book continues where DOE Simplified leaves off in Chapter 8 with an introduction to “Response Surface Methods [RSM] for Optimization.” It presents this advanced tool for design of experiments (DOE) in a way that anyone with a minimum of technical training can understand and appreciate. Unlike any other book of its kind, RSM Simplified keeps formulas to a minimum—making liberal use of figures, charts, graphs and checklists. It also offers many relevant examples, amusing and fun do-it-yourself exercises.

Productivity Press
Market: Business & Management
May 2016: 7 x 10: 344pp
Pb: 978-1-498-74598-7: $59.95
ebook: 978-1-498-74599-4

For full contents and more information, visit: www.crcpress.com/9781498745987
Strategy + Teamwork = Great Products
Management Techniques for Manufacturing Companies
Frederick Parker
Manufacturing companies succeed by using techniques that promote teamwork between engineering, marketing, and manufacturing engineering. This book explains how to implement techniques of teamwork between those disciplines and how to mold employees from various walks of life into a successful manufacturing team. It details the best techniques currently available and includes examples on how to implement them. The book also describes how to avoid common pitfalls and steer clear of useless fads that can be destructive to your organization.

Productivity Press
Market: Business & Management
October 2014: 6-1/8 x 9-1/4: 144pp
Hb: 978-1-482-60100-6: $49.95
ebook: 978-1-482-60111-3
* For full contents and more information, visit: www.crcpress.com/9781482260106

Understanding Statistics and Statistical Myths
How to Become a Profound Learner
Kicab Castaneda-Mendez, Performance Management Consultant, Chapel Hill, North Carolina, USA
Addressing more than 30 statistical myths, this book explains how to understand statistics rather than how to do statistics. In the book, six characters have 30 discussions on various topics taught in a fictional course intended to teach students how to apply statistics to improve processes. Readers follow along and learn as the students apply what they learn to a project in which they are team members. Each discussion will help readers understand why certain statements are not always true under all conditions, as well as when they contradict other myths.

CRC Press
Market: Business & Management
Addressing more than 30 statistical myths, this book explains how to understand statistics rather than how to do statistics. In the book, six characters have 30 discussions on various topics taught in a fictional course intended to teach students how to apply statistics to improve processes. Readers follow along and learn as the students apply what they learn to a project in which they are team members. Each discussion will help readers understand why certain statements are not always true under all conditions, as well as when they contradict other myths.

Systemic Improvement Planning for Results-Based Positive Operational Changes
Hakan Butuner, IMECO Industrial Management & Engineering, Istanbul, Turkey
This book introduces Systematic Improvement Planning (SIP), a structured approach to improvement. It draws upon proven industrial engineering and quality improvement tools, along with some of its own, and enables people to make positive changes. SIP is designed to help meet goals, solve problems, and implement ideas. The book provides a comprehensive and detailed framework for operational improvement at all levels of an enterprise.

Auerbach Publications
Market: Business & Management
October 2016: 6-1/8 x 9-1/4: 320pp
Hb: 978-1-498-72630-6: $79.95
ebook: 978-1-498-72631-3
* For full contents and more information, visit: www.crcpress.com/9781498726306

The TPM Playbook
A Step-by-Step Guideline for the Lean Practitioner
Chris A. Ortiz, Kaizen Assembly, Inc., Bellingham, Washington, USA
Series: The LEAN Playbook Series
A companywide approach to improving the effectiveness and longevity of equipment and machines, Total Productive Maintenance (TPM) is a critical component of production line success. Until now, however, there has been a need for a book with step-by-step guidelines on how to achieve TPM. The TPM Playbook fills this need. It includes detailed examples, color pictures, and 3D models of actual TPM implementations. In addition, a combination of short paragraphs and bulleted points walks readers through the process of achieving a comprehensive TPM program.

Productivity Press
Market: Business & Management
January 2016: 8-1/2 x 11: 52pp
Pb: 978-1-498-74166-6: $39.95
ebook: 978-1-498-74167-3
* For full contents and more information, visit: www.crcpress.com/9781498741668

Browse and order online:
www.crcpress.com
7 Fundamentals of an Operationally Excellent Management System
Chitrham Lutchman, Suncor Energy Inc., Calgary, Alberta, Canada, Douglas Evans, Suncor Energy Inc, Calgary, Canada, Waddah Shihab Ghanem Al Hashemi, Emirates National Oil Company group, Dubai, United Arab Emirates and Rohanie Maharaj, University of Trinidad and Tobago, Piarc
This book discusses the seven fundamentals required to create an operationally excellent management system (OEMS) designed to reduce workplace incidents and improve business performance. It also demonstrates the business performance impact of an OEMS across leading gas and oil organizations, such as Exxon Mobil, BP, Suncor, and Chevron. Integrating sound organizational and business practices with personnel and process safety management principles, the book is an invaluable resource for organizations seeking continuous improvements and world-class environmental health and safety (EHS) and business performance.
CRC Press
Market: Industrial & Manufacturing
January 2015: 6-1/8 x 9-1/4: 456pp
Hb: 978-1-498-71477-8: $99.95
ebook: 978-1-482-20577-1
* For full contents and more information, visit: www.crcpress.com/9781498714778

Additive Manufacturing
Edited by Amit Bandyopadhyay, School of Mechanical and Materials Engineering, Washington State University, Pullman, USA and Susmita Bose, School of Mechanical and Materials Engineering, Washington State University, Pullman, USA
This book highlights the latest advancements in 3D printing and additive manufacturing technologies. The text introduces various additive manufacturing technologies based on their utilization in different material classes. It discusses important application areas of additive manufacturing, including medicine, education, and the space industry. It also explores regulatory challenges associated with the emergence of additive manufacturing as a mature technological platform. By showing how 3D printing and additive manufacturing technologies are currently used, the book not only provides a valuable reference but also encourages future innovation.
CRC Press
Market: Engineering - Industrial & Manufacturing
September 2015: 7 x 10: 388pp
Hb: 978-1-482-22359-0: $169.95
ebook: 978-1-482-22360-4
* For full contents and more information, visit: www.crcpress.com/9781482223590

Advanced Manufacturing for Optical Fibers and Integrated Photonic Devices
Abdul Al-Azzawi, Algonquin College, Ottawa, Ontario, Canada
This book explores the theoretical principles and industrial practices of high-technology manufacturing. Focusing on fiber optic, semiconductor, and laser products, the text discusses workshops, production lines, clean rooms, Lean manufacturing processes, continuous improvement, waste reduction, the 5S’s, management support, product improvement, workplace safety, and auditing. Offering a step-by-step approach complete with numerous figures and tables, detailed references, and a glossary of terms, the book presents the latest manufacturing achievements and their applications in the high-tech sector, employing the international system of units (SI) throughout.
CRC Press
Market: Engineering - Electrical
August 2015: 6-1/8 x 9-1/4: 220pp
Hb: 978-1-498-72946-8: $149.95
ebook: 978-1-498-72945-1
* For full contents and more information, visit: www.crcpress.com/9781498729451

Additive Manufacturing: Innovations, Advances, and Applications
Edited by T.S. Srivatsan, University of Akron, Ohio, USA and T.S. Sudarshan
This book presents an overview of recent and emerging additive manufacturing (AM) techniques and their applications. It explains several of the processes developed using various materials ranging from metals to plastics, and composites to human tissue. The chapters provide systematic solutions for the selection and design of a process most appropriate for AM. The book also provides an easy guide to reading and understanding emerging trends in AM while concurrently appreciating its importance for both existing and emerging applications.
CRC Press
Market: Engineering - Industrial & Manufacturing
September 2015: 7 x 10: 444pp
Hb: 978-1-498-71477-8: $159.95
ebook: 978-1-482-20577-1
* For full contents and more information, visit: www.crcpress.com/9781498714778

Advances in Heat Pump-Assisted Drying Technology
Edited by Vasile Minea, Hydro-Québec Research Institute, Shawinigan, Québec, Canada
Series: Advances in Science & Technology
Conventional dryers offer limited opportunities to increase energy efficiency. Heat pump dryers are more energy and cost effective, as they can recycle drying thermal energy and reduce CO2, particulate, and VOC emissions due to drying. This book provides an introduction to the technology and current best practice. It enables the reader to engage confidently with the technology and provides a wealth of information on theories, principles, current practices and future direction of the technology. It will answer questions about risks, advantages vs. disadvantages, impediments, and will offer solutions to current problems.
CRC Press
Market: Engineering - Chemical
May 2016: 6-1/8 x 9-1/4: 256pp
Hb: 978-1-498-73499-8: $189.95
ebook: 978-1-498-73500-1
* For full contents and more information, visit: www.crcpress.com/9781498734998

Cold Gas Dynamic Spray
Edited by Roman Gr. Maev, University of Windsor, Canada and Volf Leschinsky, University of Windsor, Canada
Step-by-step, this text explains how cold gas dynamic spray works and what it can do. It walks the reader through the very first principles of cold spraying all the way through powder preparation, problems related to the transport and injection of a powder into a gas-powder jet, metallurgy of coating formation, methods of cold spray (CS) coatings characterization, and application of the deposited coatings. Featuring a clear layout and a number of high-quality figures, the book comprises a balanced mixture of engineering practice-oriented information and theoretical background.
CRC Press
Market: Materials Science
April 2016: 7 x 10: 448pp
Pb: 978-1-466-58442-6: $279.95
ebook: 978-1-466-58443-3
* For full contents and more information, visit: www.crcpress.com/9781466584426
Design for Profitability
Guidelines to Cost Effectively Manage the Development Process of Complex Products

Salah Ahmed Mohamed Elmoselhy, Fitzwilliam College, Cambridge, United Kingdom
Series: Industrial Innovation Series

Since the success of products significantly depends on the quality of product performance, inadequate management of the product design process can lead to improper performance of products that can result in significant long-term business losses. This book presents a design guideline for complex product design and development to enable companies to cost-effectively improve the technical performance of their products and consequently improve their competitiveness and profitability in the marketplace.

CRC Press
Market: Industrial and Manufacturing
November 2015: 6-1/8 x 9-1/4, 218pp
Hb: 978-1-466-56747-4 $189.95
ebook: 978-1-466-56748-1
* For full contents and more information, visit: www.crcpress.com/9781466567474

Directing the ERP Implementation
A Best Practice Guide to Avoiding Program Failure Traps While Tuning System Performance

Michael W. Pelphrey
Series: Resource Management

Directing the ERP Implementation: A Best Practice Guide to Avoiding Program Failure Traps While Tuning System Performance supplies best practices along with a proven roadmap for improving the odds of system implementation success. By adhering to the time-tested framework outlined in the book, readers will be able to commit to the precepts and practices that lead to successful implementations. Supplying an innovative and fast-track, yet comprehensive, approach to ERP implementation success, the book provides practical guidance to help executive leadership do the right things along their ERP journey.

CRC Press
Market: Business & Management
April 2015: 7 x 10, 380pp
Hb: 978-1-482-24841-8 $89.95
ebook: 978-1-482-24842-5
* For full contents and more information, visit: www.crcpress.com/9781482248418

Drills
Science and Technology of Advanced Operations

Viktor P. Astakhov, Production Service Management Inc, Michigan, USA
Series: Manufacturing Design and Technology

This book addresses the most important issues in drilling operations, and is designed to familiarize application specialists with properly defined basic concepts, terminology, and essentials of drilling. Materials common for making drilling tools are considered from the point of the cutting tool design and implementation to deliver an unprecedented depth of scientific and technical explanation needed for proper manufacturing and selection of a tool material for any given application.

CRC Press
Market: Manufacturing and Industrial Engineering
April 2014: 7 x 10, 888pp
Hb: 978-1-466-58434-1 $199.95
ebook: 978-1-466-58435-8
* For full contents and more information, visit: www.crcpress.com/9781466584341

Formal Methods in Manufacturing

Edited by Javier Campos, Carla Seatzu, University of Cagliari, Italy and Xiaolian Xie, Ecole Nationale Supérieure des Mines de Saint Etienne, France
Series: Industrial Information Technology

Illustrated with real-life examples, this text provides state-of-the-art solutions to common problems in manufacturing systems. Assuming some knowledge of discrete event systems theory, the book first introduces the most important formalisms used for the modeling, analysis, and control of manufacturing systems (including Petri nets, automata, and max-plus algebra), explaining the advantages of each. It then employs the formalisms to solve specific problems, such as modeling and simulation, supervisory control (including deadlock prevention), performance evaluation (including scheduling and optimization), fault diagnosis and diagnosability analysis, and reconfiguration.

CRC Press
Market: Electrical Engineering
February 2014: 7 x 10, 328pp
Hb: 978-1-466-56155-7 $189.95
ebook: 978-1-466-56156-4
* For full contents and more information, visit: www.crcpress.com/9781466561557

Friction and the Hot Rolling of Steel

Vladimir Panjkovic, Major Furnace Australia Pty Ltd, Clayton, Victoria, Australia

This text offers a systematic presentation of the evolution of concepts of friction, and its fundamental causes. It introduces key factors influencing friction in engineering systems. Applying these concepts, experimental observations and phenomena in various processes, readers understand the key frictional phenomena in the large-scale, commercial process of hot steel rolling. The usefulness of the book is not limited to hot rolling. It also provides an understanding of frictional phenomena in other important industrial sectors, such as automotive industry, railway transport, metal cutting and forming.

CRC Press
Market: Mechanical Engineering
February 2014: 6-1/8 x 9-1/4, 239pp
Hb: 978-1-482-20589-3 $169.95
ebook: 978-1-482-20591-6
* For full contents and more information, visit: www.crcpress.com/9781482205893

Encyclopedia and Handbook of Materials, Parts and Finishes, Third Edition

Mel Schwartz, Consultant, Clearwater, Florida, USA

This encyclopedia brings together in one concise volume the most up-to-date information on materials, parts, finishes, and processes utilized in the aerospace, automotive, chemical, computer, electronic, medical, oil, and space industries, and in other commercial endeavors. Using tables and illustrations when appropriate, the text provides thorough, straightforward explanations in an easy-to-use, A-to-Z format. The third edition updates the existing entries to reflect the past 13 years of progress, and describes new materials that have been invented, changed, or modified by innovative techniques, processes, or additions.

CRC Press
Market: Materials Science
June 2016: 7 x 10, 1100pp
Hb: 978-1-466-56747-4 $330.00
ebook: 978-1-466-56748-1
* For full contents and more information, visit: www.crcpress.com/9781466567474

Encyclopedia and Handbook of Materials, Parts and Finishes, Third Edition

Book of the Month

For full contents and more information, visit: www.crcpress.com
Future Information Engineering and Manufacturing Science

Edited by Dawei Zheng, International Research Association of Information and Computer Science, Beijing, China
Series: IRAICS Proceedings
The 2014 International Conference on Future Information Engineering and Manufacturing Science (FIEMS 2014) was held June 26-27 in Beijing, China. The objective of FIEMS 2014 was to provide a platform for researchers, engineers, academicians as well as industry professionals from all over the world to present their research results and development activities in Information Engineering and Manufacturing Science. The program consisted of invited sessions and technical workshops and discussions with eminent speakers, and contributions to this proceedings volume cover a wide range of topics in Information Engineering and Manufacturing Science.

CRC Press
Market: Information Engineering / Manufacturing Science
February 2015: 402pp
Hb: 978-1-138-02644-5: $239.95
eBook: 978-1-315-76075-9
* For full contents and more information, visit: www.crcpress.com/9781138026445

Global Manufacturing Technology Transfer
Africa-USA Strategies, Adaptations, and Management
Adejebi B. Badiu, Air Force Institute of Technology, Dayton, Ohio, USA
Series: Industrial Innovation Series
This book presents practical modern strategies for developing and sustaining manufacturing technology transfers. It is particularly useful for helping developing nations achieve and sustain a solid footing of economic development through manufacturing. This book uses the case of Africa and USA trade relations to demonstrate how modern technology innovation strategies can be developed and harmonized to keep a nation moving forward economically. Although Africa-USA technology transfer is used as a focus, the contents are applicable to other technology transfer relationships.

CRC Press
Market: Engineering - Industrial & Manufacturing
June 2015: 6-1/8 x 9-1/4: 381pp
Hb: 978-1-482-23553-1: $89.95
eBook: 978-1-482-23553-1
* For full contents and more information, visit: www.crcpress.com/9781482235531

2nd Edition - NEW EDITION
Edited by Terry Jacobs, Jacobs/Wyper Architects, Philadelphia, Pennsylvania, USA and Andrew A. Signore, ISG-Institute for Strategic Growth, Wayne, Pennsylvania, USA
Series: Drugs and the Pharmaceutical Sciences
This revised edition serves as a handy and current reference for professionals engaged in planning, designing, building, validating and maintaining modern GMP pharmaceutical manufacturing facilities in the U.S. and internationally. The new edition expands on facility planning, with a focus on the ever-growing need to modify existing legacy facilities, and on current trends in pharmaceutical manufacturing which include strategies for sustainability and LEED building ratings. All chapters have been re-examined with a fresh outlook on current good design practices.

CRC Press
Market: Pharmaceutical Science & Regulation
July 2016: 6-1/8 x 9-1/4: 600pp
Hb: 978-1-482-25890-5: $179.95
eBook: 978-1-482-25891-2
* For full contents and more information, visit: www.crcpress.com/9781482258905

4th Edition
Handbook of Industrial Drying, Fourth Edition
Edited by Arun S. Mujumdar, National University of Singapore
This Fourth Edition book includes 12 new chapters covering computational fluid dynamic simulation, solar, impingement, and pulse combustion drying; drying of fruits, vegetables, sugar, biomass, and coal; physicochemical aspects of sludge drying; and life-cycle assessment of drying systems. Addressing commonly encountered dryers as well as innovative dryers with future potential, the fully revised text not only delivers a comprehensive treatment of the current state of the art, but also serves as a consultative reference for streamlining industrial drying operations to increase energy efficiency and cost-effectiveness.

CRC Press
Market: Engineering - Chemical and Industrial
July 2016: 8-1/2 x 11: 1348pp
Hb: 978-1-466-59665-8: $369.95
eBook: 978-1-466-59666-5
* For full contents and more information, visit: www.crcpress.com/9781466596658
Handbook of Machining with Grinding Wheels, Second Edition

Joan D. Marinescu, University of Toledo, Ohio, USA, Mike P. Hitchiner, Saint-Gobain Abrasives, Romulus, Michigan, USA, Eckart Uhmann, University of Berlin, Germany, W. Brian Rowe, LJMU, Liverpool, UK and Ichiro Inasaki, Keio University, Japan

Grinding offers capabilities that range from high-rate material removal to high-precision superfinishing and has become one of the most widely used industrial machining and surface finishing operations. Reflecting modern developments in the science and practice of grinding, this handbook presents a broad range of abrasive machining technologies with a focus on the fundamental concepts and practical applications. This edition includes new materials, new types of abrasives, new machine-tools, new software, and new and basic research carried out by the authors.

CRC Press
Market: Engineering - Industrial & Manufacturing
February 2016: 7 x 10: 728pp
Hb: 978-1-482-20668-5: $249.95
ebook: 978-1-482-20670-8
* For full contents and more information, visit: www.crcpress.com/9781482206685

Laser and Photonic Systems Design and Integration

Edited by Shimon Y. Nof, Purdue University, West Lafayette, IN, USA, Andrew M. Weiner, Purdue University, West Lafayette, IN, USA and Gary J. Cheng, Purdue University, West Lafayette, IN, USA
Series: Industrial and Systems Engineering Series

Laser and photonic technologies and solutions influence many aspects of everyday life. With new and significant recent scientific discoveries in their fields, systems perspectives and integrated design approaches can improve even further the impact in critical areas of challenge. Yet this knowledge is dispersed across several disciplines and research arenas. This book brings together a multidisciplinary group of experts in many of these areas to foster increased understanding of the ways in which systems perspectives may influence laser and photonic innovations and application integration.

CRC Press
Market: Manufacturing & Industrial Engineering
May 2014: 6-1/8 x 9-1/4: 427pp
Hb: 978-1-466-56950-8: $174.95
ebook: 978-1-466-56952-2
* For full contents and more information, visit: www.crcpress.com/9781466569508

Manufacturing and Engineering Technology (ICMET 2014)

Edited by Ai Sheng, Information Science and Engineering Technology Research Association, Hong Kong, China and Yizhong Wang, Tianjin University of Science and Technology, Tianjin, China

Manufacturing and Engineering Technology brings together around 200 peer-reviewed papers presented at the 2014 International Conference on Manufacturing and Engineering Technology, held in San-ya, China, October 17-19, 2014. The main objective of these proceedings is to take the Manufacturing and Engineering Technology discussion a step further. Contributions cover Manufacturing, Mechanical, Materials Science, Industrial Engineering, Control, Information and Computer Engineering.

CRC Press
Market: Manufacturing and Engineering Technology
November 2014: 620pp
Hb: 978-1-138-02645-2: $319.95
ebook: 978-1-138-76572-4
* For full contents and more information, visit: www.crcpress.com/9781138026452

Manufacturing Engineering and Intelligent Materials

Edited by Li Lu and Nooh Abu Bakar

This volume is a collection of papers from experts and scholars presented at the 2015 International Conference on Manufacturing Engineering and Intelligent Materials (ICMEIM 2015), Guangzhou, January 30-31, 2015. It serves to discuss and share the latest new results and developments on the topics manufacturing system and control engineering, materials engineering and other relevant subjects. It will also strengthen the exchange and cooperation in the field of Manufacturing Engineering and Intelligent Materials.

CRC Press
Market: Materials Engineering
July 2015: 370pp
Hb: 978-1-138-02832-6: $159.95
ebook: 978-1-138-02831-9
* For full contents and more information, visit: www.crcpress.com/9781138028326

Metal Cutting Theory and Practice, Third Edition

David A. Stephenson, Ford Motor Company, Michigan, USA and John S. Agapiou, General Motors, Pontiac, Michigan, USA

With many of its chapters revised, this edition continues to provide a complete reference covering the latest technology in metal cutting tools, processes, and equipment. Major updates cover FEA methods, 5-axis machining, titanium and nickel machining, and minimum quantity lubrication machining. The MWL section is now expanded into a complete chapter. New chapters cover accuracy and error compensation as well as gear machining.

CRC Press
Market: Engineering - Industrial & Manufacturing
March 2016: 7 x 10: 962pp
Hb: 978-1-466-58753-3: $239.95
ebook: 978-1-466-58754-0
* For full contents and more information, visit: www.crcpress.com/9781466587533

Numerical Simulation of Heat Exchangers
Advances in Numerical Heat Transfer Volume V
Edited by W. J. Minkowycz, University of Illinois at Chicago, USA, Ephraim M. Sparrow and John M. Gorman, University of Minnesota, Department of Mechanical Engineering, Minneapolis, USA
Series: Series in Computational and Physical Processes in Mechanics and Thermal Sciences

This book deals with certain aspects of material science, particularly with the release of thermal energy associated with bond breaking. It clearly establishes the connection between heat transfer rates and product quality. The editors then sharply draw the thermal distinctions between the various categories of welding processes, and demonstrate how these distinctions are translated into simulation model uniqueness. The book discusses the incorporation of radiative heat transfer processes into the simulation model.

CRC Press
Market: Engineering - Mechanical
May 2016: 6-1/8 x 9-1/4: 348pp
Hb: 978-1-482-25019-0: $149.95
ebook: 978-1-482-25020-6
* For full contents and more information, visit: www.crcpress.com/9781482250190

For full contents and more information, visit: www.crcpress.com
Uptime
Strategies for Excellence in Maintenance Management, Third Edition

John D. Campbell and James V. Reyes-Picknell

Following in the tradition of its bestselling predecessors, Uptime: Strategies for Excellence in Maintenance Management, Third Edition explains how to deal with increasingly complex technologies, such as mobile and cloud computing, to support maintenance departments and set the stage for compliance with international standards for asset management. The book provides a strategy for developing and executing improvement plans that work well with the values prevalent in today's workforce. It also explains how you can use seemingly competing improvement tools to enhance each other.

Productivity Press
Market: Business & Management
August 2015: 6-1/8 x 9-1/4: 533pp
Hb: 978-1-482-25237-8: $49.95
ebook: 978-1-482-25238-5
* For full contents and more information, visit: www.crcpress.com/9781482252378

Value Stream Mapping for the Process Industries
Creating a Roadmap for Lean Transformation

Peter L. King, Lean Dynamics LLC, Newark, Delaware, USA
and Jennifer S. King, Operations Research Analyst, MCR LLC

This book explains how to create a complete value stream map (VSM) for a process industry manufacturing operation. Describing the unique features of process operations and why they require additions and adjustments to traditional VSMs, the book details an actual process operation and uses it to describe how to create the VSM. It defines all of the terms required for process VSM data boxes and uses the example process to illustrate all of the calculations required. It explains how to analyze the VSM and how to use the insights gained to develop a roadmap for a complete Lean transformation.

Productivity Press
Market: Business & Management
April 2015: 8-1/2 x 11: 244pp
Pb: 978-1-482-24768-8: $59.95
ebook: 978-1-482-24769-5
* For full contents and more information, visit: www.crcpress.com/9781482247688
Adversarial Risk Analysis

David L. Banks, Duke University, USA, Jesus M. Rios Alaga, Business Analytics and Mathematical Sciences, IBM, New York, USA and David Rios Insua, Institute of Mathematical Sciences, ICMAT-CSIC, Spain

This book shows decision makers how to build Bayesian models for the strategic calculation of their opponents' strategies, enabling decision makers to maximize their expected utility or minimize their expected loss. Many examples throughout illustrate the application of the ARA approach to a variety of games and strategic situations. A case study based on a real application in railway security provides a blueprint for how to perform ARA in similar security situations. In addition, multi-agent influence diagrams help readers visualize complex information structures.

Chapman and Hall/CRC
Market: Statistics
June 2015: 6 1/8 x 9 1/4: 224pp
Hb: 978-1-498-71239-2: $89.95
ebook: 978-1-498-71240-8
* For full contents and more information, visit: www.crcpress.com/9781498712392

Analysis with Ultrasmall Numbers

Karel Hrbacek, City College of New York, USA, Olivier Lessmann, College Rousseau, Genève and Richard O'Donovan, CEC Andre-Charanne, Genève

Series: Textbooks in Mathematics

This text presents an intuitive treatment of mathematics using ultrasmall numbers. With this modern approach to infinitesimals, proofs become simpler and more focused on the combinatorial heart of arguments, unlike traditional treatments that use epsilon–delta methods. Readers can fully prove fundamental results, such as the Extreme Value Theorem, from the axioms immediately, without needing to master notions of supremum or compactness. The book includes numerous exercises throughout and at the end of each chapter.

Chapman and Hall/CRC
Market: Mathematics
December 2014: 6 1/8 x 9 1/4: 316pp
Hb: 978-1-482-28256-6: $179.95
ebook: 978-1-482-28256-4
* For full contents and more information, visit: www.crcpress.com/9781482282562

2nd Edition - TEXTBOOK - NEW EDITION


Frank Beichelt, University of Witwatersrand, Johannesburg, South Africa

This book is a self-contained introduction into stochastic processes with special emphasis on their applications in science, engineering, finance, computer science and operations research. It provides the theoretical foundations for modeling time-dependent random phenomena in these areas and illustrates their application through the analysis of numerous examples. The material is presented in a comprehensible, application-oriented way.

Chapman and Hall/CRC
April 2016: 6 1/8 x 9 1/4: 602pp
Hb: 978-1-482-25764-9: $89.95
ebook: 978-1-482-25765-6
* For full contents and more information, visit: www.crcpress.com/9781482257649

Decision Sciences

Theory and Practice

Edited by Raghur Nandan Sengupta, Joydeep Dutta, Indian Institute of Technology, Kanpur and Aparna Gupta, Rensselaer Polytechnic Institute, Troy, New York, USA

This text focuses on different mathematical, statistical, and quantitative tools for solving a variety of theoretical as well as practical decision analysis problems. It covers a wide range of interesting ideas starting from robust optimization, multi-criteria decision making, meta-heuristic techniques, project management, and more. It also includes chapters related to networks and game theory, time series analysis, volatility modeling, queuing and scheduling theory, ANOVA, DSS, and different statistical tools in this two-volume handbook.

CRC Press
Market: Engineering - Industrial and Manufacturing
June 2016: 6 1/8 x 9 1/4: 354pp
Hb: 978-1-498-70265-2: $179.95
ebook: 978-1-482-28256-6
* For full contents and more information, visit: www.crcpress.com/9781498702652

Discrete and Continuous Simulation

Theory and Practice

Susmita Bandyopadhyay and Ranjan Bhattacharya

This text provides a detailed discussion of simulation theory and its applications. It covers current simulation trends, related literature, and the direction of future technologies as well as input modeling, optimization with simulation, continuous simulation, discrete simulation, hybrid simulation, simulation in supply chains, and manufacturing. The book also describes various probability distributions required for simulation, random number generation techniques, and explains how to use Microsoft Excel, MATLAB, and Simulink to practical use in the simulation process.

CRC Press
Market: Industrial and Manufacturing Engineering
June 2014: 6 1/8 x 9 1/4: 375pp
Hb: 978-1-466-56430-5: $179.95
ebook: 978-1-482-28256-4
* For full contents and more information, visit: www.crcpress.com/9781466564305

Discrete Event Simulation for Health Technology Assessment

J. Jaime Caro, McGill University, Montreal, Quebec, Canada, Jörgen Møller, Lund University, Sweden, Jonathan Karnon, University of Adelaide, Australia, James Stahl, Dartmouth College, Hanover, New Hampshire, USA, and Jack Ishak, Evidera, St. Laurent, Quebec, Canada

This is the first book to make all the central concepts of discrete event simulation relevant for health technology assessment. Accessible to beginners, the book requires no prerequisites and describes the concepts with little jargon as possible. It presents essential concepts, a fully worked out implementation example, approaches to analyze the simulations, the development of the required equations, model verification techniques, and validation. The book also covers various special topics and includes a real case study involving screening strategies for breast cancer surveillance.

Chapman and Hall/CRC
Market: Statistics
October 2015: 6 1/8 x 9 1/4: 354pp
Hb: 978-1-482-21825-1: $99.95
ebook: 978-1-482-21824-4
* For full contents and more information, visit: www.crcpress.com/9781482218244
Enhancing Enterprise Intelligence: Leveraging ERP, CRM, SCM, PLM, BPM, and BI

Vivek Kale, Corporate IT Strategy Consultant, Thane (West), India

The arrival of intelligent enterprise systems is of significant business value. Enterprise systems with SAP is an integrated solution to the problem of how to control all major business processes with single software architecture in real time. This book focuses on the planning and management of all resources and their use throughout the enterprise. In our new and rapidly changing environment, it is imperative that managers extend their understanding of the impact of these systems on how corporations operate.

Chapman and Hall/CRC
Market: Information Technology
January 2016: 6-1/8 x 9-1/4: 360pp
Hb: 978-1-498-70597-4: $89.95
eBook: 978-1-498-70797-8
* For full contents and more information, visit: www.crcpress.com/9781498705974

Auerbach Publications

TEXTBOOK

A First Course in Optimization

Charles L. Byrne, University of Massachusetts Lowell, USA

This text is designed for a one-semester course in optimization taken by advanced undergraduate and beginning graduate students in the mathematical sciences and engineering. It teaches students the basics of continuous optimization and helps them better understand the mathematics from previous courses. The book focuses on general problems and the underlying theory. It covers the fundamental problems of constrained and unconstrained optimization, linear and convex programming, basic iterative solution algorithms, and more general iterative optimization methods.

Chapman and Hall/CRC
Market: Mathematics
August 2014: 6-1/8 x 9-1/4: 315pp
Hb: 978-1-482-22656-0: $99.95
eBook: 978-1-482-22658-4
* For full contents and more information, visit: www.crcpress.com/9781482226560

Iterative Optimization in Inverse Problems

Charles L. Byrne, University of Massachusetts Lowell, USA

Series: Monographs and Research Notes in Mathematics
This book brings together a number of important iterative algorithms for medical imaging, optimization, and statistical estimation. It incorporates recent work that has not appeared in the book's earlier volumes. This book includes modern and established methods, the SUMMA class includes a wide range of iterative optimization models, and network models as well as more general iterative optimization methods.

Chapman and Hall/CRC
Market: Mathematics
February 2014: 6-1/8 x 9-1/4: 300pp
Hb: 978-1-482-22233-3: $124.95
eBook: 978-1-482-22234-0
* For full contents and more information, visit: www.crcpress.com/9781482222333

Fixed Point Theory, Variational Analysis, and Optimization

Edited by Saleh Abdullah R. Al-Mezel, Falleh Rajallah M. Al-Solamy, University of Tabuk, Saudia Arabia and Qamrul Hasan Ansari, Aligarh Muslim University, India, and King Fahd University of Petroleum & Minerals, Dhahran, Saudia Arabia

This book not only covers fixed point theory, variational inequalities, and vector optimization, but also explains the connections between them, enabling the study of a general form of variational inequality problems related to the optimality conditions involving differentiable or directionally differentiable functions. Packed with detailed proofs, the text supplies an introduction to the field and a guideline to the literature, progressing from basic concepts to the latest developments. It provides fundamental knowledge of directional derivatives and monotonicity required in understanding and solving variational inequality problems.

Chapman and Hall/CRC
Market: Mathematics
June 2014: 6-1/8 x 9-1/4: 368pp
Hb: 978-1-482-22207-4: $129.95
eBook: 978-1-482-22208-1
* For full contents and more information, visit: www.crcpress.com/9781482222074

Healthcare Staff Scheduling

Emerging Fuzzy Optimization Approaches

Michael Mutungi, University of Botswana, Gaborone and Charles Mbohwa, University of Johannesburg, South Africa

This book presents in-depth research on emerging approaches to healthcare staff scheduling. It starts by reviewing the key issues and challenges inherent in staff scheduling, along with the basic concepts of fuzzy set theory. Examining cutting-edge research applications, it details fuzzy optimization algorithms derived from biologically inspired approaches and fuzzy logic theory. Facilitating a practical and in-depth understanding of modern fuzzy metaheuristic optimization approaches, the book presents recent research on multi-criteria algorithms and their applications in healthcare operations, particularly staff scheduling.

CRC Press
Market: Engineering - Industrial & Manufacturing
September 2015: 6-1/8 x 9-1/4: 165pp
Hb: 978-1-498-70797-8: $89.95
eBook: 978-1-498-70797-8
* For full contents and more information, visit: www.crcpress.com/9781498707978

3rd Edition - TEXTBOOK

Linear and Integer Optimization

Theory and Practice, Third Edition

Gerard Sierksma and Yori Zwols, Google, London, United Kingdom

Series: Advances in Applied Mathematics
This textbook presents a strong and clear relationship between theory and practice. It covers basic topics such as Dantzig’s simplex algorithm, duality, sensitivity analysis, integer optimization models, and network models as well as more advanced topics including interior point algorithms, the branch-and-bound algorithm, cutting planes, and complexity. Along with case studies, it also discusses more advanced techniques such as column generation, multiobjective optimization, and game theory. It also includes computer code in the form of models in GMPL. The book contains appendices covering mathematical proofs, linear algebra graph theory, convexity, and a background in nonlinear optimization.

Chapman and Hall/CRC
Market: Mathematics
May 2015: 7 x 10: 686pp
Hb: 978-1-498-70163-7: $109.95
eBook: 978-1-498-74312-9
* For full contents and more information, visit: www.crcpress.com/9781498701637
**TEXTBOOK**

**Markov Processes**

James R. Kirkwood. Sweet Briar College

*Series: Advances in Applied Mathematics*

This text fills a niche between a calculus-based probability course and a stochastic processes course typically taken by upper undergraduate students. While Markov processes are touched on in probability courses, this book offers the opportunity to concentrate on the topic, when additional study is required. It discusses how Markov processes are applied in a number of fields, including economics, physics, and mathematical biology.

CRC Press

Market: Mathematics

February 2015: 6-1/8 x 9-1/4: 340pp

Hb: 978-1-482-24073-5: $79.95

ebook: 978-1-482-24074-2

* For full contents and more information, visit: [www.crcpress.com/9781482240733](http://www.crcpress.com/9781482240733)

**TEXTBOOK**

**Multiple Criteria Decision Analysis for Industrial Engineering**

Methodology and Applications

Gerald William Evans. University of Louisville, Kentucky, USA

*Series: Operations Research Series*

This adv. undergraduate and graduate textbook prepares the industrial engineering student on how to deal with a variety of problems that require making decisions involving multiple criteria and/or uncertainty/risk. This book is designed for students who are studying industrial engineering, but it could also be used in programs designed for business/mgmt. as well.

Comprehensive in coverage and related areas such as simulation optimization. It also emphasizes applications involving industrial engineering, engineering economics, location and layout design, project mgmt., project mgnt., healthcare mgmt. & operations, and the use of simulation for design & operations in general.

CRC Press

Market: Engineering - Industrial & Manufacturing

July 2016: 6-1/8 x 9-1/4: 512pp

ebook: 978-1-482-23990-4: $99.95

* For full contents and more information, visit: [www.crcpress.com/9781498739825](http://www.crcpress.com/9781498739825)

**TEXTBOOK**

**Numerical Methods and Optimization**

An Introduction

Sergiy Butenko. Texas A&M University, College Station, USA

and Panos M. Pardalos. University of Florida, Gainesville, USA

*Series: Chapman & Hall/CRC Numerical Analysis and Scientific Computing Series*

This book combines the materials from introductory numerical methods and introductory optimization courses into a single text. This classroom-tested approach enriches a standard numerical methods syllabus with optional chapters on numerical optimization and provides a valuable numerical methods background for students taking an introductory optimization or operations research course. The book includes some mathematical proofs as samples of rigorous analysis but in most cases, uses only examples to illustrate the concepts. A MATLAB guide and code are available for download.

Chapman and Hall/CRC

Market: Mathematics

March 2014: 6-1/8 x 9-1/4: 412pp

Hb: 978-1-466-57777-0: $79.95

ebook: 978-1-466-57778-7

* For full contents and more information, visit: [www.crcpress.com/9781466577770](http://www.crcpress.com/9781466577770)

**Operations Planning**

**Mixed Integer Optimization Models**

Joseph Geunes. University of Florida, Gainesville, USA

*Series: Operations Research Series*

A reference for those working at the interface of operations planning and optimization modeling, this book blends essential theory and powerful approaches to practical operations planning problems. Starting with the Knapsack Problem, it presents a set of classical optimization models with widespread application in operations planning. The discussion of each of these classical models begins with the motivation for studying the problem as well as examples of the problem’s application in operations planning contexts. The book explores special structural results and properties of optimal solutions that have led to effective algorithmic solution approaches for each problem class.

CRC Press

Market: Manufacturing & Industrial Engineering

September 2014: 6-1/8 x 9-1/4: 216pp

Hb: 978-1-482-23990-4: $124.95

ebook: 978-1-482-23991-1

* For full contents and more information, visit: [www.crcpress.com/9781482239904](http://www.crcpress.com/9781482239904)

**Optimization**

**Algorithms and Applications**

Rajesh Kumar Arora. Senior Engineer, Vikram Sarabhai Space Centre, Indian Space Research Organization, Trivandrum, INDIA

This book presents a variety of solution techniques for optimization problems, emphasizing concepts rather than rigorous mathematical details and proofs. It explains how to solve complex optimization problems using gradient-based and stochastic methods. It also describes different architectures to handle multidisciplinary design optimization problems. The author uses MATLAB to solve many practical problems and links the software code to the corresponding algorithms in a user-friendly way. The codes are available on the book’s CRC Press web page.

Chapman and Hall/CRC

Market: Mathematics

May 2015: 6-1/8 x 9-1/4: 466pp

Hb: 978-1-482-24074-0: $129.95

ebook: 978-1-482-24075-7

* For full contents and more information, visit: [www.crcpress.com/9781498721127](http://www.crcpress.com/9781498721127)

**Pseudolinear Functions and Optimization**

Shashi Kant Mishra and Balendu Bhoooshan Upadhyay

This is the first book to focus exclusively on pseudolinear functions, a class of generalized convex functions. The book discusses the properties, characterizations, and applications of pseudolinear functions in nonlinear optimization problems. It encompasses nearly all the published literature on the subject along with new results on semi-infinite nonlinear programming problems. The authors present optimality conditions and duality results for many types of optimization problems. They also extend pseudolinear functions to higher-level problems and explore applications to hospital management and economics.

Chapman and Hall/CRC

Market: Mathematics

December 2014: 6 x 9: 510pp

Hb: 978-1-482-25574-4: $135.95

ebook: 978-1-482-25575-1

* For full contents and more information, visit: [www.crcpress.com/9781482255737](http://www.crcpress.com/9781482255737)

Browse and order online:

[www.crcpress.com](http://www.crcpress.com)
Quadratic Programming with Computer Programs
Michael Best, University of Waterloo, Ontario, Canada

Series: Advances in Applied Mathematics
Quadratic programming is a mathematical technique that allows for the optimization of a quadratic function in several variables. QP is a subset of Operations Research and is the next higher level of sophistication than Linear Programming. It is a key mathematical tool in Portfolio Optimization and structural plasticity. This is useful in Civil Engineering as well as Statistics.

Chapman and Hall/CRC
Market: Mathematics
May 2016: 6-1/8 x 9-1/4: 552pp
Hb: 978-1-482-24210-2 $89.95
ebook: 978-1-482-24211-9
* For full contents and more information, visit: www.crcpress.com/9781482242102

Rational Queueing
Refael Hassin, Tel Aviv University, Israel

This book is a unique reference and valuable resource for anyone interested in queueing systems, both theory and practice in the modern era. It provides an up-to-date, comprehensive survey of research on the performance of queueing systems where multiple agents, like customers, servers, and central managers, all act but often in a noncooperative manner. Surveying the relevant literature and emphasizing the qualitative conclusions and insights of almost 700 papers, Refael Hassin groups these papers in a clear and coherent way, discussing the central model, main assumptions, most important qualitative insights, interesting extensions, and open questions.

Chapman and Hall/CRC
Market: Mathematics
March 2016: 6-1/8 x 9-1/4: 384pp
Hb: 978-1-498-74527-7 $89.95
ebook: 978-1-498-74528-4
* For full contents and more information, visit: www.crcpress.com/9781498745277

Search and Foraging
Individual Motion and Swarm Dynamics
Eugene Kagan, The Weizmann Institute of Sciences, Rehovot, Israel and Irad Ben-Gal, Tel Aviv University, Israel

This book examines how to program artificial search agents so that they act optimally or demonstrate the same behavior as predicted by the foraging theory for living organisms. It discusses foraging theory as well as search and screening theory in the same mathematical and algorithmic framework. It presents an overview of the main ideas and methods of foraging and search theories, making the concepts of one theory accessible to specialists of the other. Numerical examples illustrate the application of both theories.

Chapman and Hall/CRC
Market: Mathematics
June 2015: 7 x 10: 268pp
Hb: 978-1-482-24209-6 $99.95
ebook: 978-1-482-24210-2
* For full contents and more information, visit: www.crcpress.com/9781482242096

Testing and Measurement: Techniques and Applications

Edited by Kennis Chan, Advanced Science and Industry Research Center, Hong Kong

Testing and Measurement: Techniques and Applications includes contributions on Microwave, Ultrasonic and Acoustic Measurement and Application; Material Performance and Measuring and Testing Technique; Laser, Optics Fiber and Sensor; Industrial Automationization and Measurement; Artificial Intelligence and Application; and Image, Signal and Information Processing, and presents a broad and deep understanding of recent achievements and future trends of testing and measuring technology.

CRC Press
Market: Engineering
June 2015: 464pp
Hb: 978-1-138-02812-8 $139.00
ebook: 978-1-315-68493-2
* For full contents and more information, visit: www.crcpress.com/9781138028128

2nd Edition - NEW EDITION
Vehicle Scheduling in Port Automation
Hassan Rashidi, Allameh Tabataba’i University, Tehran, Iran and Edward Tsang, University of Essex, United Kingdom

Examining the optimization problems encountered in modern container terminals, this book provides the advanced algorithms required to tackle the scheduling of automated guided vehicles (AGVs). The research reported in this book represents a complete package for the scheduling problems of AGVs, formulated as a minimum cost flow model. The techniques presented are general and can easily be adapted to other areas. The book classifies the optimization problems into five scheduling decisions. For each decision, it supplies an overview, formulates each decisions as a constraint satisfaction and optimization problem, and provides solutions to each problem.

CRC Press
Market: Information Technology
August 2015: 6-1/8 x 9-1/4: 259pp
Hb: 978-1-498-73253-6 $129.95
ebook: 978-1-498-73254-3
* For full contents and more information, visit: www.crcpress.com/9781498732536

For full contents and more information, visit: www.crcpress.com/9781498735759
Flow Assurance: Fundamentals of Solids in Oil and Gas Production
Jon Steinar Gudmundsson
A multitude of mechanisms are responsible for precipitation and deposition of solids in oil and gas production. This book deals with the basic phenomena regarding the occurrence of obstructions by solids. It further discusses the four most common solids in gas and oil: asphaltene, paraffin wax, gas hydrate and inorganic solids, thus providing a guide on their occurrence and prevention. The book combines all relevant information on solids for the oil and gas industry in one text with detailed appendices, tables and diagrams for more specialist information.
CRC Press
Market: Petroleum Engineering
June 2016: 1.80pp
Hb: 978-0-415-68083-7: $69.95
* For full contents and more information, visit: www.crcpress.com/9780415680837

Process Safety
Practical Applications for Safe and Reliable Operations
James A. Klein, ABS Consulting, Maple Grove, Minnesota, USA and Bruce K. Vaughn
This book covers the basics of process safety that are applicable to plant engineering in a targeted, practical way. It assists plant engineers working with process safety systems that impact their daily work and helps them contribute to plant safety, operations, and reliability. Topics include understanding process hazards and events, the design and operation of your facility, what can go wrong and how to respond, making equipment and facility changes safely, maintaining safe and reliable equipment, and monitoring plant safety performance.
CRC Press
Market: Engineering - Chemical
July 2016: 6-1/8 x 9-1/4: 400pp
Hb: 978-1-466-56542-5: $159.95
eBook: 978-1-482-28258-0
* For full contents and more information, visit: www.crcpress.com/9781466565425

Synthesis, Design, and Resource Optimization in Batch Chemical Plants
Edited by Thokozani Majozi, School of Chemical and Metallurgical Engineering, University of Witwatersrand, Johannesburg, South Africa, Esmael Reshid Seid, University of Pretoria, South Africa and Jui-Yuan Lee, National Taipei University of Technology, Taiwan
This book presents state-of-the art models for the scheduling, synthesis, design, and resource optimization of batch chemical processes. The text describes different ways to represent and capture time in the optimal allocation of tasks to various units with the objective of maximizing throughput or minimizing makespan. It covers synthesis and design where the objective is mainly to yield a chemical facility, which satisfies all the targets with minimum capital cost investment. It also deals with resource conservation aspects, where water and energy take center stage.
CRC Press
Market: Chemical Engineering
March 2015: 6-1/8 x 9-1/4: 450pp
Hb: 978-1-482-25241-5: $189.95
eBook: 978-1-482-25242-2
* For full contents and more information, visit: www.crcpress.com/9781482252415

Browse and order online:
www.crcpress.com
2nd Edition

The Basics of Project Evaluation and Lessons Learned, Second Edition

Willis H. Thomas, Associate Director of Learning Management, Pfizer/Wyeth Research, Montvale, New Jersey, USA

The first edition won the Project Management Institute’s (PMI®) David I. Cleland Project Management Literature Award. Following in the footsteps of its popular predecessor, this second edition provides an easy-to-follow, systematic approach to conducting Lessons Learned on a project. The research in this book is founded on four years of doctoral dissertation research and is supported by renowned experts in the field of evaluation. The concepts covered are applicable to all types of organizations that implement projects and need to conduct Lessons Learned.

Productivity Press
Market: Business Management
August 2014: 6-1/8 x 9-1/4: 214pp
Pb: 978-1-482-20453-7 $24.95
ebook: 978-1-482-20454-4
* For full contents and more information, visit: www.crcpress.com/9781482204537

Design for Manufacturability
How to Use Concurrent Engineering to Rapidly Develop Low-Cost, High-Quality Products for Lean Production

David M. Anderson

This book explains how to use concurrent engineering to design products for all aspects of manufacturing for the lowest cost, highest quality, and quickest time to stable production. Extending the concepts of design for manufacturability to an advanced product development model, it shows how to simultaneously make major improvements in all these product development goals, while enabling effective implementation of Lean Production and Quality programs. The book proposes numerous innovative concurrent engineering practices, education, and management.

Productivity Press
Market: Business Management
February 2014: 6-1/8 x 9-1/4: 486pp
Hb: 978-1-482-20492-6 $74.95
ebook: 978-1-482-20494-0
* For full contents and more information, visit: www.crcpress.com/9781482204926

Computer Aided Design
A Conceptual Approach

Jayanta Sarkar, Paharpur Cooling Towers Ltd., Kolkata, India

CAD is now a necessity for the design of any equipment or any system. This book illustrates the effective ways to use CAD for engineering design. Providing clear instructions, tips, and tools, it covers drawing generation, automation, and dimensional analysis. Readers of this text are also able to use CAD in effective ways to lessen their design time with the aid of automation and achieving optimized design.

CRC Press
Market: Mechanical Engineering
December 2014: 6-1/8 x 9-1/4: 739pp
Hb: 978-1-482-20879-5 $149.95
ebook: 978-1-482-20880-1
* For full contents and more information, visit: www.crcpress.com/9781482208795

Lean-Driven Innovation
Powering Product Development at The Goodyear Tire & Rubber Company

Norbert Majerus, Goodyear Tire & Rubber Company, Akron, Ohio, USA

This book describes how the R&D team at The Goodyear Tire & Rubber Company was able to reduce its product development cycle time by 70 percent, improve its on-time delivery performance to close to 100 percent, and improve throughput three-fold by applying lean product development principles. Detailing the steps required to kick off a successful lean initiative, the book shares experiences of this seismic transformation. It explains how lean product development helped Goodyear dramatically improve revenue by having every new product available when the market needed it.

Productivity Press
Market: Business Management
August 2015: 7 x 10: 493pp
Pb: 978-1-482-25968-1 $49.95
ebook: 978-1-482-25996-8
* For full contents and more information, visit: www.crcpress.com/9781482259681

TEXTBOOK

Creating and Marketing New Products and Services

Rosanna Garcia

This textbook teaches the key business and marketing principles needed to successfully design and launch new products and services in an international marketplace. The book emphasizes marketing research techniques that can help firms identify the voice of the customer and incorporate these findings into their new product development process. It addresses the role of social networks in innovation, open innovation strategies, and international co-development efforts of new products and services.

Auerbach Publications
Market: Lean Manufacturing
April 2014: 7 x 10: 438pp
Hb: 978-1-482-30360-5 $99.95
ebook: 978-1-482-30361-2
* For full contents and more information, visit: www.crcpress.com/9781482303608

Pharmaceutical Product Development
Insights Into Pharmaceutical Processes, Management and Regulatory Affairs

Edited by Vandana B. Patravale, Institute of Chemical Technology, Mumbai, India, John I. Disouza, Tatasahib Kore College of Pharmacy, Kolhapur, India and Maharukh Rustomjee, Rubicon Research Private Limited, Mumbai, India

The field of pharmaceutical product development has undergone a significant change over the years, from an early phase of adopting mostly empirical and unsubstantiated approaches, to a focus on a more structured process that contributes to the essential and allied processes involved in creating a finished product. This book seeks to disseminate the knowledge for pharmaceutical product development in an easy-to-read mode with simplified theories, case studies and guidelines for both students and professionals in the pharmaceutical industry. Introduction to recent quality improvement trends such as quality metrics and continuous manufacturing are also provided.

CRC Press
Market: Pharmaceutical Science & Regulation
February 2016: 6-1/8 x 9-1/4: 428pp
Hb: 978-1-482-73078-8 $129.95
ebook: 978-1-482-73077-8
* For full contents and more information, visit: www.crcpress.com/9781482730778
Beyond Lean Production
Emphasizing Speed and Innovation to Beat the Competition
Roger G. Lewandowski
Covering the fundamentals needed to be competitive in today’s marketplace, this book provides readers with the tools to help their organizations achieve 100 percent effectiveness in Lean production. Explaining that overseas factories can’t compete with U.S. factories in speed of delivery to domestic customers, the book provides readers with the understanding required to add speed and urgency to all tasks in the office and the factory. It explains how to eliminate waste so readers will be able to meet and even exceed their customers’ expectations regarding service, quality, and cost.

Cellular Manufacturing
Mitigating Risk and Uncertainty
John X. Wang, Lean Six Sigma Institute of Technology, Marion, Iowa, USA
Series: Industrial Innovation Series
In today’s business world, competitiveness defines leading edge in industry and business. The drive toward maximum efficiency is constantly at the forefront of such companies’ objectives. Engineering professionals and business leaders across the county are striving to Cellular Manufacturing practices to help mitigate risk and uncertainty associated with their business bottom-line. This book presents a concise reference of existing methods that can best be used in the handling of the bottleneck machines and parts problem by implementing cellular manufacturing system design.

Manufacturing Operations Management
Sanjay Sharma
This book includes broad coverage of production and associated services. Since the success of manufacturing operations depends on the demand information and costs and revenue, qualitative and quantitative techniques of demand forecasting and also financial analysis are covered in this book. Topics such as facilities layout, inventory, project management, production, planning and management are explained in detail. Additional topics include quality control and work study.

Manufacturing Productivity in China
Edited by Li Zheng, Tsinghua University, China, Simin Huang, Tsinghua University, China and Zhihai Zhang, Tsinghua University, China
Series: Industrial and Systems Engineering Series
Chinese manufacturing industries are becoming more and more successful in the world, and it continues to impact the world economy. It is important to understand what is happening in China, and the uniqueness of Chinese manufacturing industries. This book brings together a group of authors from academia and industry to give an industrial engineering micro view point instead of an economical macro view point along with first hand case studies to better understand the competitiveness of Chinese manufacturing industries.

Organisational Resilience
Concepts, Integration, and Practice
Edited by Ran Bhamra, Loughborough University, UK
This book addresses the growing interest in the topic of organisational resilience. Readers will receive an up-to-date and in-depth appreciation of resilience research focused at the organisational level. The material will cover the disciplines of operations management, strategy, and organisational behavior. Researchers can use this book as a resource to develop their own work. Practitioners and professionals will find it useful in helping to develop their operational and strategic practices.
Production Management and Engineering Sciences

Edited by Milan Majerník, Department of Management, Faculty of Business Economy, University of Economics Bratislava, Kolíce, Slovakia, Naqib Daneshjo, Department of Business Entrepreneurship, Faculty of Business Economy, University of Economics Bratislava, Kolíce, Slovakia and Martin Bosák, Department of Management, Faculty of Business Economy, University of Economics Bratislava, Kolíce, Slovakia

These are the proceedings of the International Conference on Engineering Science and Production Management, 16th – 17th April 2015, Tatranská Štrba, High Tatras Mountains - Slovak Republic. These proceedings bring new and original advances and trends in various fields of engineering sciences and technologies and contain articles focusing on:
- Production Management, Logistics; - Industrial development, sustainable production; - Planning, management and production control; - Environmental and Safety Engineering and Management; - Integrated business Management; - Engineering and quality management of production; - European support of industrial innovation

CRC Press
Market: Water Science, Technology and Engineering
November 2015: 12pp
Hb: 978-1-138-02856-2: $199.95
ebook: 978-1-315-67379-0
* For full contents and more information, visit: www.crcpress.com/9781138028562

Six Sigma Case Studies with Minitab®
Kishore K. Pochampally, Southern New Hampshire University, Manchester, USA and Surendra M. Gupta, Northeastern University, Boston, Massachusetts, USA

Six Sigma is one of the most widely used quality improvement methodologies today, both in manufacturing and service industries. Minitab® is a statistical software package that is often used in conjunction with Six Sigma projects. This book illustrates the application of Minitab® for Six Sigma projects, using case studies in a variety of sectors, such as healthcare, manufacturing, airline, and fast food. Detailed steps and screenshots are provided to explain how to use a number of quality analysis and improvement tools in Minitab®. Figures will include Minitab® screenshots and Minitab® worksheets for the case studies will be available for download.

CRC Press
Market: Industrial Engineering and Manufacturing
February 2014: 6-1/8 x 9-1/4: 318pp
Hb: 978-1-482-20557-2: $112.95
ebook: 978-1-482-20559-6
* For full contents and more information, visit: www.crcpress.com/9781482205572

Technological Challenges and Management
Matching Human and Business Needs

Edited by Carolina Machado and J. Paulo Davim, University of Aveiro, Portugal

Series: Manufacturing Design and Technology
This book is dedicated to technological challenges and management with special emphasis on new advances and challenges that today’s organizations are facing, resulting from the continuous and highly complex changes in technological resources. Technological innovation in the management and engineering area, worldwide, is facing enormous challenges by sweeping political, social and economic changes. The purpose of this book is to help managers, engineers, policy makers, strategists, practitioners and researchers understand and develop effective responses to meet these new challenges.

CRC Press
Market: Engineering - Industrial & Manufacturing
February 2016: 6-1/8 x 9-1/4: 151pp
Hb: 978-1-482-26101-1: $99.95
ebook: 978-1-482-26102-8
* For full contents and more information, visit: www.crcpress.com/9781482261011
Becoming a Sustainable Organization
A Project and Portfolio Management Approach
Kristina Kohl, HRComputes
This book is written for project and portfolio managers in organizations transitioning to sustainability. It explains how to engage stakeholders in management roles to support this transformation. It examines the role human resources and policies can play in ensuring that the most important stakeholders—employees in an organization—become fully engaged in sustainability. The book also recommends baseline measurements and metrics so that managers can ensure sustainability initiatives are on track.

Auerbach Publications
July 2016: 6-1/8 x 9-1/4: 208pp
Hb: 978-1-498-70081-8:
$69.95
eBook: 978-1-498-70083-2
$69.95
* For full contents and more information, visit: www.crcpress.com/9781498700818

Driving Project, Program, and Portfolio Success
The Sustainability Wheel
Richard Maltzman, Earth PM, Boston University and David Shirley, Winner of the 2011 PMI David I. Cleland Project Management Literature Award
Businesses appear to have not only bought into integrating sustainability into their business plans, but have started profiting from it. This book helps project, program, and portfolio managers to integrate sustainability thinking into their projects. It introduces a new tool called the Sustainability Wheel™ that tells you where you are and what you need to improve. With this tool, you can determine priorities for sustainability improvement, validate that present sustainability efforts are within your organization’s mission/vision, and provide a mechanism to integrate sustainability into everyday operations.

Auerbach Publications
Market: Business & Management
September 2015: 6-1/8 x 9-1/4: 186pp
Hb: 978-1-498-70328-4:
$69.95
eBook: 978-1-498-70329-1
$69.95
* For full contents and more information, visit: www.crcpress.com/9781498703284

Business Continuity Planning
A Project Management Approach
Ralph L. Kliem, LeanPM, LLC, Redmond, Washington, USA and Gregg D. Richie
This book explains how to apply project management to implement and maintain business continuity. With a major emphasis on building business preparedness plans, it covers the basics of project management, risk management, business continuity, and business preparedness. Presenting a proven approach that firms can follow to become more resilient, the book provides diagrams, checklists, and other tools to help readers determine what they need to do for their firm to withstand or recover from the next emergency, disaster, or catastrophic event to impact their organization.

Auerbach Publications
Market: Business & Management
February 2015: 6-1/8 x 9-1/4: 300pp
Hb: 978-1-466-50438-7:
$79.95
eBook: 978-1-466-50437-0
$79.95
* For full contents and more information, visit: www.crcpress.com/9781466504370

EMS: Driving Project, Program, and Portfolio Success
The Sustainability Wheel
Richard Maltzman, Earth PM, Boston University and David Shirley, Winner of the 2011 PMI David I. Cleland Project Management Literature Award
Businesses appear to have not only bought into integrating sustainability into their business plans, but have started profiting from it. This book helps project, program, and portfolio managers to integrate sustainability thinking into their projects. It introduces a new tool called the Sustainability Wheel™ that tells you where you are and what you need to improve. With this tool, you can determine priorities for sustainability improvement, validate that present sustainability efforts are within your organization’s mission/vision, and provide a mechanism to integrate sustainability into everyday operations.

Auerbach Publications
Market: Business & Management
September 2015: 6-1/8 x 9-1/4: 186pp
Hb: 978-1-498-70328-4:
$69.95
eBook: 978-1-498-70329-1
$69.95
* For full contents and more information, visit: www.crcpress.com/9781498703284

Empowering Project Teams
Using Project Followership to Improve Performance
Marco Sampietro and Tiziana Villa, Project Management LAB
Examining the project environment from the perspective of project team members, this book re-interprets project management methodologies and behaviors using a bottom-up approach. It explores the application of project followership in the key stages of project management and details the methods and techniques that all project team members need to know. Outlining the behaviors team members should adopt for project success, the text considers project closure and transfer and explains why this is an ideal time to evaluate if efforts invested have been rewarded.

Auerbach Publications
Market: Business & Management
February 2014: 6-1/8 x 9-1/4: 300pp
Hb: 978-1-482-21755-1:
$87.95
eBook: 978-1-482-21756-8
$87.95
* For full contents and more information, visit: www.crcpress.com/9781482217551

Using Advanced Simulation to Improve Project Planning and Management
J. Chris White, ViaSim Solutions, Rockwall, Texas, USA and Robert M. Sholtes, ViaSim Solutions, Rockwall, Texas, USA
This book introduces a new and better way of planning, estimating, and managing projects that corrects some of the fundamental flaws found in the Critical Path Method (CPM). It presents the author’s revolutionary Dynamic Progress Method (DPM), including instructions on how to use the accompanying DPM-based simulation tool called pmBLOX (provided) to build and analyze project plans. It revolutionizes project planning and management by bringing the computational integrity of planning simulation up to speed with today’s computer user-friendliness.

CRC Press
Market: Business Management
March 2016: 6-1/8 x 9-1/4: 222pp
Hb: 978-1-466-50437-0:
$79.95
eBook: 978-1-466-50438-7
$79.95
* For full contents and more information, visit: www.crcpress.com/9781466504370

The Dynamic Progress Method
Using Advanced Simulation to Improve Project Planning and Management
J. Chris White, ViaSim Solutions, Rockwall, Texas, USA and Robert M. Sholtes, ViaSim Solutions, Rockwall, Texas, USA
This book introduces a new and better way of planning, estimating, and managing projects that corrects some of the fundamental flaws found in the Critical Path Method (CPM). It presents the author’s revolutionary Dynamic Progress Method (DPM), including instructions on how to use the accompanying DPM-based simulation tool called pmBLOX (provided) to build and analyze project plans. It revolutionizes project planning and management by bringing the computational integrity of planning simulation up to speed with today’s computer user-friendliness.

CRC Press
Market: Business Management
March 2016: 6-1/8 x 9-1/4: 222pp
Hb: 978-1-466-50437-0:
$79.95
eBook: 978-1-466-50438-7
$79.95
* For full contents and more information, visit: www.crcpress.com/9781466504370

Empowering Project Teams
Using Project Followership to Improve Performance
Marco Sampietro and Tiziana Villa, Project Management LAB
Examining the project environment from the perspective of project team members, this book re-interprets project management methodologies and behaviors using a bottom-up approach. It explores the application of project followership in the key stages of project management and details the methods and techniques that all project team members need to know. Outlining the behaviors team members should adopt for project success, the text considers project closure and transfer and explains why this is an ideal time to evaluate if efforts invested have been rewarded.

Auerbach Publications
Market: Business & Management
February 2014: 6-1/8 x 9-1/4: 300pp
Hb: 978-1-482-21755-1:
$87.95
eBook: 978-1-482-21756-8
$87.95
* For full contents and more information, visit: www.crcpress.com/9781482217551

Using Advanced Simulation to Improve Project Planning and Management
J. Chris White, ViaSim Solutions, Rockwall, Texas, USA and Robert M. Sholtes, ViaSim Solutions, Rockwall, Texas, USA
This book introduces a new and better way of planning, estimating, and managing projects that corrects some of the fundamental flaws found in the Critical Path Method (CPM). It presents the author’s revolutionary Dynamic Progress Method (DPM), including instructions on how to use the accompanying DPM-based simulation tool called pmBLOX (provided) to build and analyze project plans. It revolutionizes project planning and management by bringing the computational integrity of planning simulation up to speed with today’s computer user-friendliness.

CRC Press
Market: Business Management
March 2016: 6-1/8 x 9-1/4: 222pp
Hb: 978-1-466-50437-0:
$79.95
eBook: 978-1-466-50438-7
$79.95
* For full contents and more information, visit: www.crcpress.com/9781466504370
Essentials of Engineering Leadership and Innovation

Pamela McCauley-Bush, University of Central Florida, USA
Lesia L. Crumpton-Young, University of Central Florida, Orlando, USA

Series: Industrial Innovation Series
The global economy, international engineering challenges, a dismal economic climate, and growing shortage of the world's natural resources means that engineers must not only innovate to ensure competitiveness. Many engineers are looking for leadership skills to help ensure their success. This book provides a historical and theoretical framework for understanding post-conflict governance. It covers governance lifecycles as well as tools for the everyday work of project managers and more information, visit: www.crcpress.com/9781439820117

CRC Press
Market: Manufacturing & Industrial Engineering
September 2016: 6-1/8 x 9-1/4: 200pp
Pb: 978-1-498-75120-9:
Hb: 978-1-498-72265-0:
$79.95
ebook: 978-1-466-59633-7:
$49.95
* For full contents and more information, visit: www.crcpress.com/9781466596337

Goverance and Project Management in Post-Conflict Settings

Tat Puthsodary, American University of Afghanistan, Kabul

Post-conflict countries typically have failing infrastructure, personnel shortages, and budget deficits. They often run the risk of relapse into violence, population conflicts, bureaucratic chaos and corruption, broken economic status, but the integral parts of the holistic process of developing and disseminating the outcomes of technology. Supplemented with case studies, it covers innovation, problem solving, issues of diversity, and global work environments.

CRC Press
Market: Public Administration & Public Policy
March 2016: 6-1/8 x 9-1/4: 248pp
Hb: 978-1-482-24854-8:
$69.95
ebook: 978-1-466-59634-4
* For full contents and more information, visit: www.crcpress.com/9781482248548

The Influential Project Manager

Alfonso Bucero, MSc, PMP, PMI-RMP, PMI-F, BUCERO PM Consulting

Series: Best Practices and Advances in Program Management
Taking the power of the project management process to the leadership level, the book offers tools for understanding why leadership is the key to success. It provides a historical and theoretical framework for understanding post-conflict governance. It covers governance lifecycles as well as tools for the everyday work of project managers and more information, visit: www.crcpress.com/9781466596337

CRC Press
Market: Business & Management
July 2014: 6-1/8 x 9-1/4: 219pp
Pb: 978-1-466-59633-7:
$49.95
ebook: 978-1-466-59634-4
* For full contents and more information, visit: www.crcpress.com/9781466596337

Introduction to Software Project Management

Adolfo Villafiorita, Bruno Kessler Foundation

Providing the know-how to manage software projects effectively, this book supplies an accessible introduction to software project management. It begins with an overview of the fundamental techniques of project management and the technical aspects of software development. The second part of the book illustrates the technical activities of software development in a coherent process—describing how to customize this process to fit a wide range of software development scenarios. The book examines open source development practices and tools so readers can adopt best practices and get started with tools that are available for free.

Auerbach Publications
Market: Software Engineering
February 2014: 6-1/8 x 9-1/4: 296pp
Hb: 978-1-466-55953-0:
$89.95
ebook: 978-1-466-55954-7
* For full contents and more information, visit: www.crcpress.com/9781466559530

Leading a PMO

Mark C. Bojeun

Series: Best Practices and Advances in Program Management

This book focuses on individuals who have come to understand the values of the tools provided by PMP® but are still looking for the advantages and success factors necessary to build a highly successful PMO that drives program and project success. It caters to managers who follow the day-to-day mechanisms taught by PMP® but strive to achieve a greater value for the team and the organization. The book offers valuable complexity strategies supported by academic research and practical experience.

Auerbach Publications
Market: Business & Management
August 2016: 6-1/8 x 9-1/4: 304pp
Hb: 978-1-482-24855-5:
$79.95
ebook: 978-1-466-59635-1
* For full contents and more information, visit: www.crcpress.com/9781498722643

Leading and Managing Innovation

Russell D. Archibald, Archibald Associates LLC, Spokane, Washington, USA
Shane Archibald, Archibald Associates LLC, Spokane, Washington, USA

Series: Best Practices and Advances in Program Management

Executives in all business, industrial, governmental, and nongovernmental organizations need to fully understand the differences between operational and project management principles and practices to best take advantage of the power of good project management and thereby lead and manage the innovation within their enterprise. This book seeks to satisfy this need by presenting concise descriptions of 1) the key concepts underlying project and program management, 2) the important characteristics of projects and programs, 3) how they are governed and managed, and 4) how to determine if the desired benefits have actually been achieved.

Auerbach Publications
Market: Business & Management
December 2015: 6-1/8 x 9-1/4: 200pp
Pb: 978-1-482-24856-2:
$39.95
ebook: 978-1-466-55955-7
* For full contents and more information, visit: www.crcpress.com/9781466559551
Lean and Agile Project Management
How to Make Any Project Better, Faster, and More Cost Effective
Terra Vanzant Stern, PhD
When project managers are faced with budget cuts and fewer resources, waste elimination becomes a priority in maintaining effectiveness. This does not mean shortening or abandoning traditional project cycles, though. In fact, fast results on critical assignments can only be completed with strong plans and a detailed work-breakdown structure. The connections, or lack thereof, are what strongly impact performance and quality. This book defines nine wastes found in project management and demonstrates how they can be addressed with lean technology.

Productivity Press
Market: Business & Management
June 2016: 6-1/8 x 9-1/4: 260pp
Hb: 978-1-498-73916-0: $39.95
ebook: 978-1-498-73917-7
* For full contents and more information, visit: www.crcpress.com/9781498739160

Making Projects Work
Effective Stakeholder and Communication Management
Lynda Bourne, Stake holder Management Pty Ltd, Australia
This book provides a framework for understanding and managing factors required for achieving successful project and program outcomes. It presents guidelines to help readers develop an understanding of governance and its connection to strategy as the starting point for decisions on what work needs to be done. The book describes how to craft appropriate communication strategies to develop and maintain successful relationships with stakeholders. It highlights the strengths and weaknesses of existing project controls and outlines effective communication techniques for managing expectations and acquiring the support required for successful delivery.

Auerbach Publications
Market: Business & Management
February 2015: 6-1/8 x 9-1/4: 260pp
Hb: 978-1-482-20666-1: $69.95
ebook: 978-1-482-20667-8
* For full contents and more information, visit: www.crcpress.com/9781482206661

Managing Lean Projects
Ralph L. Kliem, LeanPM, LLC, Redmond, Washington, USA
Lean is a set of disciplines that can result in tremendous savings and profitability for companies. It can significantly reduce cycle times and increase customer satisfaction. This book discusses project management concepts, tools, and techniques as they apply to managing Lean projects. It explains how you can apply the discipline of project management to fully harness the energy and power that Lean offers. The book includes numerous diagrams, examples, and checklists to get you started quickly managing Lean projects.

Auerbach Publications
Market: Business & Management
October 2015: 6-1/8 x 9-1/4: 300pp
Hb: 978-1-482-25182-1: $59.95
ebook: 978-1-482-25183-8
* For full contents and more information, visit: www.crcpress.com/9781482251821

Managing Professional Service Delivery
9 Rules for Success
Barry M. Mundt, The Strategy Facilitation Group, Asheville, NC, USA
This book provides insights and innovative techniques drawn from more than a quarter century of experience. These techniques have the potential to transform program and project management from the current haphazard application of various techniques and metrics to an incisive and integrated approach where programs and projects are managed for the crucial economic and financial implications that are at the essence of every project.

CRC Press
Market: Manufacturing and Industrial Engineering
June 2016: 7 x 10: 256pp
Hb: 978-1-498-73914-3: $89.95
ebook: 978-1-498-73915-0
* For full contents and more information, visit: www.crcpress.com/9781498739143

Managing Projects as Investments
Earned Value to Business Value
Stephen A. Devaux, President, Analytic Project Management (APM), Inc., Massachusetts, USA
Due to a lack of appreciation of the true economic identity of projects, techniques and metrics that could hugely improve project selection and performance are not being used. This book provides insights and innovative techniques drawn from more than a quarter century of experience. These techniques have the potential to transform program and project management from the current haphazard application of various techniques and metrics to an incisive and integrated approach where programs and projects are managed for the crucial economic and financial implications that are at the essence of every project.

CRC Press
Market: Manufacturing & Industrial Engineering
September 2014: 6-1/8 x 9-1/4: 255pp
Hb: 978-1-482-21272-3: $89.95
ebook: 978-1-482-21270-8
* For full contents and more information, visit: www.crcpress.com/9781482212708

Organizational Resource Management
Theories, Methodologies, and Applications
Jussi Kantola, Dept. of Production - University of Vaasa, Finland
This book presents a unique approach that aims to tackle these management challenges. This approach precisely defines the meaning of organizational resources for management on three levels: concept level, organizational resource level, and situation level. With this approach, managers can lead their people and manage their resources in a more targeted way, providing better results with less effort. The author includes real-world case studies that illustrate how this approach can be used in several different fields.

CRC Press
Market: Manufacturing & Industrial Engineering
November 2015: 6-1/8 x 9-1/4: 138pp
Hb: 978-1-439-85142-5: $89.95
ebook: 978-1-439-85144-9
* For full contents and more information, visit: www.crcpress.com/9781439851425

Browse and order online: www.crcpress.com
Complimentary Exam Copy

**PfMP® Exam Practice Tests and Study Guide**

*Ginger Levin, PMP, PgMP*

*Series: Best Practices and Advances in Program Management*

The Project Management Institute (PMI) recently launched a new certification entitled the Portfolio Management Professional (PfMP®). The most comprehensive resource available to help readers prepare for and pass the PfMP certification exam, this book provides coverage that is current with The Standard for Portfolio Management, Third Edition. It includes two 170-question practice tests that simulate the certification examination. It also includes answer keys with rational and references to the latest standard. The two accompanying online tests feature a proprietary scoring algorithm to help readers determine their level of proficiency in each domain.

Auerbach Publications

**Market:** Business & Management

**June 2014:** 8-1/2 x 11: 336pp

P: 978-1-482-25100-5: $69.95

ebook: 978-1-482-25101-2

* For full contents and more information, visit: www.crcpress.com/9781482251005

---

**10th Edition - NEW EDITION**

**PMP® Exam Practice Test and Study Guide, Tenth Edition**


Continuing in the tradition of its bestselling predecessors, PMP® Exam Practice Test and Study Guide, Tenth Edition uses self-study to help readers increase their chances of passing the project management professional (PMP®) certification exam. This edition is up to date with the 2015 Examination Content Outline published by the Project Management Institute (PMI®). In addition to 600 practice test questions, it includes a new chapter on the five process domains. It provides an overview of each knowledge area, a list of exam topics, and 40 multiple-choice questions for each of the ten knowledge areas. It also features a 200-question online practice test that simulates the actual PMP exam.

Auerbach Publications

**Market:** Business & Management

**September 2015:** 8-1/2 x 11: 442pp

P: 978-1-498-75282-6: $69.95

ebook: 978-1-498-75283-3

* For full contents and more information, visit: www.crcpress.com/9781498752824

---

**Portfolio Management: A Strategic Approach**

Edited by *Ginger Levin, PMP, PgMP and John Wyzalek, PMP*

*Series: Best Practices and Advances in Program Management*

Presenting information that is current with The Standard for Portfolio Management, Third Edition (2013), this book supplies in-depth treatment of the five domains and identifies best practices to ensure the organization has a balanced portfolio that is critical to organizational success. This book is an ideal reference for those pursuing the new portfolio management credential from the Project Management Institute (PMI®). It is also suitable as a reference guide for executives and practitioners in the field and as a textbook for universities offering courses on portfolio management.

Auerbach Publications

**Market:** Business & Management

**October 2014:** 7 x 10: 358pp

P: 978-1-482-25104-3: $69.95

ebook: 978-1-482-25105-0

* For full contents and more information, visit: www.crcpress.com/9781482251043

---

**Program Governance**

*Muhammad Ehsan Khan*

*Series: Best Practices and Advances in Program Management*

Program Governance provides a thorough understanding of governance while reviewing the underlying theories of governance. One of the first books on the subject, it caters to the needs of practitioners, researchers, and students of management and governance. The book supplies a holistic view of program governance while covering multiple elements of program governance. Topics covered include the governance structure, governance roles, governance functions, governance mechanisms, factors influencing the governance framework, and different domains of programs that come under the jurisdiction of a governance framework.

Auerbach Publications

**Market:** Business & Management

**September 2014:** 6-1/8 x 9-1/4: 220pp

P: 978-1-466-56890-7: $69.95

ebook: 978-1-466-56891-4

* For full contents and more information, visit: www.crcpress.com/9781466568907

---

**Program Management in Defense and High Tech Environments**

*Charles Christopher McCarthy*

*Series: Best Practices and Advances in Program Management*

Program management in a technical environment is as much art as it is science. This book illuminates the entire life cycle of the program—from the customer’s original concept to successful completion. It includes many helpful ideas and insights into why programs and program managers can fail. Much more importantly, it provides insights about how program managers can succeed. The book also explains how to detect and avoid scope creep—both internal and external.

Auerbach Publications

**Market:** Databases

**November 2015:** 6-1/8 x 9-1/4: 270pp

P: 978-1-482-20838-2: $89.95

ebook: 978-1-482-20839-9

* For full contents and more information, visit: www.crcpress.com/9781482208382
**Project Health Assessment**

Paul S. Royer, PMP, Proactive Risk Management

*Series: Best Practices and Advances in Program Management*

This book presents an innovative approach for assessing project processes through a set of ten critical success factors based on PMI’s PMBOK® Guide knowledge areas. The findings from such assessments can help project managers to reduce project risk, improve stakeholder satisfaction, and increase the likelihood of project success. The book illustrates critical success factor points through numerous case studies. It also provides several downloadable documents, spreadsheet, and scheduling templates that practitioners can customize and use in their projects.

Auerbach Publications
Market: Business & Management
October 2014: 6-1/8 x 9-1/4: 382pp
Pb: 978-1-482-25283-5: $59.95

* For full contents and more information, visit: www.crcpress.com/9781482252828

---

**Project Management for Research and Development**

Lory Mitchell Wingate

*Series: Best Practices and Advances in Program Management*

Many successful research and development (R&D) companies have already realized the benefits of applying project management processes for achieving better project results. The key is to apply proven project management principles in a way that enables R&D and innovation. This book explains how to apply project management to obtain positive outcomes in R&D and innovation projects. Each chapter includes diagrams, surveys, checklists, and question-answer forms to guide readers in determining where their activity falls within a project spectrum, and to help them structure their own R&D or innovation project.

Auerbach Publications
Market: Business & Management
August 2014: 6-1/8 x 9-1/4: 517pp
Hb: 978-1-466-59629-0: $89.95

* For full contents and more information, visit: www.crcpress.com/9781466596290

---

**Project Management in Extreme Situations**

Charles A. Tryon, Jr., Tryon and Associates, Broken Arrow, OK, USA

Organizations of every type struggle to remain relevant in their marketplace. They continuously strive to introduce new products and services at a rate that satisfies their customers. In their search for fresh ideas, organizations often overlook the most significant source of new thought — their employees. Today’s employees are knowledgeable and able to see opportunities or solutions to problems. This book describes a process for turning “great ideas” into actionable proposals. It presents a simple, but powerful set of questions that has proven to deliver a never-ending stream of inspiration to an organization.

CRC Press
Market: Manufacturing & Industrial Engineering
April 2015: 6-1/8 x 9-1/4: 140pp
Pb: 978-1-482-20883-2: $49.95
ebook: 978-1-482-20883-2

* For full contents and more information, visit: www.crcpress.com/9781482262124

---

**Project Management Case Studies and Lessons Learned**

M. Kemal Atesmen, Independent Consultant, Santa Barbara, California, USA

Project managers who lead globally dispersed teams face unique challenges in managing project stakeholders, scope, knowledge sharing, schedules, resources, and above all team execution. This book presents more than 80 case studies designed to help project managers craft solutions to the typical problems that can occur in global projects. The author describes surprising, unexpected, and catastrophic cases that he encountered during his 35 years of project management experience in the global arena. The book includes lessons learned after every case.

Auerbach Publications
Market: Business & Management
December 2014: 6-1/8 x 9-1/4: 231pp
Pb: 978-1-498-70040-5: $59.95

* For full contents and more information, visit: www.crcpress.com/9781498700405

---

**Project Management Maturity Model, Third Edition**

J. Kent Crawford, Project Management Solutions, Inc., Glen Mills, Pennsylvania, USA

Series: PMI Solutions Research

Project Management Maturity Model, Third Edition provides a roadmap to help organizations move to higher levels of organizational behavior. It covers the areas critical to organizational improvement, such as the project management office, management oversight, and professional development. The book describes the Project Portfolio Management Maturity Model, which covers best practices for determining portfolio maturity, setting short-term priorities, improving portfolio management processes, and tracking progress. Chapters are based on the 10 knowledge areas specified in PMI’s standard, PMBOK® Guide, Fifth Edition.

Auerbach Publications
Market: Business & Management
October 2014: 6-1/8 x 9-1/4: 247pp
Pb: 978-1-482-25544-7: $79.95

* For full contents and more information, visit: www.crcpress.com/9781482255447

---

For full contents and more information, visit: www.crcpress.com/9781482208825
Project Management Research
A Guide for Graduate Students
Adejei B. Badiri, Air Force Institute of Technology, Dayton, Ohio, USA, Christina F. Rusnock, Air Force Institute of Technology, Dayton, Ohio, USA and Vhance V. Valencia
Series: Industrial Innovation Series
Research is an essential part of technological advancement. Because of the diversity of factors involved, managing research effectively requires a special approach. Although there have been many guide books on the market, none take a research project implementation approach as this book does. It presents the application of project management tools and techniques to research, specifically in Science and Technology areas, serving as a comprehensive and generalized guide with templates and formats of research planning, research development, management and implementation.

CRC Press
Market: Engineering - Industrial & Manufacturing
March 2016: 6-1/8 x 9-1/4: 216pp
Pb: 978-1-482-25991-3: $89.95
eBook: 978-1-482-25992-0
* For full contents and more information, visit: www.crcpress.com/9781482259913

Project Planning and Project Success
The 25% Solution
Pedro Serrador
Series: Best Practices and Advances in Program Management
Although project planning is known to be critical to project success, it remains a relatively under-studied area of project management research. This book draws on a literature review of planning that covers more than 270 sources. It also discusses new research that analyzed data from more than 1,300 global projects. The book brings this under-studied area of knowledge to the forefront. It emphasizes that planning is required for project success and that shortchanging planning will have a negative impact on project success.

Auerbach Publications
Market: Business & Management
November 2014: 6-1/8 x 9-1/4: 228pp
Hb: 978-1-482-20552-7: $69.95
eBook: 978-1-482-20553-4
* For full contents and more information, visit: www.crcpress.com/9781482205527

Project Scope Management
A Practical Guide to Requirements for Engineering, Product, Construction, IT and Enterprise Projects
Jamal Moustafaev
Series: Best Practices and Advances in Program Management
Incomplete or missed requirements, omissions, ambiguous product features, lack of user involvement, unrealistic customer expectations, and the proverbial scope creep can result in cost overruns, missed deadlines, poor product quality, and can very well ruin a project. This book explains how to elicit, document, and manage requirements to control project scope creep. It also describes how to manage project stakeholders to minimize the risk of an ever-growing list of user requirements. The book examines five different projects and traces their development from a project scope management perspective.

Auerbach Publications
Market: Business & Management
December 2014: 6-1/8 x 9-1/4: 474pp
Pb: 978-1-482-25948-3: $69.95
eBook: 978-1-482-25949-0
* For full contents and more information, visit: www.crcpress.com/9781482259483

Project Management Simplified
A Step-by-Step Process
Barbara Karten, Independent Trainer for Project Management, Clinton, Massachusetts, USA
Series: Industrial Innovation Series
This book identifies principles developed to help companies and businesses succeed with projects. It simplifies the use of these methodologies and processes so the everyday person can apply these approaches to be successful with their projects. The book guides the reader to define project scope and to complete projects with quality, on time, and on budget. It explains project concepts in easy to understand everyday terms, provides examples and offers the reader the opportunity to develop their own project plan.

CRC Press
Market: Engineering - Industrial & Manufacturing
January 2016: 6-1/8 x 9-1/4: 266pp
Pb: 978-1-498-72934-5: $89.95
eBook: 978-1-498-72935-2
* For full contents and more information, visit: www.crcpress.com/9781498729345

Project Management Theory and Practice, Second Edition
Gary L. Richardson, University of Houston, TX
Updated to reflect PMI’s Project Management Body of Knowledge (PMBOK Guide), Fifth Edition, the second edition of this bestselling text continues to provide a practical overview of project management theory. It integrates the organizational environment that surrounds a project to supply the well-rounded knowledge of theories, organizational issues, and human behavior needed to manage real-world projects effectively. This edition contains a new chapter on Stakeholder Management, which is a new knowledge area covered in the latest PMBOK Guide

Auerbach Publications
Market: Project Management
October 2014: 7 x 10: 670pp
Pb: 978-1-482-25495-2: $89.95
eBook: 978-1-482-25496-9
* For full contents and more information, visit: www.crcpress.com/9781482254952

Risk Management
Concepts and Guidance, Fifth Edition
Carl L. Pritchard, PMP, PMI-RMP, EVP, Pritchard Management Associates, Frederick, Maryland, USA
This new edition of Risk Management: Concepts and Guidance supplies a look at risk in light of current information; yet remains grounded in the history of risk practice. Taking a holistic approach, it examines risk as a blend of environmental, programmatic, and situational concerns. Providing comprehensive coverage of risk management tools, practices, and protocols, this edition has been updated to reflect the Project Management Institute’s A Guide to the Project Management Body of Knowledge (PMBOK Guide), Fifth Edition.

Auerbach Publications
Market: Project Management
December 2014: 6-1/8 x 9-1/4: 474pp
Hb: 978-1-482-25845-5: $59.95
eBook: 978-1-482-25846-2
* For full contents and more information, visit: www.crcpress.com/9781482258455
The Self-Made Program Leader
Taking Charge in Matrix Organizations

Steve Tkalec
mississauga, ontario, Canada
Series: Best Practices and Advances in Program Management

Almost all leadership books assume the leader has authority over their team members. The challenge in project management is that this is not always the case. A whole new plan of attack has to be executed for the project manager to deliver in an organization without formal authority. This book takes a unique approach to understanding the matrix structure and the tactics needed to succeed. It shows you proven strategies and behaviors that you can use to successfully deliver your projects, programs, and portfolios.

Auerbach Publications
Market: Business & Management
August 2015: 6 1/8 x 9 1/4: 169pp
Hb: 978-1-482-23313-1: $69.95
ebook: 978-1-482-23314-8
For full contents and more information, visit: www.crcpress.com/9781482233131

Situational Project Management

Oliver F. Lehmann
Series: Best Practices and Advances in Program Management

Project managers need a typology of projects and project situations that can help them navigate between the many monsters that lurk along their pathways. They need to understand how connective leadership and behavioral complexity are linked with success and failure. They also need a clear understanding of the mechanics of success and failure. This book is designed to help project managers assess a situation, predict the appropriate approach, methodology and achieving style, and then apply those steps without seeming unauthentic.

Auerbach Publications
Market: Business & Management
August 2016: 6 1/8 x 9 1/4: 256pp
Hb: 978-1-498-72261-2: $59.95
ebook: 978-1-498-72262-9
For full contents and more information, visit: www.crcpress.com/9781498722629

Stakeholder Engagement
The Game Changer for Program Management

Amy Baugh
Series: Best Practices and Advances in Program Management

Strong stakeholder engagement is perhaps the most critical factor for achieving successful program execution in our fast-paced world. Many program managers get stuck in the “science” of program management, spending vast amounts of effort on tasks, charts, and metrics. Program managers who emphasize activities around relationship building and stakeholder engagement usually have the best chance for program success. This book focuses on how to engage your stakeholders in the right way, and keep them engaged throughout the course of your program.

Auerbach Publications
Market: Business & Management
February 2015: 6 1/8 x 9 1/4: 230pp
Hb: 978-1-482-23060-8: $69.95
ebook: 978-1-482-23061-5
For full contents and more information, visit: www.crcpress.com/9781482230673

Transforming Business with Program Management
Integrating Strategy, People, Process, Technology, Structure, and Measurement

Satish P. Subramanian
Series: Best Practices and Advances in Program Management

Organizations need to constantly innovate and improve products and services to maintain a strong competitive position in the market place. The vehicle used by organizations for such constant reinvention is a business transformation program. This book illustrates a tested program management roadmap along with the supporting comprehensive frameworks to successfully execute business transformation programs, formulated strategies, and strategic initiatives. It outlines the steps to successfully transform any business and deliver tangible business outcomes.

Auerbach Publications
Market: Business & Management
March 2015: 6 1/8 x 9 1/4: 255pp
Hb: 978-1-466-59099-1: $69.95
ebook: 978-1-466-59100-4
For full contents and more information, visit: www.crcpress.com/9781466590991
Affordable Reliability Engineering
Life-Cycle Cost Analysis for Sustainability & Logistical Support

William R. Wessels and Daniel Sillivant

This book applies reliability-centered maintenance, engineering economic analysis, and Monte Carlo simulation to enable engineering and management professionals to achieve optimum life-cycle affordability. It presents reliability-centered cost-benefit analysis from the perspective of design and field sustainment. This text explains the process taken to ensure a design meets specifications and minimizes costs in the process. It gives engineers the knowledge to compare options for minimizing costs while keeping reliability above specifications.

CRC Press
Market: Quality Control and Reliability
April 2015: 6-1/8 x 9-1/4: 378pp
Hb: 978-1-482-21967-8 $149.95
ebook: 978-1-482-21967-8

* For full contents and more information, visit: www.crcpress.com/9781482219678

Analyzing Sensory Data with R

Sebastien Le, Agrocampus Ouest, Rennes, France and Thierry Worch, Qi Statistics, Ruscombe, UK

Series: Chapman & Hall/CRC The R Series

This book helps readers choose the right statistical method to analyze their sensory data. Each chapter presents the nature of the sensory evaluation and its objectives; the sensory particularities related to the sensory evaluation, details about the data set obtained, and the statistical analyses required. Using real examples, the authors then illustrate step by step how the analyses are performed in R. The chapters conclude with variants and extensions of the methods.

Chapman and Hall/CRC
Market: Statistics
October 2014: 6-1/8 x 9-1/4: 374pp
Hb: 978-1-466-56572-2 $89.95

ebook: 978-1-466-56573-9

* For full contents and more information, visit: www.crcpress.com/9781466565722

Artificial Intelligence Tools
Decision Support Systems in Condition Monitoring and Diagnosis

Diego Galar Pascual, Luleå University of Technology, Sweden

This book discusses white- and black-box approaches to fault diagnosis in condition monitoring, delivering a thorough evaluation of the latest artificial intelligence tools. It addresses nearest-neighbor-based, clustering-based, statistical, and information theory-based techniques, considering the merits of each technique as well as the issues associated with real-life applications. It covers classification methods, from neural networks to Bayesian and support vector machines. It proposes fuzzy logic to explain the uncertainties associated with diagnostic processes. It also provides data sets, sample signals, and MATLAB® code for algorithm testing.

CRC Press
Market: Mechanical Engineering
April 2015: 6-1/8 x 9-1/4: 549pp
Hb: 978-1-466-56885-3 $159.95
ebook: 978-1-466-56885-3

* For full contents and more information, visit: www.crcpress.com/9781466568853

Authentication of Foods of Animal Origin

Ioannis Sotiris Arvanitoyannis, University of Thessalia, Volos, Greece

Series: Food Biology Series

The first in a two-volume set on the authenticity of foods, this volume focuses on techniques and methods for assessing food authenticity and traceability and their application to foods of animal origin. Dedicated chapters include meats, poultry, fish and seafood, milk and dairy, and honey. The book addresses current legislation in the United States, Canada, and Europe regarding traceability, authenticity, and the genetic modification of foods. The final section offers conclusions, discusses future trends, and provides suggestions for improving food authenticity and traceability.

CRC Press
Market: Food & Culinary Science
December 2015: 6-1/8 x 9-1/4: 334pp
Hb: 978-1-498-70641-4 $159.95
ebook: 978-1-498-70643-8

* For full contents and more information, visit: www.crcpress.com/9781498706414

Automatic Monitoring, Fault Diagnostics, and Maintenance
Using Meta-Heuristic Optimization

Pasquale Arpaia and Carlo Manna, University College Cork, Ireland

Based on practical field experience and several case studies, this book presents state-of-the-art artificial intelligence techniques, validating their efficiency and accuracy in real-world industrial applications. The authors show how a meta-heuristic approach can enhance automatic fault monitoring in man-made systems. For each phase of fault monitoring, they propose a meta-heuristic approach that is tested experimentally in an actual industrial environment. While the proposed methods are validated on specific industrial problems, their applicability is wide and general.

CRC Press
Market: Mechanical Engineering
July 2016: 6-1/8 x 9-1/4: 272pp
Hb: 978-1-466-55531-0 $149.95
ebook: 978-1-466-55532-7

* For full contents and more information, visit: www.crcpress.com/9781466555310

Biology of Foodborne Parasites

Edited by Lihua Xiao, CDC, Atlanta, GA, Una Ryan and Yaoyu Feng

Series: Food Microbiology

This book is devoted to the study of molecular biology of foodborne parasitic pathogens. The first section outlines key molecular biological techniques that have been applied to foodborne parasitic pathogens research. Topics range from genetic manipulation, molecular detection, and population genetics to phylogenetic analysis (including use of related software), whole genome sequencing, metagenomic analysis, and vaccine development, among other current concerns. The second and third sections cover individual foodborne protists and helminthes, with each chapter following a similar format for a consistent presentation of information.

CRC Press
Market: Food & Culinary Science
April 2015: 7 x 10: 520pp
Hb: 978-1-466-56883-9 $199.95
ebook: 978-1-466-56885-3

* For full contents and more information, visit: www.crcpress.com/9781466568839

Quality Control & Reliability
Competitive Innovation and Improvement
Statistical Design and Control
Kieron Dey
This book explains how to combine two widely known statistical methods—statistical design and statistical control—in a manner that can help any business, government, or research organization solve problems quickly, with sustained results. Because the problem-solving strategy employed is based on pure scientific method, it makes integration into any existing problem-solving or research method quite simple. Organizations can immediately apply the concepts discussed with existing staff, releasing latent energy rather than adding to their workload.

Productivity Press
Market: Business & Management
September 2014: 6-1/8 x 9-1/4: 231pp
Hb: 978-1-482-23434-6 $74.95
ebook: 978-1-482-23344-5
* For full contents and more information, visit: www.crcpress.com/9781482233438

Dairy Microbiology
A Practical Approach
Edited by Photis Papademas, Cyprus University of Technology, Limassol
The objective of this book is to provide a scientific background to dairy microbiology by re-examining the basic concepts of general food microbiology and the microbiology of raw milk while offering a practical approach to the following aspects: well-known and newfound pathogens that are of major concern to the dairy industry. The book will provide dairy professionals and students alike the latest information on this vast topic.

CRC Press
Market: Food Science & Technology
December 2014: 6-1/8 x 9-1/4: 254pp
Hb: 978-1-482-29867-3 $124.95
ebook: 978-1-482-29868-0
* For full contents and more information, visit: www.crcpress.com/9781482298673

Edible Films and Coatings
Fundamentals and Applications
Edited by Pilar Montero, Carmen Gómez-Guillén, Elvira López-Caballero and Gustavo V. Barbosa-Canovas, Washington State University, Pullman, USA
Series: Food Preservation Technology
The search for strategies to preserve foods with minimal changes during processing is always of great interest. Traditionally, edible films and coatings have been used as a partial barrier to moisture, oxygen, and carbon dioxide through selective permeability to gases, as well as improving mechanical handling properties. This book covers the newest generation of edible films and coatings that are being especially designed to allow the incorporation and/or controlled release of specific additives by means of nanoencapsulation, layer-by-layer assembly, and other promising technologies.

CRC Press
Market: Food & Culinary Science
July 2016: 7 x 10: 440pp
Hb: 978-1-482-21831-2 $249.95
ebook: 978-1-498-70879-1
* For full contents and more information, visit: www.crcpress.com/9781482218312

Edible Food Packaging
Materials and Processing Technologies
Edited by Miquel Angelo Parente Ribeiro Cerqueira, IBB, Centre of Biological Engineering, University of Minho, Braga, Portugal, Ricardo Nuno Correia Pereira, IBB, Centre of Biological Engineering, University of Minho, Braga, Portugal, Oscar Leandro da Silva Ramos, IBB, Centre of Biological Engineering, University of Minho, Braga, Portugal, Jose Antonio Couto Teixeira, University of Minho, Dept. of Biological Engineering, Braga, Portugal and Antonio Augusto Vicente, University of Minho, Dept. of Biological Engineering, Braga, Portugal
Series: Contemporary Food Engineering
The edible packaging industry has grown considerably over the last few years and is expected to have an important impact on the food market. This book reviews edible packing technologies, recent developments in the field, and practical information on new applications. Topics covered include nanotechnology and edible packaging, processing technologies for the application and production of edible coatings/films, application of bioactive compounds using edible packaging, and the development of active and smart edible packaging. It also reviews regulatory aspects in both the U.S. and the U.K.

CRC Press
Market: Food & Culinary Science
April 2016: 6-1/8 x 9-1/4: 504pp
Hb: 978-1-482-23416-9 $249.95
ebook: 978-1-482-23422-0
* For full contents and more information, visit: www.crcpress.com/9781482234169

Experimental Strategies and Data Analysis for Research
John Lawson, Brigham Young University, Provo, Utah, USA and John Erjavec, University of North Dakota, Grand Forks, USA
Although books covering experimental design are often written for academic courses taken by statistics majors, most experiments performed in industry and academic research are designed and analyzed by non-statisticians. Therefore, a need exists for a desk reference that will be useful to practitioners who use experimental designs in their work. This book fills that gap. It is written as a guide that can be used as a reference book or as a sole or supplemental text for a university course.

Chapman and Hall/CRC
Market: Statistics
June 2016: 6-1/8 x 9-1/4: 500pp
Hb: 978-1-466-51217-7 $79.95
ebook: 978-1-466-51218-4
* For full contents and more information, visit: www.crcpress.com/9781466512177

Food Microbiology
In Human Health and Disease
Edited by Nancy Khordori, Eastern Virginia Medical School, Norfolk, USA
A broad overview of foodborne infectious diseases, this book covers recent outbreaks, highlighting the food sources and pathogens involved. It also examines foodborne infectious diseases in travelers that are not commonly seen in the United States, outbreak investigation, sources and vehicles of foodborne pathogens as well as diagnosis, treatment, and prevention of foodborne infectious diseases. The authors explore the relationship between antibiotic use in animal food and its effects on human health, and the use of “good bacteria” in food to promote health and treat disease.

CRC Press
Market: Food & Culinary Science
December 2015: 6-1/8 x 9-1/4: 195pp
Hb: 978-1-498-70878-4 $99.95
ebook: 978-1-498-70879-1
* For full contents and more information, visit: www.crcpress.com/9781498708784
Food Packing Materials
Testing & Quality Assurance
Edited by Preeti Singh, Technische Universitat Muenchen, Germany, Ali Abas Wani and Horst-Christian Langowski
This book is arguably the first one focusing on packaging material testing and quality assurance. It provides information to help food scientists, polymer chemists, and packaging technologists find practical solutions to packaging defects and to develop innovative packaging materials for food products. Knowledge of packaging material testing procedures is extremely useful in the development of new packaging materials. Unique among books on packaging, this reference focuses on basic and practical approaches for testing packaging materials.
CRC Press
Market: Food and Culinary Science
June 2016: 6-1/8 x 9-1/4: 384pp
Hb: 978-1-466-55994-3: $199.95
eBook: 978-1-466-55995-0
* For full contents and more information, visit: www.crcpress.com/9781466559943

Food Processing Technologies
Impact on Product Attributes
Edited by Amit K. Jaiswal
Food processing generally implies the transformation of the perishable raw food into value-added products; however, the procedures may influence food’s nutritional quality attributes, such as increase or decrease in certain bioactive metabolites. This book’s main focus is to present a wealth of food processing knowledge, the consequences for food and its various components, such as the changes in bioactive compounds, and the safety and sensory aspects of food. Traditional thermal processing techniques as well as innovative, nonthermal methods are highlighted.
CRC Press
Market: Food & Culinary Science
May 2016: 6-1/8 x 9-1/4: 536pp
Hb: 978-1-482-25754-0: $259.95
eBook: 978-1-482-25755-7
* For full contents and more information, visit: www.crcpress.com/9781482257540

Food Safety Chemistry
Toxicant Occurrence, Analysis and Mitigation
Edited by Liangli (Lucy) Yu, Institute of Food and Nutraceutical Science, School of Agriculture and Biology, Shanghai Jiao Tong University, Shuo Wang and Bao-Guo Sun
This edited book is a comprehensive guide to the chemistry of food toxicants produced during processing, formulation, and storage of food. Each major food chemical contaminant will be discussed for toxic effects and the biological mechanisms behind their toxicity. Their absorption and distribution profiles and the factors influencing their levels in foods will be discussed. In addition, a listing of commonly used analytical techniques in food safety chemistry will make the book useful for food scientists and nutritionists.
CRC Press
Market: Food Science and Technology
October 2014: 6-1/8 x 9-1/4: 344pp
Hb: 978-1-466-59794-5: $169.95
eBook: 978-1-466-59795-2
* For full contents and more information, visit: www.crcpress.com/9781466597945

Food Safety in China
A Comprehensive Review
Linhai Wu, Jiangsu Province Research Base of Food Safety, Jiangnan University, No 1800 LiHu Avenue, Wuxi, Jiangsu, 214122, PRC and Dian Zhu
This book provides a comprehensive review of the efforts put forth by China to prevent food safety concerns. Looking at food producers and operators, consumers, and government agencies as part of an organic system, the book examines the complete system of the food supply chain from multi-scientific systematic points of view. It begins with the production of agricultural products and investigates the changing track of food safety (including imported and exported products) in the key aspects of production, circulation, and consumption from 2006 to 2011.
CRC Press
Market: Food & Culinary Science
July 2014: 6-1/8 x 9-1/4: 384pp
Hb: 978-1-482-21834-3: $99.95
eBook: 978-1-482-21833-6
* For full contents and more information, visit: www.crcpress.com/9781482218336

Food Safety
Researching the Hazard in Hazardous Foods
Edited by Barbara Almanza, Purdue University, West Lafayette, Indiana, USA, Richard Ghiselli and Mahmood A. Khan, Virginia Polytechnic Institute and State University, Falls Church, USA
Series: Advances in Hospitality and Tourism
The book provides a thorough review of current food safety and sanitation information with practical applications of current research findings included. The book surveys and examines the prevailing research and applications and reviews specific operational issues such as power or water emergencies. It also covers food safety and sanitation in various environments, such as restaurants, schools, and fairs and festivals. It is multidisciplinary in that it comprises culinary, hospitality, microbiology, and operations analysis.
Apple Academic Press
Market: Food Science and Technology
April 2014: 6 x 9: 510pp
Hb: 978-1-926-89570-3: $149.95
eBook: 978-1-482-22353-8
* For full contents and more information, visit: www.crcpress.com/9781926895703

Foodborne Pathogens and Food Safety
Edited by Md. Latiful Bari, Dhaka University, Bangladesh and Dike O. Ukuku, USDA-NAA-ARS-ERRC, Wyndmoor, Pennsylvania, USA
Series: Food Biology Series
Foodborne pathogens continue to cause major public health problems worldwide and have escalated to unprecedented levels in recent years. This book tackles major foodborne diseases and key food safety issues. In addition, it discusses emerging and reemerging microbial agents and other food safety related topics. This book also addresses the challenges facing both developed and developing countries to ensure food safety in the development of new food products and processing technologies, internationalization of food trade, safety of foods derived from biotechnology, microbiological risks, and emergence of new and antibiotic-resistant pathogens, particularly from emerging pathogens.
CRC Press
Market: Food & Culinary Science
December 2015: 6-1/8 x 9-1/4: 318pp
Hb: 978-1-498-72408-1: $149.95
eBook: 978-1-482-22353-8
* For full contents and more information, visit: www.crcpress.com/9781498724081
**Foodborne Viral Pathogens**

Grant Hansman and Peter White  
*Series: Food Microbiology*

Unlike foodborne pathogenic bacteria, little is published on food viruses and their research. This book is devoted to the study of molecular biology of foodborne viral pathogens and is divided into two sections. The first section outlines key molecular biological techniques that have been applied to foodborne viral pathogens research. The second section covers individual foodborne viral pathogens in relation to their classification, morphology, genome structures, biology, epidemiology, clinical features, pathogenesis, diagnosis, treatment, and prevention, among others.

CRC Press  
Market: Food & Culinary Science  
August 2016: 7 x 10: 800pp  
Hb: 978-1-466-57950-7: $259.95  
ebook: 978-1-466-57951-4

* For full contents and more information, visit: [www.crcpress.com/9781466579507](http://www.crcpress.com/9781466579507)

---

**The Global Quality Management System**

Improvement Through Systems Thinking  
Suresh Patel, Indian Institute of Management, Vastrapur, Ahmedabad, Gujarat, India

Global Quality Management System is about managing business processes through systems thinking as opposed to the traditional command and control system (that deploys a top-down functional hierarchy where people can behave in ways which can dissatisfy the customer and/or degrade their performance). The management culture promoted is that of prevention and is based on “circle of virtues” and not that of “vices.”

Productivity Press  
Market: Business & Management  
February 2016: 6 1/8 x 9 1/4: 328pp  
Hb: 978-1-498-73980-1: $49.95  
ebook: 978-1-498-73981-8

* For full contents and more information, visit: [www.crcpress.com/9781498739801](http://www.crcpress.com/9781498739801)

---

**Handbook of Measurements**

Benchmarks for Systems Accuracy and Precision  
Edited by Adedeji B. Badiru, Air Force Institute of Technology, Dayton, Ohio, USA and LeeAnn Racz, Biomedical Sciences Corps, Lakenheath, UK  
*Series: Industrial Innovation Series*

Planning, measurement, and paying attention to details form the basis for all successful engineering operations. Using a systems framework, this handbook presents a comprehensive all-encompassing guide to measurements. Using a technically rigorous approach to systems linking of measurements, it focuses on high-level engineering computations that are essential for benchmarks and technical innovation. This sets it apart from other handbooks.

CRC Press  
Market: Engineering - Industrial & Manufacturing  
November 2015: 7 x 10: 706pp  
Hb: 978-1-482-22522-8: $129.95  
ebook: 978-1-482-22523-5

* For full contents and more information, visit: [www.crcpress.com/9781482225228](http://www.crcpress.com/9781482225228)

---

**Healthcare Safety for Nursing Personnel**

An Organizational Guide to Achieving Results  
James T. Tweedy, International Board for Certification of Safety Managers, Helena, Alabama, USA

Nursing personnel not only work to keep patients safe, but must also contend with a number of safety and health risks. Illustrating the occupational risks nurses face, this book addresses healthcare safety as related to nursing personnel risks, hazards, and responsibilities in hospitals and healthcare facilities. It begins with an introduction to nursing safety and then delves into the range of safety issues that nurses must contend with. Topics covered include administrative area safety, bloodborne pathogens, workplace violence, infection control and prevention, and emergency management.

Productivity Press  
Market: Healthcare  
December 2014: 7 x 10: 366pp  
Hb: 978-1-482-23027-7: $189.95  
ebook: 978-1-482-23028-4

* For full contents and more information, visit: [www.crcpress.com/9781482230277](http://www.crcpress.com/9781482230277)

---

**Implementing ISO 9001:2015**

Edited by B. Purushothama, Purushothama Consultants, Bangalore, India  
*Series: Woodhead Publishing India in Textiles*

The ISO 9000 guidelines were accepted as international standards in 1987, and amended in 1996, 2000, and 2008. The standards are being completely rewritten in 2015, and the committee draft is circulated the world over. This book is based on the document ISO/TC176/S2C/2-N 1147 released on June 3, 2013 to help the industry align itself to the new standards by the time the rewrite is released. Written in advance so that companies can implement new systems proactively, this text aids in complying with the anticipated ISO 9001:2015 guidelines.

WPI Publishing  
Market: Industrial Engineering  
December 2014: 6 x 9: 176pp  
Hb: 978-9-380-30850-0: $159.95  
ebook: 978-9-380-40893-7

* For full contents and more information, visit: [www.crcpress.com/9789380308500](http://www.crcpress.com/9789380308500)
Improving Food Quality with Novel Food Processing Technologies

Edited by Ozlem Tokucoglu, Celal Bayer University, Manisa, Turkey and Barry G. Swanson, Washington State University, Pullman, USA

Improving food quality, specifically properties such as rheological, physicochemical, and sensorial aspects, is always a goal of food and beverage manufacturers. During the past decade, novel processing technologies including high hydrostatic pressure (HHP), ultrason, pulse electric field (PEF), and advanced heating technologies containing microwave, ohmic heating, and radio frequency have frequently been applied in the processing of foods and beverages. This book addresses maintaining and improving food quality through the use of these novel food processing technologies.

* For full contents and more information, visit: www.crcpress.com/9781466507241

Integrated Reliability

Condition Monitoring and Maintenance of Equipment

John Osarenren, Integrated Agriculture and Industrial Consultancy, LLC, New York, USA

This text highlights the solutions to the common failures and reliability of equipment in major industries, through an integrated reliability condition monitoring, and maintenance with a technological inheritance model-based program. It relates all operating conditions of a critical cylindrical equipment part (shaft) throughout its life cycle, starting from design through manufacturing to actual equipment service application. The mathematical relationship of a desired operating manufacturing process and work-piece conditions is developed as a system multivariate quality model that relates with its part failure mechanism.

* For full contents and more information, visit: www.crcpress.com/9781482249408

Lean Six Sigma for Small and Medium Sized Enterprises

A Practical Guide

Jiju Antony, S. Vinodh and E. V. Gijo

Lean Six Sigma (LSS) is not as popular with small and medium-sized enterprises (SMEs) as it is with larger ones. However, many SMEs are suppliers to larger entities who are pushing for superior quality and world-class process efficiencies from suppliers. Because of this, the authors have come up with a practical and essential book for guiding SMEs in deploying LSS as their prime methodology for achieving and sustaining world-class efficiency and effectiveness of their critical business processes.

* For full contents and more information, visit: www.crcpress.com/9781482260083

Light Scattering Technology for Food Property, Quality and Safety Assessment

Edited by Renfu Lu, USDA, ARS, East Lansing, Michigan, USA

Series: Contemporary Food Engineering

Recently, considerable research activities have been reported on the development and application of various light scattering technologies for assessing structural, rheological and sensory properties, quality attributes, and safety of a wide range of food and agricultural products. This book is the first to provide readers with an overview of the principles and theory of light transfer in food and biological materials. It also includes a comprehensive review of the latest advances in light scattering technology in food and agricultural applications.

* For full contents and more information, visit: www.crcpress.com/9781482263343

Lean Six Sigma for Engineers and Managers With Applied Case Studies

Matthew John Franchetti, The Mechanical, Industrial, and Manufacturing Engineering Department, The University of Toledo, Ohio, USA

This book introduces Lean Six Sigma (LSS) to engineers and managers interested in implementing LSS at their organizations. The book provides a detailed roadmap and industry examples to aid readers in understanding and implementing the LSS system. This book discusses the LSS process to define improvement needs, measure current business performance, analyze performance results using statistical tools, improve business and financial results, and control peak business performance.

* For full contents and more information, visit: www.crcpress.com/9781482243529

Maintenance Audits Handbook

A Performance Measurement Framework

Diego Galar Pascual, Luleå University of Technology, Sweden and Uday Kumar, Luleå University of Technology, Sweden

This book addresses issues and challenges of performance measurement in the maintenance function. It presents a proposal of indicators with a framework that classifies and sorts regarding functional and hierarchical aspects, identifying the contribution of each of the above mentioned elements. Proposal has been developed with different aspects of traditional literature, i.e., several frameworks (or natural groupings) like BSC Balanced Scorecard, Multicriteria framework, Neely Prism etc and adaptation of these frameworks, hierarchies for the use of indicators and benchmark values are provided to allow quantification, comparison and emission of recommendations.

* For full contents and more information, visit: www.crcpress.com/9781466583917

Complimentary Exam Copy
e-Inspection
New in Paperback
Companion Website
Meat Quality
Genetic and Environmental Factors
Edited by Wieslaw Przybylski, PhD, Warsaw University of Life Science, Poland and David Hopkins, PhD, NSW Department of Primary Industries, Australia
Series: Chemical & Functional Properties of Food Components
This book covers factors affecting meat quality from the growth of animals to the final product. It discusses specific aspects of meat quality for beef, pork, and sheep. This comprehensive book covers key topics such as animal welfare, nutrition, pre-slaughter handling, slaughter technology, breeding strategies, and the influence of common genetic factors on meat quality. It also discusses the latest meat production systems designed to ensure high-quality meat and the role of transgenic animal technology in meat quality.

Molecular Biology of Food and Water Borne Mycotoxigenic and Mycotic Fungi
Edited by R. Russell Mat Paterson, Centre for Biological Engineering, Portugal and Nelson Lima, Centre for Biological Engineering, Portugal
Series: Food Microbiology
This comprehensive book summarizes the general knowledge about toxigenic fungi and describes key molecular techniques that have been applied to foodborne fungal pathogens. The book deals specifically with foodborne mycotoxigenic fungi, from the standpoint of mycoses. It covers the 20 genera that contain human pathogenic and foodborne species, of which approximately 10 merit a separate chapter. The book contains separate chapter sections on 10 genera that contain mycotoxin producing species. It also examines yeast genera, which contain species that are pathogenic to humans and also contain food associated species.

Methods in Food Analysis
Edited by Rui M. S. Cruz, ISE-University of Algarve, Faro, Portugal, Igor Khmelinskii and Margarida Vieira, Universidade do Algarve, Faro, Portugal
This book reviews methods of analysis and detection in the area of food science and technology. Each chapter deals with determination/quantification analyses of quality parameters in food, covering topics such as lipids, color, texture, and rheological properties in different food products. The book focuses on the most common methods of analysis, presenting methodologies for specific work conditions. It provides a reference for food engineers and researchers working in the area of food science and technology as well as undergraduate and postgraduate students.

Novel Food Preservation and Microbial Assessment Techniques
Edited by Ioannis S. Bozias, University of Thessaly, Nea Ionia, Greece
Demand for minimally processed foods has resulted in the development of innovative, non-thermal food preservation methods, such as high-pressure sonication, ozone, and UV treatment. This book presents a summary of these novel food processing techniques. It also covers new methods used to monitor microbial activity, including spectroscopic methods (FT-IR and Raman), molecular and electronic noses, and DNA-based methods.
2nd Edition

**Plant Sanitation for Food Processing and Food Service, Second Edition**

Y. H. Hui, Science Technology System, West Sacramento, California, USA

Comprehensive and accessible, this book presents fundamental principles and applications that are essential for food production and food service safety. It provides basic, practical information on the daily operations in a food processing plant and reviews some of the industry’s most recent developments. Formerly titled *Food Plant Sanitation*, this second edition discusses nine additional food processing industries and contains 14 new chapters. Among others, new topics include sanitation in food establishments, and sanitation of fresh produce in retail establishments.

CRC Press
Market: Food and Culinary Science
December 2014: 7 x 10: 1186pp
Hb: 978-1-466-57765-6 $237.95
ebook: 978-1-466-57770-1 $219.95
* For full contents and more information, visit: www.crcpress.com/9781466577656

---

**Quality Assurance**

**Applying Methodologies for Launching New Products, Services, and Customer Satisfaction**

D. H. Stamatis, President of Contemporary Consultants, MI, USA

Series: Practical Quality of the Future

In many industries, launching of new products/services is a way of life. The idea of bringing new products and services into the market however presents many problems for timing, cost and quality. For example in the automotive industry the recalls for millions of vehicles in the last several months have been very expensive and have had a negative effect on customer satisfaction. Similar issues have been reported with chicken contamination and energy organizations. This book addresses requirements for both customer and supplier that need to be followed so that problems can be avoided and customer satisfaction can be reached.

CRC Press
Market: Engineering - Industrial & Manufacturing
September 2015: 6-1/8 x 9-1/4: 616pp
Hb: 978-1-482-24966-8 $199.95
ebook: 978-1-482-24967-5
* For full contents and more information, visit: www.crcpress.com/9781482249668

---

**Practical Methods in Predictive Food Microbiology**

Lihan Huang, USDA-ARS, Eastern Regional Research Center, Wyndmoor, PA, US and Andy Hwang, USDA-ARS, Microbial Food Safety Research Unit, Wyndmoor, Pennsylvania, USA

Series: Garland Bibliographies in Contemporary Education

This book introduces comprehensive, up-to-date theories, methods, and practical approaches commonly encountered in predictive food microbiology. It covers the basic science of predictive microbiology and provides hands-on illustrations and techniques of experimental design, data analysis, model development, and practical applications of predictive food microbiology. Basic methods for data analysis, including principles of regression analysis, linear and nonlinear, are showcased as well as the new USDA Integrated Pathogen Modeling Program (IPMP), an all-in-one data analysis and model development suite.

CRC Press
June 2016: 6-1/8 x 9-1/4: 400pp
Hb: 978-1-482-26064-9 $219.95
ebook: 978-1-482-26065-6
* For full contents and more information, visit: www.crcpress.com/9781482260649

---

**Quality by Experimental Design, Fourth Edition**

Thomas B. Barker, Professor Emeritus, Rochester Institute of Technology, New York, USA and Andrew Milivojevich

A practical guide to designed experiments, this book helps technicians, engineers, and Six Sigma professionals resolve technological problems, advance technology, and improve productivity. It can be used in an applied educational program at the undergraduate and graduate levels for engineers having little or no exposure to fundamental statistics. The book is also suitable for continuing education program in quality engineering. This fourth edition include four new chapters on mixture experiments.

Chapman and Hall/CRC
Market: Statistics
January 2016: 7 x 10: 720pp
Hb: 978-1-498-72868-3 $129.95
ebook: 978-1-498-72867-5
* For full contents and more information, visit: www.crcpress.com/9781498728683

---

**Mastering the Five Tiers of Audit Competency**

The Essence of Effective Auditing

Ann Butera, The Whole Person Project, Inc., Elmont, New York, USA

Series: Internal Audit and IT Audit

Unlike compliance and Sarbanes-Oxley audits, risk-based operational audits and performance audits require a broad array of competencies. This is a book for auditors and risk professionals who want to improve their results during risk-based audits. Each section of this self-help book is devoted to a component of the audit: Planning, detailed risk and control assessment, testing, audit report writing, project management, audit team management, and client relationship management. Each section will be comprised of practical do and don’t techniques and will be an anthology of leading risk-based auditing practices. It is intended to be used as a career and job aid.

Auerbach Publications
Market: Business & Management
April 2016: 6-1/8 x 9-1/4: 240pp
Hb: 978-1-482-24699-5 $149.95
ebook: 978-1-482-24698-8
* For full contents and more information, visit: www.crcpress.com/9781482246995

---

**Quality Management for Organizations Using Lean Six Sigma Techniques**

Erick Jones, University of Texas, Arlington, USA

A reference on the workings of Modern Lean Six Sigma techniques, this book presents the background on quality and lean six sigma techniques and tools. It reviews the previous history of lean six sigma in manufacturing, current applications of lean six sigma in operations, which projects should be selected and prioritized, and what to do with non-lean six sigma projects. It also describes the different six sigma certifications, and closes with future directions.

CRC Press
Market: Manufacturing & Industrial Engineering
February 2014: 7 x 10: 627pp
Hb: 978-1-439-89782-9 $149.95
ebook: 978-1-439-89782-9
* For full contents and more information, visit: www.crcpress.com/9781439897829

---

**Food and Culinary Science Market:**

**CRC Press**
**Reliability Analysis with Minitab**

Kishore Kumar Pochampally, Southern New Hampshire University, MA and Surendra M. Gupta, Northeastern University, Boston, Massachusetts, USA

Reliability is quality over time. It is formally defined as the probability of a product or system performing as intended for a specified time. Improper analysis of product reliability can be very expensive or even fatal. Many of the product recalls that we see daily are due to unexpected failures resulting from poor reliability analysis during the product design stage. Minitab is a statistical software package that has a highly useful set of “Reliability/Survival” tools, but those tools are barely explored or explained in literature. This new book illustrates the application of Minitab for Reliability Analysis using case studies in both manufacturing and service sectors.

CRC Press
Market: Engineering - Industrial & Manufacturing
March 2016: 6-1/8 x 9-1/4: 148pp
Hb: 978-1-498-73758-6: $89.95
ebook: 978-1-482-25880-6
* For full contents and more information, visit: www.crcpress.com/9781498737586

**Robot System Reliability and Safety**

A Modern Approach

B.S. Dhillon, University of Ottawa, Department of Mechanical Engineering, Ontario, Canada

Written by a well-known expert in reliability engineering, this book presents up-to-date information on robot reliability, safety, and related areas in a single-volume, eliminating the need to consult diverse sources. It covers fundamental mathematical concepts and reliability and safety basics for readers without prior knowledge of the subject. The book describes useful techniques for analyzing the reliability and safety of robot systems and includes examples with solutions, numerous problems, and extensive references.

CRC Press
Market: Manufacturing and Industrial Engineering
April 2015: 6-1/8 x 9-1/4: 259pp
Hb: 978-1-466-50677-0: $149.95
ebook: 978-1-466-50680-0
* For full contents and more information, visit: www.crcpress.com/9781466506770

**Robust Response Surfaces, Regression, and Positive Data Analyses**

Rabindra Nath Das, The University of Burdwan, India

Showing how robust response surface methodology (RRSM) can overcome the limitations of RSM, this book presents RRS designs, along with the relevant regression and positive data analysis techniques. It explains how to use RRSM in experimental designs and regression analysis and addresses problems of RRS designs, such as rotatability, slope-rotatability, weak rotatability, and optimality. The author illustrates the concepts and methods with real examples of lifetime responses, resistivity, replicated measures, and more.

Chapman and Hall/CRC
Market: Statistics
May 2014: 7 x 10: 366pp
Hb: 978-1-466-50677-0: $112.95
ebook: 978-1-466-50680-0
* For full contents and more information, visit: www.crcpress.com/9781466506770

**Root Cause Analysis**

A Step-By-Step Guide to Using the Right Tool at the Right Time

Matthew A. Barsalou, BorgWarner Turbo Systems Engineering, Kirchheimbolanden, Germany

This book covers root cause analysis (RCA), with an emphasis on using quality tools to empirically investigate issues. It starts with the theoretical background and then provides step-by-step instructions for performing RCA using various quality tools. The book explains how to use plan-do-check-act (PDCA) together with the scientific method and quality tools when investigating quality failures. The tools and concepts presented are appropriate for both the manufacturing industry and service industry.

Productivity Press
Market: Business & Management
December 2014: 6-1/8 x 9-1/4: 154pp
Pb: 978-1-482-25879-0: $29.95
ebook: 978-1-482-25880-6
* For full contents and more information, visit: www.crcpress.com/9781482258790

**Sensory Evaluation Techniques, Fifth Edition**

5th Edition - NEW EDITION

Sensory Evaluation Techniques, Fifth Edition

Gail Vance Civille, Sensory Spectrum Incorporated, New Providence, New Jersey, USA and B. Thomas Carr

This new edition of a bestseller covers all phases of performing sensory evaluation studies, from listing the steps involved in a sensory evaluation project to presenting advanced statistical methods. Comprehensively reorganized, revised, and updated, the fifth edition gives a clear and concise presentation of current practical solutions, accepted methods, standard practices, and some advanced techniques. It provides how-to information for a wide variety of users in industry, government, and academia, and gives students the necessary theoretical background in sensory evaluation methods, applications, and implementations.

CRC Press
Market: Food & Culinary Science
November 2015: 7 x 10: 600pp
Hb: 978-1-482-21690-5: $149.95
ebook: 978-1-482-21681-2
* For full contents and more information, visit: www.crcpress.com/9781482216905

**A Six Sigma Approach to Sustainability**

Continual Improvement for Social Responsibility

Holly A. Duckworth, Kaiser Aluminum, Durango, Colorado, USA and Andrea Hoffmeier, Zmarketeers, Inc, Alpharetta, Georgia, USA

Series: Industrial Innovation Series

Many organizations are struggling to operate within the ISO 26000 standards on social responsibility. The authors of this new book provide a solution by leveraging their combined experience in Six Sigma. The book introduces SOFAIR, a six-step methodology for achieving sustainability through social responsibility. This rigorous methodology uses Six Sigma as a basis for maximizing the efficiency and effectiveness of an organization’s social responsibility performance improvement effort. Case studies and examples are provided for the reader’s benefit.

CRC Press
Market: Engineering - Industrial & Manufacturing
February 2016: 6-1/8 x 9-1/4: 226pp
Hb: 978-1-498-72086-1: $89.95
ebook: 978-1-498-72086-1
* For full contents and more information, visit: www.crcpress.com/9781498720865
**Solving Complex Industrial Problems without Statistics**

Ralph R. Pawlak, Retired - General Motors, Fisher-Price, and Vibratech, USA

Manufacturing and service organizations of all sizes must learn to problem solve or they will not survive. Methods and examples included in this book will provide insight into the solution of complex quality and manufacturing problems, without the use of statistics. Each of the examples, which are provided in case study form, can be used as a guide when similar problems are experienced. These same techniques have been applied in the U.S., Canada, Italy, China, and Hong Kong and in facilities that manufacture toys, chemicals, electronics, castings, strollers, clothing, gears, and other machine and assembly components.

CRC Press
Market: Engineering - Industrial & Manufacturing
April 2016: 6-1/8 x 9-1/4: 168pp
Hb: 978-1-498-75908-3: $89.95
eBook: 978-1-498-75909-0
* For full contents and more information, visit: www.crcpress.com/9781498759083

---

**Transport Planning and Traffic Safety**

Making Cities, Roads, and Vehicles Safer

Edited by Geetam Tiwari, Indian Institute of Technology, New Delhi, India and Dinesh Mohan, Indian Institute of Technology, New Delhi, India

TRIPP (Transportation Research and Injury Prevention Programme) at the India Institute of Technology (Delhi) is an interdisciplinary programme focusing on the reduction of adverse health affects of road transport. TRIPP has been organizing an annual course on Transportation Planning and Traffic Safety since 1991. This book contains the lectures delivered in the course, supplemented by relevant additional content. The goal is for this book to become the source book for the road safety training courses and an introductory book for graduate level courses on road safety taught at the university.

CRC Press
Market: Engineering - Industrial & Manufacturing
March 2016: 7 x 10: 376pp
Pb: 978-1-498-75145-2: $119.95
ebook: 978-1-498-75147-6
* For full contents and more information, visit: www.crcpress.com/9781498751452

---

**The Standardized Work Field Guide**

Timothy D. Martin, Franciscan St. Elizabeth Health, Lafayette, Indiana, USA, Jeffrey T. Bell, Franciscan St. Elizabeth Health, Lafayette, Indiana, USA and Scott A. Martin

This field guide can used right on on the gemba (work area) for implementing and documenting standardized work. It will contain not only the “future state” of standardized work, but crucial step-by-step techniques and explanations not found in other publications. It contains many real work examples of problems that cause the lean practitioner difficulty with documentation as well as accurate solutions. The many illustrations and graphic will not focus so much on practice, not theory. Standardized work is not simply a tool for documenting, but a method for reducing variation. It provides a basis for continuous improvement through kaizen.

Productivity Press
Market: Business & Management
July 2016: 8-1/2 x 11: 136pp
Pb: 978-1-498-75201-5: $49.95
ebook: 978-1-498-75203-9
* For full contents and more information, visit: www.crcpress.com/9781498752015

---

**Trends in Fish Processing Technologies**

Edited by Daniela Borda, Anca I. Nicolau and Peter Raspor, University of Primorska, Izola, Slovenia

This book provides an overview of the modern technologies employed in on- and off-shore fish processing facilities. It details the advances of both primary and secondary fish processing, including high-pressure processing (HPP) as an alternative to thermal treatment and advanced fish preservation techniques. It provides references to food safety and quality indicators for processed fish and explores innovative packaging solutions detailing the use of, among other things, freshness and time temperature indicators, antimicrobial bio-nanocomposite packaging materials, and biodegradable edible films.

CRC Press
Market: Food & Culinary Science
June 2016: 6-1/8 x 9-1/4: 272pp
Hb: 978-1-482-25538-5: $239.95
ebook: 978-1-482-25540-9
* For full contents and more information, visit: www.crcpress.com/9781498729178

---

**Total Productive Maintenance**

Strategies and Implementation Guide

Tina Kanti Agustiady, BASF Chemical, Quincy, Florida, USA and Elizabeth A. Cudney, Missouri University of Science and Technology, Rolla, USA

Series: Industrial Innovation Series

Leading the industries in a particular market requires predicting processes before they fail. Understanding the art of Total Productive Maintenance, in a sense of predicting, correcting and communicating, ensures positive results. The art of effective communication in order to see positive results of TPM and continuous improvement requires the right set of tools from the right perspective. This book will demonstrate how to obtain a healthy balance of both, while being successful.

CRC Press
Market: Industrial & Manufacturing
June 2015: 6-1/8 x 9-1/4: 322pp
Hb: 978-1-482-25538-6: $89.95
ebook: 978-1-482-25540-9
* For full contents and more information, visit: www.crcpress.com/9781482255386

---

**Value Analysis and Engineering Reengineered**

The Blueprint for Achieving Operational Excellence and Developing Problem Solvers and Innovators

Abate O. Kassa, AOK Consulting & Education, Jamaica Hills, New York, USA

By mastering the re-engineered value analysis & value engineering (VA/VE) problem-solving value methodology outlined in this book, any organization will be able to self-diagnose problems and self-discover solutions. The book is the product of Abate Kassa’s dual lenses of experience and research over four decades. The book updates and upgrades VA/VE by integrating popular improvement methodologies, including Six Sigma, Lean Manufacturing, Total Quality Management, Kaizen, Business Process Reengineering, and Project Management, into the scientific method of the value methodology he dubbed PISERIA.

Productivity Press
Market: Business & Management
December 2015: 6-1/8 x 9-1/4: 168pp
Hb: 978-1-498-73725-8: $59.95
ebook: 978-1-498-73726-5
* For full contents and more information, visit: www.crcpress.com/9781498737258

---
Warranty Claims Reduction
A Modern Approach with Continuous Improvement Techniques

Ronald Blank, Senior Quality Engineer and Productivity Consultant

Avoiding complex math and accounting terms, this book explains how to boost profits through the reduction of warranty expenses. Outlining a multifunctional approach for reducing claims, it begins by summarizing the traditional and most common strategies for warranty cost reduction. Next, it explains how readers can reduce warranty costs even further by taking a more complete approach. The comprehensive approach described arms readers with less conventional, yet powerful, approaches for reducing warranty costs, including improving warranty processing productivity, clarifying installation and usage instructions, and streamlining supply chain management.
**Agribusiness Supply Chain Management**

N. Chandrasekaran, Take Solutions, Ltd., Chennai Tamilnadu, India and G. Raghuram, Indian Institute of Management, Ahmedabad, Gujarat, India

This book introduces the complexity and importance of supply chain management within businesses handling agricultural products. Topics include major drivers, facility, inventory, and transportation management, sourcing decisions such as processed or farm fresh, input and output challenges, processors, challenges of managing perishables, infrastructure, retailing, quality, information technology, risk strategies, financials, direct trade versus auction, and negotiation relevant government policies. The book includes numerous case studies that span a wide range of issues and industries.

CRC Press
March 2014: 6-1/8 x 9-1/4: 700pp
Hb: 978-1-466-58900-1 $99.95
ebook: 978-1-482-22609-6 $89.95
* For full contents and more information, visit: www.crcpress.com/9781466516748

**Basics of Supply Chain Management**

Jayanta Kumar Bandyopadhyay, Central Michigan University, Midland, USA

Supply chain management has become widespread in most industries. It is now included in the curriculum of many business schools. This book covers the contents of the basic supply chain management course to help you prepare for the certification examination. It covers all modules of a core supply chain management course: forecasting and managing demand, transformation process, planning and scheduling, purchasing, and distribution management, and global supply chain issues. The book presents each concept fully and in an accessible manner, with practice problems, self-study test questions, and case studies.

CRC Press
Market: Supply Chain Management
October 2015: 6-1/8 x 9-1/4: 366pp
Hb: 978-1-466-58892-9 $99.95
ebook: 978-1-482-22609-6 $89.95
* For full contents and more information, visit: www.crcpress.com/9781466588929

**City Logistics**

Mapping The Future

Edited by Eiichi Taniguchi, Department of Urban Management, Kyoto University, Japan and Russell G. Thompson

This book explains the main concepts of city logistics along with the associated implementation issues, methodologies, and policy measures. Chronicling how planning and policy have improved city logistics practice over the last ten years, it details logistics activities, traffic congestion, and environmental impact in urban freight transportation systems. The book includes case studies from the US, UK, Netherlands, Japan, South Africa, and Australia.

CRC Press
Market: Public Administration
November 2014: 6-1/8 x 9-1/4: 231pp
Hb: 978-1-482-20889-6 $79.95
ebook: 978-1-482-20892-4
* For full contents and more information, visit: www.crcpress.com/9781482208894

**The Dirty Side of the Garment Industry**

Fast Fashion and Its Negative Impact on Environment and Society

Nikolay Anguelov

The textile industry is currently one of the biggest industries practicing labor violations and use of environmentally hazardous processes. This book presents an expert overview of the garment industry, highlighting the harsh realities of the environmental and labor problems that are associated with it. The book covers current regulatory policies, both national and international, on production and labor, and the author does not shy away from making recommendations for change. Readers will come away with a detailed, holistic understanding of the garment industry as well as clarity regarding the larger issue of finding balance when it comes to the ethics of consumption.

CRC Press
Market: Supply Chain Management
September 2015: 6-1/8 x 9-1/4: 220pp
Hb: 978-1-482-22608-9 $89.95
ebook: 978-1-482-22609-6 $89.95
* For full contents and more information, visit: www.crcpress.com/9781498712224

**Driving Risk and Spend Out of the Global Supply Chain**

Thomas A. Cook, Managing Director, Blue Tiger International Series: The Global Warrior Series

This book is among the first to detail all the risks a multinational firm faces when operating overseas and engaging in foreign purchasing and sales, import and export trade, and global logistics. It provides step-by-step guidance on how to develop a global risk strategy as well as a blueprint for implementation. The book outlines all the areas where spend can be reduced along with a specific strategy on how to reduce spend without compromising values.

CRC Press
Market: Business & Management
September 2014: 6-1/8 x 9-1/4: 366pp
Hb: 978-1-482-22608-9 $112.95
ebook: 978-1-482-22609-6
* For full contents and more information, visit: www.crcpress.com/9781482226089

**Global Logistics Management**

Edited by Bahar Y. Kara, Bilkent University, Ankara, Turkey, Ihsan Sabuncuoglu, Abdullah Gul University, Turkey and Bopaya Bidanda, University of Pittsburgh, Pennsylvania, USA

Series: Industrial Engineering Academic interest in research on logistics—a key concept of industrial engineering—has increased rapidly throughout the years, solidifying the need for a consolidated resource on the topic. An outlet for the recent development in global logistics, this book clearly illustrates logistic problems encountered in many different application areas, and provides the state of the art on some classical applications. It highlights the richness of logistics applications in the industrial engineering discipline and how to use them.

CRC Press
Market: Engineering - Industrial & Manufacturing
December 2014: 6-1/8 x 9-1/4: 332pp
Hb: 978-1-482-22694-2 $89.95
ebook: 978-1-482-22695-9
* For full contents and more information, visit: www.crcpress.com/9781482226942
Global Supply Chain Quality Management
Product Recalls and Their Impact
Edited by Barbara B. Flynn, Indiana University, Kelley School of Business and Xiande Zhao, China Europe International Business School and South China University of Technology (China)
Series: Supply Chain Integration Modeling, Optimization and Application
This book draws together key insights from the relevant literature across diverse disciplines and presents detailed research case studies of six extended global supply chains in three industries: toys, food, and pharmaceuticals. These case studies cover U.S. companies with supply chains that extend into China and include the perspectives of U.S. and Chinese executives. The book then presents a conceptual model that synthesizes the literature and case studies, and describes the ways in which alternative product recall strategies influence consumers’ perception of an organization’s corporate social legitimacy and consumers’ future purchasing behaviors.
CRC Press
Market: Business Management / Supply Chain Management
November 2014: 6-1/8 x 9-1/4: 432pp
Hb: 978-1-498-74894-0: $59.95
eBook: 978-1-482-25918-6
* For full contents and more information, visit: www.crcpress.com/9781498748940

How to Run Your Supply Chain
Richard Wardle and David Ph Essays
The book describes in practical terms how to run an excellent supply chain, one that delivers more than the expected cost, quality and delivery from suppliers. The need for integration between commercial, materials management and distribution parts of the supply chain is explained in terms of information flow, systems integration and the way in which people work together and form teams. The practical approaches discussed are drawn from nearly 30 years work experience and are described from the perspective of a supply chain manger. The book applies directly to supply chains involving a physical product – manufactured internally or outsourced, or some type of physical operation such as oilfield services.
CRC Press
Market: Business & Management
May 2016: 7 x 10: 232pp
Hb: 978-1-482-25917-9: $59.95
eBook: 978-1-482-25918-6
* For full contents and more information, visit: www.crcpress.com/9781482259179

Managing Growth and Expansion into Global Markets
Logistics, Transportation, and Distribution
Thomas A. Cook, Managing Director, Blue Tiger International
Series: The Global Warrior Series
This book addresses the unique logistical, transportation, and distribution issues surrounding growth and expansion into global markets. Supplying a full overview of management assessment tools, it explains what it takes to enter into foreign markets and avoid common pitfalls. Distilling the author’s decades of experience in global supply chain management and international business, the book details the benefits and drawbacks of both organic growth and merger and acquisitions into global markets. After reading this book, readers will better understand how to properly assess their organizations’ options for growth and expansion.
CRC Press
Market: Business & Management
September 2015: 6-1/8 x 9-1/4: 352pp
Hb: 978-1-482-25919-6: $89.95
eBook: 978-1-482-25919-6
* For full contents and more information, visit: www.crcpress.com/9781482259196

5th Edition - TEXTBOOK - NEW EDITION
Integral Logistics Management
Operations and Supply Chain Management Within and Across Companies, Fifth Edition
Paul Schönsleben, Swiss Federal Institute of Technology, Zurich, Switzerland
This comprehensive 5th edition text on logistics management covers both theoretical and practical aspects of all major operational topics. The new edition includes an added chapter on strategic and tactical concepts. There are also expanded sections on risk management, and location planning and sustainability, and concepts for product family environments vs. one-of-a-kind production. Interactive Macromedia Flash elements are available for download on a companion website.
CRC Press
Market: Business & Management
March 2016: 7 x 10
Hb: 978-1-498-75053-0: $99.95
eBook: 978-1-498-75054-7
* For full contents and more information, visit: www.crcpress.com/9781498750530

Managing Supply Chain Risk
Integrating with Risk Management
Sime Curkovic, Western Michigan University, Kalamazoo, MI, USA, Thomas Scannell, Western Michigan University, Kalamazoo, Michigan, USA and Bret Wagner, Western Michigan University, Kalamazoo, Michigan, USA
Risk management in supply chain logistics has become a necessity due to the number of variables that could cripple a business. This book gives an overview of the critical factors to be considered when managing supply chain risk, with further discussion of how managing supply chain risk can be integrated into Enterprise Risk Management (ERM) applications, with a focus on the Committee of Sponsoring Organizations (COSO), Failure Mode Effects and Analysis (FMEA), and International Organization of Standards (ISO) 31000:2009 frameworks.
CRC Press
Market: Supply Chain Management
June 2015: 6-1/8 x 9-1/4: 261pp
Hb: 978-1-498-70111-4: $79.95
eBook: 978-1-498-70111-4
* For full contents and more information, visit: www.crcpress.com/9781498701114

Logistics and Transportation Security
A Strategic, Tactical, and Operational Guide to Resilience
Maria G. Burns, Texas Southern University, Houston, USA
This book provides thorough coverage of transportation security by examining sea, land, and air transportation systems and linkages. Its topics include hazardous material handling, securing transportation networks, logistics essentials, supply chain security, risk assessment, the regulatory framework, strategic planning, and innovation through technology. It also examines the need for synergy between the public and private sectors, illustrating the benefits of this synergy with a number of case studies and interviews.
CRC Press
Market: Business & Management
October 2015: 7 x 10: 380pp
Hb: 978-1-482-25308-5: $69.95
eBook: 978-1-482-25308-5
* For full contents and more information, visit: www.crcpress.com/9781482253085

For full contents and more information, visit: www.crcpress.com/9781439815540

Browse and order online: www.crcpress.com
Mastering the Business of Global Trade
Negotiating Competitive Advantage Contractual Best Practices, Incoterms, and Leveraging Supply Chain Options

Thomas A. Cook, Managing Director, Blue Tiger International

Explaining the key elements of what any international business person must know, this book describes how to utilize negotiation skills and leveraged options, along with Incoterms, to extract the maximum benefits from your supply chain. Illustrating how Incoterms impact compliance and risk, it details options to help readers reduce their exposure to risk as well as best practices to help readers steer clear of compliance issues that can lead to costly delays. The book establishes a simple, yet comprehensive, roadmap that readers can easily follow to engage in more deals and increase returns, while reducing overall risk exposure.

CRC Press
Market: Supply Chain Management
February 2014: 6-1/8 x 9-1/4: 405pp
Hb: 978-1-466-59578-1: $99.95
ebook: 978-1-466-59579-8
* For full contents and more information, visit: www.crcpress.com/9781466595781

Pharmaceutical Supply Chain
Drug Quality and Security Act

Fred A. Kuglin, Kuglin, Inc., Plano, Texas, USA

Error-proofing in the production process of pharmaceuticals isn’t just a matter of good business, it has life-and-death implications for consumers. The 2013 Drug Quality and Security Act introduces more stringent compliance factors towards this common goal, in large part requiring new mandates on tracking and tracing chain of custody in the supply chain. This book comprehensively overviews the new mandate and its implications, including implementation strategies for track-and-trace programs along with presenting a fuller understanding of the mechanics of intergovernmental policies and oversights.

CRC Press
Market: Pharmaceutical
July 2015: 6-1/8 x 9-1/4: 206pp
Hb: 978-1-482-25893-6: $79.95
ebook: 978-1-482-25894-3
* For full contents and more information, visit: www.crcpress.com/9781482258936

The SAP Materials Management Handbook

Ashfaqe Ahmed, SCM Consulting, Bhilai, Chattisgarh, India

This handbook provides a complete understanding of how to configure and implement the SAP materials management module across various types of projects. It uses system screenshots of SAP environments to illustrate the complete flow of business transactions involved with SAP MM. Supplying detailed explanations of the steps involved, it presents case studies from actual projects that demonstrate how to convert theory into powerful SAP MM solutions. The book explains how to use the SAP MM module to take care of the complete range of business functions related to purchasing and inventory management.

Auerbach Publications
Market: Industrial Engineering
March 2014: 7 x 10-441pp
Hb: 978-1-466-58162-3: $99.95
ebook: 978-1-466-58163-0
* For full contents and more information, visit: www.crcpress.com/9781466581623

Supply Chain Construction
The Basics for Networking the Flow of Material, Information, and Cash

William T. Walker, Polytechnic Institute of NYU, Brooklyn, New York, USA

Series: Resource Management

Covering the practical issues of a highly integrated network woven together by corporate relationships and enabled by information technology, this book addresses the many segments key to a smooth and profitable supply chain including sourcing, warehousing, and transportation. Emphasizing flexibility and strength, it promotes optimal ways to withstand product evolution, contingencies, divisions, and disasters without dips in profitability. A strong network design not only insures growth in all logistical divisions, but the future of the company as a whole. Cases and checklists are provided.

CRC Press
Market: Supply Chain Management
August 2015: 6-1/8 x 9-1/4: 484pp
Hb: 978-1-482-24046-7: $79.95
ebook: 978-1-482-24047-4
* For full contents and more information, visit: www.crcpress.com/9781482240467

Principles of Supply Chain Management, Second Edition

Richard E. Crandall, Appalachian State University, Boone, North Carolina, USA, William R. Crandall, University of North Carolina, Pembroke, USA and Charlie C. Chen, Appalachian State University, Boone, North Carolina, USA

Series: Resource Management

This second edition of a popular textbook presents a balanced overview of the principles of supply chain management. The first section provides a complete overview of how supply chain management fits into the current landscape of business. The second section presents a detailed study of supply chain components. The third section presents a practical look at designing and implementing an integrated network. This new edition expands on current important topics such as e-commerce, risk management, outsourcing and reshoring, sustainability, project management, and data analysis. Also available with the new edition is a complete set of instructor materials.

CRC Press
Market: Business Management / Supply Chain Management
December 2017: 7 x 10-717pp
Hb: 978-1-482-21202-0: $89.95
ebook: 978-1-482-21202-0
Prev Ed Hb: 978-1-420-99107-6
* For full contents and more information, visit: www.crcpress.com/9781482212020

Supply Chain Management and Logistics
Innovative Strategies and Practical Solutions

Edited by Zhe Liang, Tongji University, Shanghai, China, Wanpracha Art Chaovattanugse, University of Washington, Seattle, USA and Leyuan Shi, University of Wisconsin-Madison, USA

Series: Industrial and Systems Engineering Series

Designed by practitioners for practitioners, this book provides a wide-spectrum resource on many different aspects involved in the supply chain management, including contemporary applications. With contributions from leading experts from all over the world, the book includes innovative strategies and practical solutions that address problems encountered by enterprise in management of supply chain and logistics. The book is an in-depth discussion on both general techniques and specific approaches to a broad range of important, inspiring, and unsolved questions in the field.

CRC Press
Market: Manufacturing and Industrial Engineering
October 2015: 6-1/8 x 9-1/4: 266pp
Hb: 978-1-466-57787-9: $129.95
ebook: 978-1-466-57788-6
* For full contents and more information, visit: www.crcpress.com/9781466577879
Supply Chain Optimization through Segmentation and Analytics

Gerhard J. Plenert, MainStream GS, LLC, Carmichael, California, USA
Series: Resource Management

Supply Chain Segmentation (SCS) has become a critical tool in optimizing supply chain performance. By using segmentation, an organization is taken out of the world of “one size fits all” and brought into a world that facilitates customized responses. This book explains what SCS is, how it works, and the role of analytics. The book gives detailed case studies demonstrating how SCS is applied and improves efficiency. It covers software appropriateness and integration, as well as a full summary perspective on segmentation and its competitive impacts in terms of economic pressure, supplier and consumer interfaces.

CRC Press
Market: Business & Management
April 2014: 6-1/8 x 9-1/4: 259pp
Hb: 978-1-466-58476-1 $87.95
ebook: 978-1-466-58477-8
* For full contents and more information, visit: www.crcpress.com/9781466584761

Supply Chain Risk Management
An Emerging Discipline

Gregory L. Schlegel, VP Business Development, SherTrack LLC and Founder, The Supply Chain Risk Management Consortium and Robert J. Trent, Lehigh University, Bethlehem, PA, USA
Series: Resource Management

This book presents a risk management framework that will help readers position and conceptualize the topic of supply chain risk management. With this framework, practitioners will be able to reduce costs associated with risk, protect their brand and reputation, ensure positive financial outcomes, and begin to develop visible, predictable, resilient, and sustainable supply chains. The book provides access to a Cloud-based, end-to-end supply chain risk assessment “Heat Map” which illustrates the maturity of the chain through the various stages.

CRC Press
Market: Business Management / Supply Chain Management
October 2014: 6-1/8 x 9-1/4: 334pp
Hb: 978-1-482-20597-8: $79.95
ebook: 978-1-482-20599-2
* For full contents and more information, visit: www.crcpress.com/9781482205978

Browse and order online: www.crcpress.com
Addaptive Stochastic Optimization Techniques with Applications

James A. Momoh, Howard University, Washington, District of Columbia, USA

This book describes state-of-the-art optimization techniques used to solve problems with adaptive, dynamic, and stochastic features. It presents modern advances in static and dynamic optimization, decision analysis, intelligent systems, evolutionary programming, heuristic optimization, stochastic and adaptive programming, and adaptive critics. It evaluates optimization methods for handling operational planning, Voltage/Var, control coordination, vulnerability, reliability, resilience, and reconfiguration issues, providing numerous mathematical formulations, algorithms for implementation, examples, and case studies. It also discusses the limitations of current optimization techniques in meeting the challenges of smart electric grids.

CRC Press

Market: Electrical Engineering

December 2015: 6-1/8 x 9-1/4: 414pp

Hb: 978-1-439-82978-3: $149.95
ebook: 978-1-439-82979-0

* For full contents and more information, visit: www.crcpress.com/9781439829783

Aeropae Manufacturing Processes

Pradip K. Saha, The Boeing Company, Seattle, Washington, USA

Manufacturing processes of aircraft components include broad activities consisting of multiple materials processing technologies. Present book is a focused attempt to present manufacturing process technologies exclusively for fabricating major aircraft components. Topics covered in a total of twenty chapters are presented with a balanced perspective on the relevant fundamentals and various examples and case studies. An individual chapter discussing certain scope and directions of research and development in the area of developing high strength lighter aircraft materials, and cost effective manufacturing processes is also included.

CRC Press

Market: Engineering - Mechanical

June 2016: 7 x 10: 584pp

Hb: 978-1-498-75605-1: $239.95
ebook: 978-1-498-75604-4

* For full contents and more information, visit: www.crcpress.com/9781498756044

Adaptive, Dynamic, and Resilient Systems

Edited by Niranjan Suri, Florida Institute for Human & Machine Cognition, Pensacola, USA and Giacomo Cabri, University of Modena and Reggio Emilia, Italy

Series: Mobile Services and Systems

Examining cutting-edge adaptive systems research, this book addresses the challenges of understanding, predicting, and controlling systems of networked computers, along with the human component behind these complex systems. The authors unveil novel approaches to building adaptive, dynamic, and resilient systems—including agile computing, multi-agent based, biologically-inspired approaches, grid computing, autonomic computing, and self-organizing systems.

Auerbach Publications

Market: Information Technology

June 2014: 6-1/8 x 9-1/4: 378pp

Hb: 978-1-466-68484-2: $109.95
ebook: 978-1-466-68482-6

* For full contents and more information, visit: www.crcpress.com/9781466684826

Air and Missile Defense Systems Engineering

Warren Board, Department of the Navy and John B. Hoffman, Technology Service Corporation, Silver Spring, Maryland, USA

As new missile shield programs are put into place, the need increases for information on the latest systems design techniques and component technologies. This book explains how to properly assess war-fighting capability by examining detect, control, and engage processes in the context of the combat system. The authors present a systems engineering approach that can be applied to new systems under consideration and to existing operational system designs. Using this approach, performance tradeoffs can be made between the sensor (radar) and weapon (missile) that support the development, testing, and fielding of a balanced system. The text also addresses battlespace performance assessment.

CRC Press

Market: Engineering

March 2016: 6-1/8 x 9-1/4: 254pp

Hb: 978-1-439-90670-6: $129.95
ebook: 978-1-439-90671-3

* For full contents and more information, visit: www.crcpress.com/9781439906708

Advances and Trends in Engineering Sciences and Technologies


Edited by Mohamad Al Ali, Faculty of Civil Engineering, Technical University in Kosice, Kosice, Slovakia and Peter Platko, Faculty of Civil Engineering, Technical University in Kosice, Kosice, Slovakia

The International Conference on Engineering Sciences and Technologies (EaST 2015), organized under the auspices of the Faculty of Civil Engineering, Technical University in Kosice – Slovak Republic was held May 27–29, 2015 in the High Tatras, Slovak Republic. Facilitating discussions on novel and fundamental advances in the fields of Engineering Sciences and Technologies for scientists, researchers and professionals from around the world. The Conference focused on a wide spectrum of topics and areas of Civil engineering sciences: Materials and technologies; Survey, mapping and planning; Buildings and structures; Roads, bridges and geotechnics; Water supply and drainage.

CRC Press

Market: Engineering Science

October 2015: 450pp

Hb: 978-1-138-02907-1: $199.95
ebook: 978-1-315-64464-9

* For full contents and more information, visit: www.crcpress.com/9781138029071

Applied System Innovation

Proceedings of the 2015 International Conference on Applied System Innovation (ICASI 2015), May 22-27, 2015, Osaka, Japan

Edited by Teen-Hang Meen, Department of Electronic Engineering, National Formosa University, Yunlin, Taiwan, Stephen Prior and Artde Donald Kin-Tak Lam, College of Physics and Information Engineering, Fuzhou University, Fuzhou, China

The 2015 International Conference on Applied System Innovation (ICASI 2015) was held May 22-27, 2015 in Osaka, Japan and provided a unified communication platform for researchers working on a wide range of topics from . The conference brought together a diverse group of engineers and technologists from across disciplines for the generation of new ideas, collaboration potential and business opportunities. Professionals from industry, academia and government were encouraged to discourse on research and development, professional practice, business and management in the fields of information, innovation, communication and engineering.

CRC Press

Market: Systems Engineering

February 2016: 102pp

Hb: 978-1-138-02893-7: $179.95
ebook: 978-1-315-64464-9

* For full contents and more information, visit: www.crcpress.com/9781138028937
Automotive Engine Metrology

Salah H. R. Ali, National Institute for Standards (NIS), Giza City, Egypt

In recent decades, metrology—an accurate and precise technology of high quality for automotive engines—has gained a great deal of scientific interest due to its unique advanced soft engineering techniques in design and diagnostics. Used in a variety of scientific applications, these techniques are now widely regarded as safer, more efficient, and more effective than traditional ones. This book compiles and details the cutting-edge research in science and engineering from the Egyptian Metrology Institute (National Institute for Standards) that is revolutionizing advanced dimensional techniques through the development of coordinate and surface metrology.


Edited by Alex Gorod, Systemics Laboratory, Hoboken, New Jersey, USA, Brian E. White, CAU, SES, Sudbury, Massachusetts, USA, Vernon Ireland, The University of Adelaide, Australia, S. Jimmy Gandhi, California State University Northridge, USA and Brian Sauser, University of North Texas, Denton, USA

Suitable as a reference for industry practitioners and as a textbook for classroom use, this book provides an understanding of systems engineering (SoSE), enterprise systems engineering (ESE), and complex systems engineering (CSE). Industry practitioners present and analyze case studies from a range of domains that demonstrate the underlying principles and best practices. A number of the case studies focus on addressing real human needs. Diverse approaches such as use of soft systems skills are illustrated in applications, and other helpful techniques are also provided.

Configuration Management

Theory, Practice, and Application

Jon M. Quigley, Co-Founder, Value Transformation, LLC, Texas, USA and Kim L. Robertson

This is one of the first books on management to take readers on a journey that traces the management theory behind the things we produce and consume that starts in antiquity and continues through the evolutionary development to their current implementation. Understanding this back story is critical to grasping the implications of decisions made in the first 60 days of any development program, as these decision impact 90 percent of the downstream developmental costs. The book is replete with original artwork and real-world examples of how configurations are managed across all market segments—uniting theory with practice and application.

Discrete Simulation and Animation for Mining Engineers

John R. Sturgul, University of Adelaide, Australia

This book explains how to model mining systems using GPSS/H* and PROOF® by Wolverine Software Corporation. Employing a unique approach that encourages engagement from the start, the text discusses animation first, and then slowly introduces simulation language. As each new topic is covered, an animation is provided to illustrate the key concepts. Leveraging valuable insight gained from the author’s extensive experience modeling mines around the world, the book offers a comprehensive yet accessible treatment of mine simulation and animation useful in increasing the efficiency of industrial mining processes.

2nd Edition

Design Science Research Methods and Patterns

Innovating Information and Communication Technology, 2nd Edition

Vijay K. Vaishnavi, Vijay K. Vaishnavi, University of Nevada at Reno

Presenting innovative research methods, this second edition of a bestseller describes a simple and practical methodology for conducting cutting-edge design science research (DSR). It provides comprehensive guidance on how to conduct such research and provides in-depth treatment of design science theory and the different types of theory that can be generated in design science research. Making novel use of the concept of patterns, it presents 84 research patterns for conducting effective DSR. It emphasizes design science theory throughout and is filled with practical examples of using patterns to conduct IT research.

Configuration Management

Guidelines, Design Patterns, and Application Examples with the IEC 61499

Edited by Alois Zottl, fortiss GmbH, Munich, Germany and Thomas Strasser

This book discusses the IEC 61499 reference architecture for distributed and reconfigurable control, and its adoption by industry. The text provides design patterns, application guidelines, and rules for designing distributed control applications based on the IEC 61499 model. Examples from various industrial domains and laboratory environments are introduced and explored. Featuring chapters authored by subject-matter experts from Austria, Czech Republic, Germany, Greece, Finland, Portugal, Spain, Sweden, China, Canada, New Zealand, and the US, the book offers a global overview of IEC 61499 application domains. It also aids in implementing current automation solutions.

Browse and order online: www.crcpress.com
**Embedded Software Development for Safety-Critical Systems**

Chris Hobbs, QNX Software Systems, Canada

This book discusses the development of safety-critical systems under the following standards: IEC 61508; ISO 26262; EN 50128; and IEC 62304. It details the advantages and disadvantages of many architectural and design practices recommended in the standards, ranging from replication and diversification, through anomaly detection to the so-called “safety bag” systems. Reviewing the use of open-source components in safety-critical systems, the book has evolved from a course text used by QNX Software Systems for a training module on building embedded software for safety-critical devices.

**Handbook of Power Management Circuits**

Edited by Haruo Kobayashi, Gunma University, Japan and Takashi Nabeshima, Oita University, Japan

This book provides a comprehensive yet deep and wide description of DC-DC switching power supply circuits, to which much attention is being paid as a key technology in green IT, especially in automotive and consumer electronics industry. It covers buck converters, isolated converters, PFC converters, their modeling and analysis, several control methods, passive components, and their several recent applications (on-chip power supplies, DC-DC and AC-DC converter applications, single-inductor multi-output DC-DC converters, energy harvest applications, wireless power delivery, charge pump circuits, and power amplifiers).

Pan Stanford

**Enterprise Integration and Information Architecture**

A Systems Perspective on Industrial Information Integration

Li Da Xu, Old Dominion University, Norfolk, Virginia, USA

Series: Advances in Systems Science and Engineering (ASSE)

This book explains how to improve industrial information integration through the application of a systems approach. Describing how systems science is impacting current research, it covers enterprise architecture, information architecture for enterprises, business process/work flow modeling, and enterprise information integration. Complete with numerous examples of extended enterprise integration in actual supply chain environments, the book illustrates the critical issues that arise in professional practice and also explores emerging trends in enterprise integration and its information architecture.

**Infusing Innovation Into Organizations**

A Systems Engineering Approach

Edited by M. Ann Garrison Darrin, Johns Hopkins University, Applied Physics Lab, Laurel, Maryland, USA and Jerry Krill, The Johns Hopkins University, Applied Physics Laboratory, Laurel, Maryland, USA

Infusing Innovation into Organizations: A Systems Engineering Approach shows how systems engineering approaches can mitigate issues that derive from resistance to change. The systems engineering approach offers two key benefits. First, it is a discipline involving systematic analysis of problems encountered and their potential solutions. The second benefit is that the systems engineering approach offers a holistic solution, through providing a long-term infrastructure. The approach connects every participant in the organizational chain, and allows for the creation of systemic change that can influence the behavior of the whole system.

**Fluctuation Mechanism and Control on System Instantaneous Availability**

Yi Yang, Beihang University, Beijing, China, Yong-Li Yu, The Maintenance Engineering Institute, Shijiazhuang, China and Li-Chao Wang

Fluctuation Mechanism and Control on System Instantaneous Availability facilitates the development of modeling and identification skills for both theoretical research and applications. Supplying an overall summary of current research results in fluctuation analysis of instantaneous availability, it covers the theory, methodology, and specific engineering implementation required to conduct equipment instantaneous availability analysis. Presenting practical methods and tools, it describes how to control the matching transition of new equipment systems as a result of interactions among sub-systems.

**Integration of Services into Workflow Applications**

Pawel Czarnul, Gdansk University of Technology, Poland

Series: Chapman & Hall/CRC Computer and Information Science Series

Describing state-of-the-art solutions in distributed system architectures, this book presents a concise approach to integration of loosely coupled services into workflow applications. It discusses key challenges related to integration of distributed systems and proposes solutions, both in terms of theoretical aspects, such as models and workflow scheduling algorithms, as well as technical solutions such as software tools and APIs. The book provides an in-depth look at workflow scheduling and proposes a way to integrate several different types of services into one single workflow application.

Chapman and Hall/CRC

**Complimentary Exam Copy**

**e-Inspection**

**New in Paperback**

**Companion Website**
Modeling and Simulation-Based Systems Engineering Handbook

Edited by Daniele Gianni, European Organization for the Exploitation of Meteorological Data, Italy, Andrea D’Ambrogio, University of Roma “Tor Vergata”, Italy, and Andreas Tolik, SimIS Inc., Portsmouth, Virginia, USA

Series: Engineering Management

Modeling and simulation (M&S) is increasingly becoming a central activity in the development of new and existing systems because it enables designers and researchers to manage systems complexity and investigate system behaviors through virtual representation. To date, a handbook that includes established M&S practices is not available in the systems engineering community. This multi-contributed reference book provides the M&S practices for supporting systems engineering in diverse domains. Readers can also identify their systems engineering needs and adapt these practices to suit their specific application domain, thus avoiding redefining practices from scratch.

CRC Press

Market: Manufacturing and Industrial Engineering

December 2014: 7 x 10: 478pp
Hb: 978-1-466-57145-7 $139.95
ebook: 978-1-466-57146-4

* For full contents and more information, visit: www.crcpress.com/9781466571457

Multi-modal Transit System Modelling in the Context of ITS/ICT

Edited by Agostino Nuzzolo, Tor Vergata University of Rome, Italy and William H. K. Lam, Hong Kong Polytechnic University, Hung Hom, Hong Kong

Making public transit faster and more efficient is a key role for transit agencies who are called to the hard task of planning and managing to satisfy the growing mobility needs of travellers. In recent years, the evolution of information technology and telematics has generated support systems that help transit agencies achieve advanced public transportation systems both from the travellers’ and operators’ perspective. This book explores real-time network modelling using new behavioral paradigms, and discusses recent developments as well as advanced public transportation systems and advanced transit assignment modelling.

CRC Press

Market: Engineering - Civil

June 2016: 6-1/8 x 9-1/4: 248pp
Hb: 978-1-498-74353-2 $169.95
ebook: 978-1-498-74354-9

* For full contents and more information, visit: www.crcpress.com/9781498743532

Nonlinear Systems Tracking

Lyubomir T. Gruyitch, University of Technology of Belfort—Montbéliard, France (Retired)

This book establishes the tracking theory, tractability theory, and tracking control synthesis for time-varying nonlinear plants and their control systems. Treating dynamical and control systems, the text describes the crucial tracking control concepts that comprise effective tracking control algorithms. It defines the main tracking and trackability properties involved, detailing the corresponding conditions needed for the controlled plant to exhibit each property. It also discusses various algorithms for tracking control synthesis, attacking the tracking control synthesis problems themselves. The book opens important new research avenues in control science and engineering.

CRC Press

Market: Engineering – Aeronautical, Astronautical, Electrical, Mechanical

January 2016: 7 x 10: 478pp
Hb: 978-1-498-75325-6 $189.95
ebook: 978-1-498-75326-3

* For full contents and more information, visit: www.crcpress.com/9781498753258

Principles of System Identification

Theory and Practice

Arun K. Tangirala, Indian Institute of Technology, Madras, India

This book explains the theoretical concepts of building (linear) dynamic models from experimental data, their practical implementations, and experimental aspects with data pre-treatment. Starting with a quick tour of identification, the first part provides foundations of discrete-time deterministic LTI systems. The second part describes modeling of stochastic stationary processes. The third part explains estimation theory and methods in detail with illustrative examples. The core material in parts four and five presents model descriptions, classical and modern identification methods, practical and experimental aspects with case studies.

CRC Press

Market: Electrical/Chemical Engineering

December 2014: 7 x 10: 908pp
Hb: 978-1-439-89599-3 * $129.95
Pack - Book and Ebook: 978-1-439-89599-3 * $129.95
* For full contents and more information, visit: www.crcpress.com/9781439895993

Probability Methods for Cost Uncertainty Analysis

A Systems Engineering Perspective, Second Edition

Paul R. Garvey, Stephen A. Book, and Raymond P. Covert, Covarus LLC, Palm Beach Gardens, Florida, USA

This book presents analytical methods for modeling and measuring uncertainty in the cost of engineering systems. This includes the treatment of correlation between the cost of system elements, how to present the analysis to decision-makers, and the use of bivariate probability distributions to capture joint interactions between a system’s cost and schedule. Analytical techniques from probability theory are stressed, along with the Monte Carlo simulation method. Numerous examples and case discussions illustrate the practical application of theoretical concepts.

Chapman and Hall/CRC

Market: Statistics

December 2015: 6-1/8 x 9-1/4: 502pp
Hb: 978-1-482-21975-3 * $119.95
ebook: 978-1-482-21976-0

* For full contents and more information, visit: www.crcpress.com/9781482219753

Reflexion and Control Mathematical Models

Dmitry A. Novikov, Trapeznikov Institute of Control Sciences, Russian Academy of Sciences, Moscow, Russia and Alexander G. Chkhartishvili, Trapeznikov Institute of Control Sciences, Russian Academy of Sciences, Moscow, Russia

Series: Communications in Cybernetics, Systems Science and Engineering

The book considers the basics of mathematical modeling of reflexive processes in control. The models of informational and strategic reflexion allow describing and studying the behavior of reflexing subjects, investigating the relationship between payoffs gained by agents and their reflexion ranks, solving problems of informational and reflexive control in organizational, economic, social and other systems, and military applications among others (the book contains over 30 examples of possible applications in these fields), describing uniformly many phenomena connected with reflexion, viz. implicit control, informational control via the mass media and reflexion in psychology.

CRC Press

Market: Systems Science

March 2014: 288pp
Hb: 978-1-138-02473-1 * $112.95
ebook: 978-1-315-77554-8

* For full contents and more information, visit: www.crcpress.com/9781138024731
Software and Systems Architecture in Action

Raghvinder S. Sangwan, Malvern, PA, USA
Series: Applied Software Engineering Series
This book explores practices that can be helpful in the development of architectures of large-scale systems in which software is a major component. Examining the synergies that exist between software and systems engineering, it details an approach to architecture design that is driven from systemic quality attributes determined from both the business and technical goals of the system. This approach utilizes analytically derived patterns and tactics for quality attributes that inform the architect’s design choices and help shape the architecture of a given system.

Auerbach Publications
Market: Information Technology
October 2014: 6-1/8 x 9-1/4: 232pp
Hb: 978-4-98-70274-4 $119.95
ebook: 978-1-498-70275-1
* For full contents and more information, visit: www.crcpress.com/9781498702744

Software Patterns, Knowledge Maps, and Domain Analysis

Mohamed E. Fayad, San José State University, Charles W. Davidson College of Engineering, Computer Engineering, California, USA, Huascar A. Sanchez, Srikanth G.K. Hegde, Anshu Basia and Ashika Vakil
This book introduces a new process for creating software design patterns that leads to highly stable, reusable, and cost-effective software. The basis of this new process is a topology of software patterns called knowledge maps. This book is designed to allow readers to master the basics of knowledge maps from their theoretical aspects to practical application. Each chapter of the book concludes with an open research issue, review questions, exercises, and a series of projects.

Auerbach Publications
Market: Information Technology
December 2014: 7 x 10: 488pp
Hb: 978-1-466-57143-3 $99.95
ebook: 978-1-466-57144-0
* For full contents and more information, visit: www.crcpress.com/9781466571433

Stabilization Theory for Linear Boundary Control Systems

Takao Nambu, Kobe University, Japan
This book presents a unified algebraic approach to stabilization problems of linear boundary control systems with no assumption on finite-dimensional approximations to the original systems, such as the existence of the associated Riesz basis. A new proof of the stabilization result for linear systems of finite dimension is also presented, leading to an explicit design of the feedback scheme. The problem of output stabilization is discussed, and some interesting results are developed when the observability or the controllability conditions are not satisfied.

CRC Press
Market: Mathematics
June 2016: 6-1/8 x 9-1/4: 275pp
Hb: 978-1-498-75847-5 $179.95
ebook: 978-1-498-75848-2
* For full contents and more information, visit: www.crcpress.com/9781498758475

Stable Analysis Patterns for Software and Systems

Mohamed Fayad, San José State University, California
This book presents a new, pragmatic approach for understanding the problem domain and in utilizing stable analysis patterns for engineering and modeling stable software systems, components and frameworks. The unique template employed in this book for describing the presented analysis patterns makes the use of these patterns easy and efficient. The book also helps readers attain the basic knowledge needed to analyze and extract analysis patterns for their own domain of interest and master how to document their own patterns.

Auerbach Publications
Market: Information Technology
July 2016: 7 x 10: 608pp
Hb: 978-1-498-70274-4 $119.95
ebook: 978-1-498-70275-1
* For full contents and more information, visit: www.crcpress.com/9781498702744

Stable Design Patterns

Mohamed Fayad, San José State University, California
Software stability concepts have shown great promise in the area of software reuse and lifecycle improvement. These innovative concepts produce unique models that are both stable over time and across various paradigm shifts within a given application context. The important idea behind stable design patterns is to design and create an enduring solution to the problem under consideration, with the goal of increased stability and broader reuse. This book presents novel, pragmatic approaches to understanding and solving software stability challenges.

Auerbach Publications
Market: Information Technology
May 2016: 6-1/8 x 9-1/4: 500pp
Hb: 978-1-498-70330-7 $169.95
ebook: 978-1-498-70331-4
* For full contents and more information, visit: www.crcpress.com/9781498703307

6th Edition - TEXTBOOK - NEW EDITION
Statistics for Engineering and the Sciences, Sixth Edition

William M. Mendenhall and Terry L. Sincich
Designed for a two-semester introductory course, this popular text continues to teach students the basic concepts of data description and statistical inference as well as the statistical methods necessary for real-world applications. Along with updated and reorganized material, this sixth edition includes many new and updated exercises based on contemporary engineering and scientific-related studies and real data. It also offers more statistical software printouts and corresponding instructions for use that reflect the latest versions of the SAS, SPSS, and MINITAB software.

Chapman and Hall/CRC
Market: Statistics
December 2015: 8 x 10: 1166pp
Hb: 978-1-498-72885-0 $219.95
ebook: 978-1-498-72887-4
* For full contents and more information, visit: www.crcpress.com/9781498728850
Systems Design and Engineering
Facilitating Multidisciplinary Development Projects

G. Maarten Bonnema, University of Twente, Enschede, The Netherlands, Karel T. Veenvliet, University of Twente, Dept. of Construction Management and Engineering, Enschede, The Netherlands, and Jan F. Broenink, University of Twente, Enschede, The Netherlands

Systems Engineering is gaining importance in the high-tech industry with systems like digital single-lens reflex cameras, medical imaging scanners, and industrial production systems. Such systems require new methods that can handle uncertainty in the early phases of development, that systems engineers can provide. This book offers a toolbox approach by presenting the tools and illustrating their application with examples. This results in an emphasis on the design of systems, more than on analysis and classical systems engineering. The book is useful for those who need an introduction to system design and engineering, and those who work with system engineers, designers and architects.

CRC Press
Market: Engineering - Industrial & Manufacturing
December 2015: 6-1/8 x 9-1/4: 113pp
Ps: 978-1-498-75126-1 $49.95
ebook: 978-1-498-75127-8
* For full contents and more information, visit: www.crcpress.com/9781498751261

Systems Engineering and Analysis of Electro-Optical and Infrared Systems

William Wolfgang Arrasmith, Florida Institute of Technology, Melbourne, USA

Electro-Optical systems are fundamental in many areas including the military, medical, commercial, industrial, and private sectors. Systems Engineering and Analysis of Electro-Optical and Infrared Systems integrates solid fundamental systems engineering principles, methods, and techniques with the technical focus of contemporary Electro-Optical and Infrared optics, imaging, and detection methodologies and systems. The book provides a running base study throughout the book that illustrates concepts and applies topics learned.

CRC Press
Market: Manufacturing & Industrial Engineering
April 2015: 7 x 10: 328pp
Hb: 978-1-466-57992-7 $169.95
ebook: 978-1-466-57993-4
* For full contents and more information, visit: www.crcpress.com/9781466579927

Systems Engineering Simplified

Robert Cloutier, Stevens Institute of Technology, Clifton Baldwin, Stevens Institute of Technology and Mary Alice Bone, Stevens Institute of Technology

Although there are many facets of systems engineering, it basically can be explained as focusing on addressing “why” a system is needed, “what” the system must do, and then “how” the system will accomplish the task over the entire life of the system - from conception to disposal. Designed for student systems engineers, this book provides a holistic understanding of systems engineering while they consider their applications of fluid power into broader systems.

CRC Press
Market: Manufacturing & Industrial Engineering
January 2015: 6-1/8 x 9-1/4: 92pp
Ps: 978-1-498-70668-1 $39.95
ebook: 978-1-498-70669-8
* For full contents and more information, visit: www.crcpress.com/9781498706681

2nd Edition
System Safety Engineering and Risk Assessment
A Practical Approach, Second Edition

Nicholas J. Bahr

This book gives engineers and managers working in companies and governments around the world a pragmatic approach to system safety and risk assessment techniques. It explains in easy-to-understand language how to design workable safety management systems and implement tested solutions immediately. The book’s many practical tips and best practices explain not only how to prevent accidents, but also how to build safety into systems at a sensible price. The book includes numerous case studies from real disasters that describe what went wrong and the lessons learned.

CRC Press
Market: Manufacturing & Industrial Engineering
December 2014: 6-1/8 x 9-1/4: 48pp
Hb: 978-1-466-55160-2 $162.95
ebook: 978-1-466-55161-9
Prev. Ed Hb: 978-1-560-32416-4
* For full contents and more information, visit: www.crcpress.com/9781466551602

Browse and order online: www.crcpress.com
A Systems Perspective on Financial Systems

**Jeffrey Yi-Lin Forrest**, International Institute for General Systems Studies, Grove City, USA; Slippery Rock University, Slippery Rock, USA

Series: Communications in Cybernetics, Systems Science and Engineering

This book is devoted to a systems-theoretical presentation of the main results of money and financial institutions by using the systemic yoyo model and relevant analytical tools. The author presents the main concepts and results in the language of systems science, which has in the past century brought forward revolutionary applications of systems research in various areas of the traditional disciplines. This book can be used as a textbook for researchers and graduate students in economics, finance, systems science, and mathematical / systems modeling. It will also be useful as a reference book for applied economists and various policy makers.

CRC Press

Market: Economics
March 2014: 570pp
Hb: 978-1-138-02628-5: $124.95
eBook: 978-1-315-77209-7

* For full contents and more information, visit: [www.crcpress.com/9781138026285](http://www.crcpress.com/9781138026285)

Engineering Optimization 2014


Optimization methodologies are fundamental instruments to tackle the complexity of today’s engineering processes. Engineering Optimization 2014 is dedicated to optimization methods in engineering, and contains the papers presented at the 4th International Conference on Engineering Optimization (ENGOPT2014, Lisbon, Portugal, 8-11 September 2014). The book will be of interest to engineers, applied mathematicians, and computer scientists working on research, development and practical applications of optimization methods in engineering.

CRC Press

Market: Engineering
September 2014: 18pp
Hb: 978-1-38-02725-1: $309.00
eBook: 978-1-315-73210-7

* For full contents and more information, visit: [www.crcpress.com/9781138027251](http://www.crcpress.com/9781138027251)
Bioprocessing of Textiles
Edited by C. Vigneswaran, M. Ananthasubramanian, PSG College of Technology, Coimbatore, India and P. Kandhavadivu, PSG College of Technology, Coimbatore, India
Series: Woodhead Publishing India in Textiles
This book deals with the basic fundamentals of enzyme technology and their applications in textile processing of both natural and synthetic fibres for enhancing their functional characteristics. The book also describes the future scope of enzyme technology for hygienic and healthcare textile product development and safety aspects of handling enzymes in the textile industries. In short, this book presents a refreshing original approach in emphasizing the interface between enzyme technology and textile materials apart from dealing with diverse methods and techniques used in industrial practices.
CRC Press
Market: Materials Science
August 2014: 6 x 9: 460pp
Hb: 978-1-482-21656-1: $229.95
ebook: 978-1-482-21653-1: $229.95
* For full contents and more information, visit: www.crcpress.com/9789380308425

Braided Structures and Composites
Production, Properties, Mechanics, and Technical Applications
Edited by Sohel Rana, University of Minho, Guimarães, Portugal and Raul Fangueiro
Series: Composite Materials
This first-of-its-kind book provides a single source of cutting-edge information on braiding, covering the technology from concept to product design and application. The text explains the basic principles of braiding technology for industrial textiles, composites, and products. It identifies the key parameters that influence the braiding process and its produced structures, and shows how to control these parameters to achieve the desired material characteristics. It discusses various structure modeling and analysis techniques and software tools. It also describes various application requirements and their design solutions.
CRC Press
Market: Materials Science and Engineering
August 2015: 6 x 9: 1-1/4: 320pp
Hb: 978-1-482-24500-6: $179.95
ebook: 978-1-482-24501-3
* For full contents and more information, visit: www.crcpress.com/9781482245004

4th Edition - NEW EDITION
James F. Shackelford, University of California, Davis, USA, Young-Hwan Han, Yeungnam University, Gyeongsan, South Korea, Sukyoung Kim, Yeungnam University, Gyeongsan, South Korea and Se-Hun Kwon, Pusan National University, Busan, South Korea
This handbook provides a single-volume source for material property data verified by associations like ASM International and the American Ceramic Society. Featuring extensive references to contemporary literature, this edition offers a more streamlined presentation organized by categories of traditional and advanced materials. This edition also converts its chemical and physical property data from US customary units to SI units, improving its usefulness on a global scale. Plus, its coverage is expanded to include the latest on low-dimensional carbons, two-dimensional nanomaterials, MAX phases, and amorphous metals.
CRC Press
Market: Materials Science and Engineering
August 2015: 7 x 10: 634pp
ebook: 978-1-482-21656-1
* For full contents and more information, visit: www.crcpress.com/9781482216530

Electronics in Textiles and Clothing
Design, Products and Applications
L. Ashok Kumar, PSG College of Technology, Coimbatore, Tamil Nadu, India and C. Vigneswaran
This book covers the basic fundamentals of electronics and their applications in textiles and clothing product development. With increasing awareness about the e-textiles, researchers and scientists are finding ways to treat the textile materials, integrating with electronics for communication/signal transferring applications. The book discusses wearable electronics, fabric production techniques for wearable electronics, design of circuits and integration into wearable electronic fabrics, product development, software development, design and development of wearable electronic flexible solar tent, and garment integrated wearable electronic products.
CRC Press
Market: Engineering - Industrial & Manufacturing
November 2015: 6-1/8 x 9-1/4: 426pp
Hb: 978-1-482-21650-8: $189.95
ebook: 978-1-482-21651-5
* For full contents and more information, visit: www.crcpress.com/9781498715508

Engineering Textiles
Research Methodologies, Concepts, and Modern Applications
Edited by Alexandr A. Berlin, Russian Academy of Sciences, Moscow, Russia, Roman Joswik, Military Institute of Chemistry and Radiometry, Warsaw, Poland and Vatin Nikolai Ivanovich, Saint-Petersburg State Polytechnical University, Russia
This volume provides critical, authoritative evaluations of advances in the discipline of textile engineering. Reporting on recent advances with significant applications in textile engineering, the chapters are written by internationally recognized researchers. This book covers important concepts and advances in the field, including applications of nonwovens in textile engineering, textile waste treatment for use in emulsion rubbers, parameters of polyhydroxybutyrate nanofibers, preparation of amines for use in textile engineering, progress in photovoltaic textile, and new applications in nanoeengineering materials.
Apple Academic Press
Market: Materials Science
September 2015: 6-1/8 x 9-1/4: 386pp
Hb: 978-1-771-88078-7: $149.95
ebook: 978-1-498-70603-2
* For full contents and more information, visit: www.crcpress.com/9781771880787

Fashion Retail Supply Chain Management
A Systems Optimization Approach
Tsan-Ming Choi, Business Division, Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong
Series: Communications in Cybernetics, Systems Science and Engineering
This book is a comprehensive reference source that provides the state-of-the-art findings on many important emerging research issues related to retail supply chain management and optimization problems. The book takes an explicit systems approach, and discusses retail-led fashion supply chain optimization models, consumer utility-driven fashion supply chain optimization models and fashion retail supply chain systems with information updating, as well as suggesting future research avenues.
CRC Press
Market: Textile manufacturing
May 2014: 122pp
Hb: 978-1-138-00028-5: $139.95
ebook: 978-1-203-76469-5
* For full contents and more information, visit: www.crcpress.com/9781138000285

Full contents and more information, visit: www.crcpress.com/9781498715508
Edited by J. N. Chakraborty, National Institute of Technology, Jalandhar, India and J. N. Chakraborty, National Institute of Technology, Jalandhar, India
This is a comprehensive book that imparts technological skills about the colouration of textiles. It discusses academic as well as shop-floor aspects of colouration. It also covers eco-friendly enzymatic processing and differential coloured effects.

Industrial Practices in Weaving Preparatory
Edited by Mukesh K. Singh, Uttar Pradesh Textile Technology Institute, Kanpur, India
Series: Woodhead Publishing India in Textiles
Industrial Practices in Weaving Preparatory covers the basic concepts of winding, warping, and sizing processes. The book includes critical comparisons between various industrial concepts, practices, and processes of winding warping and sizing. Weaving preparatory machine manufacturers have registered remarkable developments and innovations in this field, and the book covers all latest developments of above-said topics.

Fundamentals of Yarn Winding
Edited by Milind Koranne, M.S. University of Baroda, India
Series: Woodhead Publishing India in Textiles
The book discusses various parameters related to the building of winding packages, their influence on package performance, and optimization according to end-user requirements. Important elements of winding machines are explained in detail, such as yarn tensioning and clearing devices, yarn splicers, and various methods of package driving and yarn traversing.

An Introduction to Rice-grain Technology
K. R. Bhattacharya and Syed Zakiuddin Ali
Series: Woodhead Publishing India in Food Science, Technology and Nutrition
This book presents the essence of the theory and practice of drying, storage, milling, ageing, parboiling, products-making, and byproducts utilisation of rice in a simple, unencumbered style that is accessible even to the lay person. The book should be of value to the managers and operators of the thousands of rice mills strewn all over the Rice country. It should also be welcome to students of food technology for their first exposure to the topic, and to the interested lay person.

Handbook of Sustainable Apparel Production
Edited by Subramanian Senthilkannan Muthu, SGS Hong Kong Limited, Hung Hom, Kowloon
This handbook covers all aspects of sustainable apparel production including the raw materials employed, sustainable manufacturing processes, and environmental as well as social assessments of apparel production. The book discusses the development of sustainable indices plus social and environmental audits which gaining popularity in the apparel industry.

Materials and Technology for Sportswear and Performance Apparel
Edited by Steven George Hayes and Praburaj Venkatraman, Dept. of Clothing Design & Technology, Manchester Metropolitan University, UK
A detailed book which combines coverage of fashion, function and fit on the design and development of functional garments for sportswear with particular focus on garment manufacturing. It discusses fundamental terms, definitions, materials, concepts, factors and techniques related to developing sportswear products with examples and case studies. The book goes on to explore the sportswear market, trends, consumer perceptions, and celebrity endorsements in brand promotion. It also discusses popular fibers and fabrics, including woven, knits, and composite fabrics used for sportswear.
Materials Processing by Cluster Ion Beams

History, Technology, and Applications

Isao Yamada

This book discusses the physics, materials science, surface engineering issues, and nanotechnology capabilities of cluster beam processing. Written by the originator of the gas cluster ion beam (GCIB) concept, the text describes the development of sources for producing cluster beams from solid materials, the engineering characteristics of gas cluster ion beam equipment, and surface processing techniques for smoothing, shallow implantation, and preparation of high-quality thin films. It offers an overview of ion beam technologies, from the discovery of monomer ions to the introduction of GCIBs.

CRC Press
Market: Materials Science
August 2015: 6-1/8 x 9-1/4: 268pp
Hb: 978-1-498-71175-8: $129.95
* For full contents and more information, visit: www.crcpress.com/9781498711753

Nanostructured Polymer Blends and Composites in Textiles

Edited by Mihai Ciocoiu, Gheorghe Asachi Technical University of Iasi, Romania and Seghir Maamir, University of Boumerdes, Algeria

The book is intended for researchers and those interested in future developments in mechanical and physicochemical characteristics of modified nanotextile materials and polymer blends. The book will also be a useful tool for students and researchers, providing helpful insights into new evolving research areas in nanostructured polymer blends and composites in textiles.

Apple Academic Press
Market: Materials Science
November 2015: 6 x 9: 446pp
Hb: 978-1-771-88143-2: $149.95
* For full contents and more information, visit: www.crcpress.com/9781771881432

A Novel Green Treatment for Textiles

Plasma Treatment as a Sustainable Technology

Chi-wai Kan, The Hong Kong Polytechnic University

Series: Sustainability: Contributions through Science and Technology

Focusing on green chemistry and sustainability, this book discusses how plasma treatment has been used to modify textile properties. The book highlights the benefits of generating plasma and the reaction mechanisms between the surface of a textile and plasma species. The text addresses factors such as the nature of plasma gas, gas flow rate, system pressure, and discharge power that affect the final results of plasma treatments. An opening chapter presents current “brown” methods of treating textiles, exploring the environmental, economic, and social costs of these methods. Throughout the book, the author presents the twelve principles of green chemistry and how they can be applied to the textile industry.

CRC Press
Market: Materials Chemistry
September 2014: 6-1/8 x 9-1/4: 311pp
Hb: 978-1-439-83944-7: $187.95
e-book: 978-1-439-83945-4
* For full contents and more information, visit: www.crcpress.com/9781439839447

A Practical Guide to Quality Management in Spinning

Edited by B. Purushothama

Series: Woodhead Publishing India in Textiles

This book begins with the concept of quality management systems in spinning and then the objectives of product. The book explains the concept of product objectives and the impact of product features at customer’s end. It will help the shop floor technicians as a practical guide and will be useful for the students who want to become a spinner.

WPI Publishing
Market: Materials Science
May 2015: 6 x 9: 239pp
Hb: 978-9-380-30808-1: $159.95
e-book: 978-9-380-40877-7
* For full contents and more information, visit: www.crcpress.com/9789380308081

Plasma Technologies for Textile and Apparel


Series: Woodhead Publishing India in Textiles

Plasma Technologies for Textile Apparel details plasma based technologies in textile industries. It disseminates knowledge gained over the years by Indian Institutes and organizations in the arena of plasma based applications for textiles. The book describes basics of low temperature plasma production in vacuum as well as at atmospheric pressure and various applications of plasma in textile particularly in Indian context.

WPI Publishing
Market: Materials Science
November 2014: 6 x 9: 386pp
Hb: 978-9-380-30855-5: $259.95
* For full contents and more information, visit: www.crcpress.com/9789380308555

Principles of Fabric Formation

A Practical Guide to Quality Management in Spinning

Edited by Prabr Kumar Banerjee, Indian Institute of Technology, Delhi, India

Textile fabrics of various structures are being increasingly used by engineers of different disciplines. This junior/senior undergraduate-level textbook focuses on the diverse technical applications of fabric in textiles. It covers topics such as weaving, weaving, sizing, woven fabric construction, weaving, and knitting, warp knitting, braiding, nonwoven, triaxial, multiaxial, and 3-D fabrics. A solutions manual is available upon qualifying course adoption.

CRC Press
Market: Industrial & Manufacturing Engineering/Textile Engineering
December 2014: 6-1/8 x 9-1/4: 509pp
Hb: 978-1-498-71175-8: $259.95
* For full contents and more information, visit: www.crcpress.com/9781498711753

Browse and order online:
www.crcpress.com
Process Control and Yarn Quality in Spinning
Edited by G. Thilagavathi, PSG College of Technology, Coimbatore, India and T. Karthik, P.S.G College of Technology, Coimbatore, India
Series: Woodhead Publishing India in Textiles
The book outlines the concepts of raw material selection, control of various process parameters in the preparatory processes like blow room, carding, combing preparatory and comber to optimize the process conditions, and analysis and interpretation of various types of test reports to find out the source of fault.

WPI Publishing
Market: Industrial Textiles
September 2015: 6 x 9: 161pp
Hb: 978-9-380-30836-8: $179.95
*eBook: 978-9-380-30837-5
*For full contents and more information, visit: www.crcpress.com/9789380308357

Process Management in Spinning
R. Senthil Kumar
This book gives a broad outlook on various aspects of process management from mixing to winding department. Raw material evaluation and selection plays a vital role in process control of spinning. It describes the scientific method adopted to optimize raw material properties. The influence of machine components on process control and quality in each department are covered in a detailed manner with charts and data wherever necessary.

CRC Press
Market: Industrial & Manufacturing Engineering
September 2014: 6 x 9: 416pp
Hb: 978-1-482-20836-8: $129.95
*eBook: 978-1-482-20837-5
*For full contents and more information, visit: www.crcpress.com/9781482208368

Science of Compression Bandages
Edited by Bipin Kumar, Indian Institute of Technology, Delhi, India, Apurba Das, Indian Institute of Technology, New Delhi, India and R. Alagirusamy, Indian Institute of Technology, New Delhi, India
Series: Woodhead Publishing India in Textiles
The book addresses the fundamental pursuit of compression therapy. It uses a multi-disciplinary approach involving various concepts of physics, biology, biomaterials, fabric engineering, structural dynamics, material science, technical textiles, and instrumentation to better present the compression subject from different perspectives.

WPI Publishing
Market: Materials Science
January 2014: 6 x 9: 161pp
Hb: 978-9-380-30841-8: $199.95
*eBook: 978-9-380-30842-5
*For full contents and more information, visit: www.crcpress.com/9789380308418

Solutions to Problems in Textile and Garment Industry
Edited by B. Purushothama, Purushothama Consultants, Bangalore, India
Series: Woodhead Publishing India in Textiles
This book defines and identifies problems and the roots of a problem, and then goes on to explain various techniques that can be used for solving problems. It explores brainstorming and critical and creative thinking methods, usage of QC tools for diagnosing and taking decisions, and managing the change after implementing a solution. Case studies illustrate how solutions were found for the problems. By studying these techniques, readers can choose better techniques to solve their problems.

WPI Publishing
Market: Materials Science
November 2014: 6 x 9: 280pp
Hb: 978-9-380-30845-6: $229.95
*eBook: 978-9-380-30846-3
*For full contents and more information, visit: www.crcpress.com/9789380308494

Statistics for Textile Engineers
Edited by J. R. Nagla, DKTE Society’s Textile and Engineering Institute, Ichalkaranji, India
Series: Woodhead Publishing India in Textiles
The book discusses various statistical methods and techniques which are useful for the study and analysis of textile data.

WPI Publishing
Market: Materials Science
May 2014: 6 x 9: 300pp
Hb: 978-9-380-30826-5: $199.95
*eBook: 978-9-380-30852-4
*For full contents and more information, visit: www.crcpress.com/9789380308265

Textile Mechanisms in Spinning and Weaving Machines
Ganapathy Nagarajan, Aksum University Axum, Ethiopia
The book has been written in response to numerous suggestions and great interest of colleagues and students in the textile industry to note the various design aspects in the mechanics of the textile machineries.

WPI Publishing
Market: Materials Science
December 2014: 6 x 9: 384pp
Hb: 978-9-380-30845-6: $229.95
*eBook: 978-9-380-30846-3
*For full contents and more information, visit: www.crcpress.com/9789380308456

Complimentary Exam Copy e-Inspection New in Paperback Companion Website
Textiles and Environment
Edited by N. N. Mahapatra, COLORANT LIMITED, Ahmedabad, India
Series: Woodhead Publishing India in Textiles
Textiles and Environment has been written in accordance to the author’s personal experience while he was working in big corporate companies as general manager of a dye house. Dyed yarn and fabrics were exported to various countries. Mainly the European buyers used to ask for various new certifications by which the production people were confused. The author has put all the doubts into this book which is handy for dyeing technicians. He introduces new eco-friendly processes and technology in a simplified manner.

WPI Publishing
Market: Industrial Textiles
March 2015: 6 x 9: 207pp
Hb: 978-9-380-30856-2: $179.95
ebook: 978-9-380-30899-9
*For full contents and more information, visit: www.crcpress.com/9789380308562

Textiles and Human Thermophysiological Comfort in the Indoor Environment
Radostina A. Angelova, Technical University of Sofia, Bulgaria
This book considers the role of indoor textiles and clothing as a barrier between the environment and the human body. It details an experimental study of heat and mass transfer processes through woven textiles. It describes a numerical investigation of the transport of air and heat through woven fabrics by means of computational fluid dynamics. It develops, applies, and verifies an original approach for simulating the woven macrostructure as a jet system. It also evaluates thermophysiological comfort under indoor environmental parameters, clothing insulation, and activity.

CRC Press
Market: Materials Science
October 2015: 6-1/8 x 9-1/4: 328pp
Hb: 978-1-498-71539-3: $189.95
ebook: 978-1-498-71540-9
* For full contents and more information, visit: www.crcpress.com/9781498715393

Woven Fabric Structure Design and Product Planning
Edited by J. Hayavadana, Osmania University, Hyderabad, India
Series: Woodhead Publishing India in Textiles
The book deals with the structural details of the woven fabric which has glimpses of primary, secondary, and tertiary weaves. The book has a number of examples on each topic and a few chapters have been given with objective type of questions.

WPI Publishing
Market: Materials Science
January 2015: 6 x 9: 166pp
Hb: 978-9-380-30824-1: $159.95
ebook: 978-9-380-30897-5
*For full contents and more information, visit: www.crcpress.com/9789380308241

Browse and order online:
www.crcpress.com
2nd Edition - NEW EDITION

Air Pollution Control Technology Handbook, Second Edition

Karl B. Schnelle, Jr., Vanderbilt University, Nashville, Tennessee, USA; Russell F. Dunn and Mary Ellen Ternes, Crowe and Dunley, Oklahoma City, USA

With its comprehensive coverage of air pollution control processes, this book is a detailed reference for the practicing engineer who prepares the process engineering and cost estimation required for the design of an air pollution control system. Fully updated with new legislation, air regulations, and extensive reviews of the design of control equipment, the book also highlights current improvements in effective air pollution control. This edition includes graphics, images, and figures to illustrate changes in air pollution issues and regulations.

CRC Press
Market: Engineering - Environmental
October 2015: 6-1/8 x 9-1/4: 429pp
Hb: 978-1-482-24560-2 $169.95
ebook: 978-1-482-24562-6
Prev. Ed Hb: 978-1-566-70586-8
Ebook: 978-1-482-22217-3
* For full contents and more information, visit: www.crcpress.com/9781482222166

Human Hypersensitivity to Environmental Chemicals

Yukio Yanagisawa, University of Tokyo, Japan; Hiroshi Yoshino, Tohoku University, Sendai, Japan; and Satoshi Ishikawa, Kitasato University, Tokyo, Japan

Written by multidisciplinary experts in medicine, chemistry, and architecture, this book examines chemical sensitivity (CS). In 15 chapters fitted to 15 lectures, it discusses not only the medical explanation, but also the environmental factors of this hypersensitive reaction, such as chemistry and architectural aspects. The book overviews pollution-induced diseases such as Minamata Disease. It also points out the similarity of modern hypersensitivity syndromes to historical pollution diseases from the viewpoints of not only natural scientific aspects, but also social understanding of the disease.

CRC Press
Market: Industrial Hygiene
May 2016: 6-1/8 x 9-1/4: 224pp
Hb: 978-1-466-58444-0 $189.95
ebook: 978-1-466-55637-9
* For full contents and more information, visit: www.crcpress.com/9781466556348

5th Edition - TEXTBOOK

Air Quality, Fifth Edition

Thad Godish, Ball State University, Muncie, Indiana, USA; Wayne T. Davis, University of Tennessee, Knoxville, USA; and Joshua S. Fu

The new edition of a bestseller includes updated information on topics such as global warming, global dimming, international issues associated with air quality and its regulation, atmospheric deposition, atmospheric chemistry, and health and environmental effects of atmospheric pollution. The fifth edition will include new graphics, images and an appended list of unit conversions. The chapters have been reorganized, new material has been added, less relevant material deleted, and new images added, particularly those from earth satellites.

CRC Press
Market: Environmental Engineering
August 2014: 6-1/8 x 9-1/4: 542pp
Hb: 978-1-466-58444-0 $199.95
ebook: 978-1-466-58445-7
Ebook: 978-1-482-22217-3
* For full contents and more information, visit: www.crcpress.com/9781466584440

Industrial Air Quality and Ventilation

Controlling Dust Emissions

Ivan Nikolayevich Logachev, Belgorod State Technological University, Russia; and Konstantin Ivanovich Logachev, Belgorod State Technological University, Russia

This book presents both theoretical and practical guidance for the design and implementation of local exhaust and ventilation systems in industrial facilities. It explains the mechanism and processes of ejecting airflows in different variations—from uniform air motion processes in closed chutes to the creation of accelerated air streams in a free-particle flow. It also examines the engineering methods of calculating the amount of aspirated air for various industries, and compares the calculated volumes of aspiration with real-life test results.

CRC Press
Market: Engineering - Environmental
February 2014: 6-1/8 x 9-1/4: 417pp
Hb: 978-1-482-22216-6 $199.95
ebook: 978-1-482-22217-3
* For full contents and more information, visit: www.crcpress.com/9781482222166

Everyday Environmental Toxins

Children’s Exposure Risks

Edited by Areej Hassan, Boston Children’s Hospital, Massachusetts, USA

This collection of timely chapters presents a nuanced study of environmental toxins and the risks they pose to children’s development. The book details the impact of a number of commonplace environmental toxins, focusing on everyday exposure to tobacco smoke, lead, pesticides, and flame retardants. This book aims to create greater awareness to spur additional research, provide vital information to clinicians, and send a powerful message to government officials, putting pressure on them to develop policies that improve the quality of the environment and spare children the detrimental effects of such exposures.

Apple Academic Press
Market: Environmental Chemistry
March 2015: 6 x 9: 352pp
Hb: 978-1-771-88101-2 $139.95
ebook: 978-1-849-71815-8
* For full contents and more information, visit: www.crcpress.com/9781771881012

Local Exhaust Ventilation

Aerodynamic Processes and Calculations of Dust Emissions

Ivan Logachev, Belgorod State Technological University, Russia; Konstantin Logachev and Olga Averkova

This book examines the computations of gas-borne dust flows in local exhaust ventilation systems and provides practical recommendations for the energy-efficient containment of dust emissions. It discusses basic approaches to operational energy savings for local exhaust ventilation systems, including shaping intake openings of open local exhaust devices after determining boundaries of vortex areas, increasing the working distance of suction openings, inhibiting carryover of dust into aspiration network by promoting rotational aerodynamic fields, and more. Color photos throughout illustrate dust behavior, flow lines, and patterns.

CRC Press
Market: Engineering - Environmental
May 2015: 7 x 10: 564pp
Hb: 978-1-482-72064-9 $179.95
ebook: 978-1-482-72064-9
* For full contents and more information, visit: www.crcpress.com/9781482720632
Occupational Safety and Hygiene III

Edited by Pedro M. Azeves, School of Engineering, University of Minho, Guimaraes, Portugal, João Santos Baptista, University of Porto, Porto, Portugal, Monica P. Barroso, University of Minho, Guimaraes, Portugal, Paula Carneiro, University of Minho, Guimaraes, Portugal, Patricio Cordeiro, University of Minho, Guimaraes, Portugal, Nelson Costa, University of Minho, Guimaraes, Portugal, Rui B. Melo, University of Lisbon, Lisbon, Portugal, A. Sergio Miguel and Gonçalo Perestrello, SMEG Consultores, Porto, Portugal

This book will help to get acquainted with the state-of-the-art within the field Occupational Health & Safety, as well as with some practical tools and approaches that are currently used by OHS professionals in a global context.

CRC Press
Market: Occupational Safety and Health
February 2015: 6-1/8 x 9-1/4: 616pp
Hb: 978-1-498-71511-9: $199.95
eBook: 978-1-498-71512-6
* For full contents and more information, visit: www.crcpress.com/9781138027657

Patient Handling in the Healthcare Sector

A Guide for Risk Management with MAPO Methodology (Movement and Assistance of Hospital Patients)

Olga Menoni, Foundation IRCCS Cà Granda Policlinico Hospital, Milan, Italy, Natale Battevi, Foundation IRCCS Cà Granda Policlinico Hospital, Milan, Italy and Silvia Cairoli, Foundation IRCCS Cà Granda Policlinico Hospital, Milan, Italy

This book is a practical guide to the analysis of patient handling risk using the MAPO method in different areas of healthcare. It includes special chapters devoted to procedures to define specific preventive plans and procedures. It shows how to perform a task of patient handling and provides all of the needed information (how to evaluate the patient, such as what type of lifting aides are appropriate, how to use them, etc.) to reduce biomechanical overload risk.

CRC Press
Market: Ergonomics & Human Factors
September 2014: 6-1/8 x 9-1/4: 223pp
Hb: 978-1-482-21718-6: $79.95
eBook: 978-1-482-21719-3
* For full contents and more information, visit: www.crcpress.com/9781482217186

Synergic Influence of Gaseous, Particulate, and Biological Pollutants on Human Health

Edited by Jozef S. Pastuszka, Silesian University of Technology, Gliwice, Poland

This book is a unique merger of two divergent parts. The first part is a presentation of the existing knowledge on the characteristics of basic air pollutants and their documented impact on human health. The focus is on the main gaseous, airborne particles (including fiber particles) and biological pollutants. The second part is a literature review conducted by the authors who are actively engaged in studying the described pollutants. The second part contains a study of methods used for the evaluation and prognosis of health effects to exposure to particular pollutants.

CRC Press
Market: Medicine
November 2015: 6-1/8 x 9-1/4: 314pp
Hb: 978-1-498-71511-9: $129.95
eBook: 978-1-498-71512-6
* For full contents and more information, visit: www.crcpress.com/9781498715119

The Health Effects of Asbestos

An Evidence-based Approach

Dorsett D. Smith

The health-related effects of asbestos have long been mired in controversy, with industry and plaintiff attorneys playing a significant role. This comprehensive book provides a balanced and extensive evidence-based critical analysis of the literature concerning asbestos-related diseases, from a scientific and historical perspective. The book presents a carefully referenced review of the medical literature on the health effects of asbestos, and reflects the extensive experience of the author in evaluating patients with asbestos-related disorders.

CRC Press
Market: Medicine
November 2015: 6-1/8 x 9-1/4: 381pp
Hb: 978-1-498-72840-9: $139.95
eBook: 978-1-498-72840-9
* For full contents and more information, visit: www.crcpress.com/9781498728386

WASTES 2015 – Solutions, Treatments and Opportunities

Selected papers from the 3rd Edition of the International Conference on Wastes: Solutions, Treatments and Opportunities, Viana Do Castelo, Portugal, 14-16 September 2015

Edited by Candida Vilarinho, University of Minho, Portugal, Fernando Castro, University of Minho, Portugal and Mário Russo, Polytechnic Institute of Viana do Castelo, Portugal

This volume presents a selection of papers from the WASTES 2015 conference, a platform for scientists and industries from the waste management and recycling sectors from around the world, who shared experiences and knowledge at the meeting. Covering discussions regarding the balance between economic, environmental and social outcomes, the development of innovative techniques, tools and strategies on how wastes can be transformed into good ideas. Improving both the overall environmental performance and the understanding of the industry impact on the environment, as well as the options analysis for its improvement were key objectives of this conference.

CRC Press
Market: Environmental Engineering
September 2015: 378pp
Hb: 978-1-138-02982-1: $169.95
eBook: 978-1-498-64900-9
* For full contents and more information, visit: www.crcpress.com/9781138028821

Handbook of Chemical Regulations

Benchmarking, Implementation, and Engineering Concepts

Edited by Martha J. Boss, AECOM, Omaha, Nebraska, USA, Brad Boss, AECOM, Omaha, Nebraska, USA, Cybil Boss, AECOM, Omaha, Nebraska, USA and Dennis W. Day, AECOM, Omaha, Nebraska, USA

This book is the first of its kind to provide a compendium of environmental, health and safety, and engineering concepts for global harmonization, based on a framework of regulatory standards. Understanding the scientific concepts that are inherent in chemical usage and their interplay globally is essential for chemical manufacturers, processors, distributors, importers, exporters, and other users. An easy to read guide to navigating global harmonization, this book offers reasons behind major requirements for chemical production, distribution, importation, and usage.

CRC Press
Market: Occupational Health & Safety
August 2015: 6-1/8 x 9-1/4: 616pp
Hb: 978-1-498-71779-3: $139.95
eBook: 978-1-498-71780-9
* For full contents and more information, visit: www.crcpress.com/9781498717793

Browse and order online: www.crcpress.com
Occupational Safety and Hygiene II

Edited by Pedro Arezes, School of Engineering, University of Minho, Guimaraes, Portugal, João S. Baptista, University of Porto, Porto, Portugal, Monica P. Barroso, University of Minho, Guimaraes, Portugal, Paula Carneiro, University of Minho, Guimaraes, Portugal, Patricio Cordeiro, University of Minho, Guimaraes, Portugal, Nelson Costa, University of Minho, Guimaraes, Portugal, Rui B. Melo, University of Lisbon, Lisbon, Portugal, Sergio A. Miguel and Goncalo Perestrelo, SMGP Consultores, Porto, Portugal

A very useful collection of papers to get acquainted with the state-of-the-art of research in issues concerning occupational safety and hygiene, as well as with some practical tools and approaches that are currently used by OHS professionals in a global context.

CRC Press
Market: Occupational Safety and Health
January 2014: 818pp
Hb: 978-1-138-00144-2: $199.95
ebook: 978-1-315-77352-0
* For full contents and more information, visit: www.crcpress.com/9781138001442

Practical Leadership Skills for Safety Professionals and Project Engineers

Gary L. Winn, West Virginia University, Morgantown, USA

This book discusses the science of organizational behavior and the author cites current social and psychological work on leadership and professional development in an effort to “jump start” the careers of engineers and future safety professionals. The goal in writing this book is to quickly acclimate undergraduates on a career path toward engineering and safety management because they are missing opportunities to work, read, travel, and prepare for the profession. This book includes leadership and professional development techniques so that graduates can go out into the market with the leadership and communication skills needed.

CRC Press
Market: Occupational Health & Safety
March 2016: 6-1/8 x 9-1/4: 350pp
Hb: 978-1-498-75822-2: $89.95
ebook: 978-1-498-75824-6
* For full contents and more information, visit: www.crcpress.com/9781498758222
2nd Edition - NEW EDITION

Creative Safety Solutions, Second Edition

Thomas D Schneid, Eastern Kentucky University, Richmond, USA

* Series: Occupational Safety & Health Guide Series

In today’s rapidly changing workplace, safety and loss prevention professionals cannot always “go by the book” for the answers to new and unique problems and issues. When there is no tried-and-true solution to a problem, safety and loss prevention professionals must think outside of the box of conventional solutions and develop new and creative solutions. This book sets out to stimulate creative thinking by identifying some of the new programs, new ideas, and new solutions being tried by other professionals in the field. The author hopes that by thinking outside of the box, it will help create new ways to improve the workplace.

CRC Press
Market: Occupational Health & Safety
September 2015: 6-1/8 x 9-1/4: 216pp
Hb: 978-1-482-21654-7: $89.95
ebook: 978-1-482-21655-4
* For full contents and more information, visit: www.crcpress.com/9781482216547

Electrical Safety

Systems, Sustainability, and Stewardship

Edited by Martha J. Boss, URS Corporation, Omaha, Nebraska, USA and Gayle Nicoll, URS Corporation, Greentree, Pennsylvania, USA

While many safety professionals attempt to use electrical safety regulations, they may not understand the basis for the regulations and thus may not implement the regulations correctly. This is not surprising due to the complex wording of most regulations. This book presents a detailed description of the components of an electrical system. It explains the basis for the electrical safety regulations and identifies key safety items. It also covers how the electrical concepts apply to all major components of an electrical system within a facility.

CRC Press
Market: Occupational Health & Safety
October 2014: 6-1/8 x 9-1/4: 456pp
Hb: 978-1-482-23017-6: $99.95
ebook: 978-1-482-23018-3
* For full contents and more information, visit: www.crcpress.com/9781482230178

Guide to Environment Safety and Health Management

Developing, Implementing, and Maintaining a Continuous Improvement Program

Frances Alston and Emily J. Millikin

* Series: Industrial Innovation Series

Development and execution of a successful ES&H program in today’s profit-driven business climate is challenging and complex. The techniques outlined in this book provide guidance and aid in understanding the challenges that must be addressed by ES&H management and professionals. This book covers the primary areas of ES&H and key elements that should be considered in developing, managing, and implementing an effective, compliant and cost effective program. It fulfills the need that exists in the workplace for guidance from a practical experience view point.

CRC Press
Market: Occupational Health & Safety
July 2015: 6-1/8 x 9-1/4: 256pp
Hb: 978-1-482-25940-7: $99.95
ebook: 978-1-482-25941-4
* For full contents and more information, visit: www.crcpress.com/9781482259407

3rd Edition


Daniel E. Della-Giustina, West Virginia University, Morgantown, USA

A must-have guide for current and future safety professionals, the third edition of this practical handbook presents the key elements of an effective fire safety management program; explains the types and functions of fire control equipment; discusses the identification and control of hazardous materials; identifies safety organizations and available resources for fire service programs; describes commonly installed fire detection systems and their maintenance and inspection; and includes learning objectives, case studies, updated codes and standards, and information about emergency response and school fire safety planning.

CRC Press
Market: Occupational Health & Safety
February 2014: 6-1/8 x 9-1/4: 279pp
Hb: 978-1-482-22122-0: $112.95
ebook: 978-1-482-22123-7
* For full contents and more information, visit: www.crcpress.com/9781482221220

3rd Edition

Healthcare Hazard Control and Safety Management, Third Edition

James T. Tweedy, International Board for Certification of Safety Managers, Helena, Alabama, USA

The third edition of this bestselling reference supplies a comprehensive overview of hazard control, safety management, compliance, standards, and accreditation in the healthcare industry. Examining hazard control and safety management as proactive functions of the organization, this edition includes new information on leadership, performance improvement, risk management, organizational culture, behavioral safety, root cause analysis, and recent OSHA and Joint Commission regulatory changes. Outlining a proactive hazard control approach based on leadership involvement, the book includes checklists and sample management plans that readers can immediately put to use.

CRC Press
Market: Healthcare
March 2014: 7 x 10: 606pp
Hb: 978-1-482-20655-5: $139.95
ebook: 978-1-482-20656-2
* For full contents and more information, visit: www.crcpress.com/9781482206555

Browse and order online: www.crcpress.com
Human Error in Process Plant Design and Operations
A Practitioner’s Guide

J. Robert Taylor, Consultant, Alleroed, Denmark

The book basically shows you how to analyze operator, maintenance, and management error for oil, gas, and chemical plants. The book describes practical approaches to human error analysis in process plant operations, including estimated error and accident frequencies. Based on the well-known SRK model of human error it represents a practical collection of examples and statistics from over 30 years of study, with many examples of the practical application of methods.

CRC Press
Market: Occupational Health & Safety
December 2015: 6-1/8 x 9-1/4: 300pp
Hb: 978-1-466-57964-4: $130.00
Pb: 978-1-482-25898-1:
ebook: 978-1-482-25886-6
* For full contents and more information, visit: www.crcpress.com/9781498738859

Introduction to Risk and Failures
Tools and Methodologies

D. H. Stamatis, President of Contemporary Consultants, MI, USA

Risk is everywhere, in everything we do. Realizing this fact, we all must try to understand this “risk” and if possible to minimize it. This book expands the conversation beyond failure mode and effects analysis (FMEA) techniques. While FMEA is indeed a powerful tool to forecast failures for both design and processes, it is missing methods for considering safety issues, catastrophic events, and their consequences. This new book focuses on risk and HAZOP as they relate to major catastrophic events, safety, and risk.

CRC Press
Market: Occupational Health & Safety
May 2014: 6-1/8 x 9-1/4: 274pp
Hb: 978-1-466-58137-1: $129.95
Pb: 978-1-498-73885-9:
ebook: 978-1-482-23480-0
* For full contents and more information, visit: www.crcpress.com/9781482234794

Human Safety and Risk Management
A Psychological Perspective, Third Edition

A. Ian Glendon, School of Applied Psychology, Griffith University, Southport, Queensland, Australia and Sharon Clarke, UMIST, Manchester, UK

The third edition of Human Safety and Risk Management incorporates a decade of new research and development to provide readers with a comprehensive and contemporary guide to the psychology of risk and workplace safety. It focuses on the concept of risk and recent developments in understanding workplace safety from a psychological perspective. This new edition provides readers with state-of-the-art theory reviews, research findings and practical applications to enhance their understanding of human psychology in the context of risk and safety.

CRC Press
Market: Occupational Health & Safety
October 2015: 7 x 10: 474pp
Hb: 978-1-466-58138-8: $124.95
Pb: 978-1-498-73886-6:
ebook: 978-1-482-23481-7
* For full contents and more information, visit: www.crcpress.com/9781482220544

Lean Safety Gemba Walks
A Methodology for Workforce Engagement and Culture Change

Robert B. Hafey, RBH Consulting LLC, Homer Glen, Illinois, USA

This book is a follow-up to the author’s bestselling book, Lean Safety, published in 2010. It is a natural progression from the philosophical overview provided by Lean Safety to the reality of the application of those principles in facilities around the world. This book presents a collection of Lean Safety Gemba Walk case studies that are based on the author’s experiences over the last four years. As the stories unfold, readers are transported on a journey of discovery through the Gemba and begin to see safety differently just as those who physically participated.

Productivity Press
November 2014: 7 x 10: 173pp
Hb: 978-1-422-53989-1: $139.95
Pb: 978-1-422-53989-1: $139.95
ebook: 978-1-422-53989-1
* For full contents and more information, visit: www.crcpress.com/9781482289891
Medical Device Use Error

Root Cause Analysis

Michael Wiklund, UL-Wiklund, Concord, Massachusetts, USA, Andrea Dwyer, UL-Wiklund, Concord, Massachusetts, USA and Erin Davis, UL-Wiklund, Concord, Massachusetts, USA

This book offers practical guidance on how to methodically discover and explain the root cause of a use error—a mistake—that occurs when someone uses a medical device. From home-use products to devices used in clinical environments, the text presents case studies that show how root cause analysis leads from understanding a use error’s causes and consequences to the development of design-based solutions. Using clear illustrations and simple narrative explanations, the text covers the fundamentals, language, and regulatory expectations of root cause analysis.

CRC Press
Market: Biomedical Science
February 2016: 6-1/8 x 9-1/4: 245pp
Hb: 978-1-498-70579-0 $89.95
ebook: 978-1-498-70580-6
* For full contents and more information, visit: www.crcpress.com/9781498705790

Physical Security and Safety

A Field Guide for the Practitioner

Edited by Truett A. Ricks, Eastern Kentucky University, Richmond, USA (retired), Bobby E. Hicks, Midway College, Kentucky, USA and Jeffrey Dingle, PCI Gaming, Atmore, Alabama, USA

Series: Occupational Safety & Health Guide Series

This book addresses the need for security, how to identify the threat against and level of security needed to protect assets, and security theories and concepts used to provide an acceptable level of security. Security practices are intermingled with safety issues. OSHA and Fire Regulations complement an overall loss prevention program. This text introduces the security practitioner to basic tenets of safety and safety management. Safety practitioners will find this book of value in understanding physical security theories, concerns, and practices.

CRC Press
Market: Occupational Health and Safety
October 2014: 6-1/8 x 9-1/4: 179pp
Pb: 978-1-482-22702-4 $89.95
ebook: 978-1-482-22703-1
* For full contents and more information, visit: www.crcpress.com/9781482227024

Mistake Proofing for Lean Healthcare

Edited by Samuel Carlson, MD and Maura May

Series: Lean Tools for Healthcare Series

Mistake proofing, or poka-yoke, is an improvement methodology in which a device or method is used to prevent defects or errors in processes. Mistake Proofing for Lean Healthcare introduces the main concepts and benefits of mistake proofing and highlights common reasons that errors and defects occur. It also explains how to catch errors before they become defects so readers can ensure quality before a process is performed. The book includes numerous real-life examples.

Productivity Press
Market: Biomedical Science
September 2015: 7 x 10: 111pp
Pb: 978-1-4398-3743-6 $28.95
ebook: 978-1-482-28213-9
* For full contents and more information, visit: www.crcpress.com/9781439837436

Rock Engineering Risk

John A. Hudson, Imperial College, London, UK and Xia-Ting Feng, Chinese Academy of Sciences, Institute of Rock and Soil Mechanics, Wuhan, China

Series: ISRM Book Series

This book provides a new, valuable approach to the consideration of risk in underground engineering projects constructed within rock masses. There are Chapters on uncertainty and risk, rock engineering systems, rock fractures and rock stress, the design of a repository for radioactive waste, plus two major case examples relating to the headrace tunnels and caverns for a hydroelectric project. The book is particularly timely given the current increasing emphasis on geo-engineering safety, accountability and sustainability. The book will benefit all who are concerned with rock engineering projects in civil, mining, geological and construction engineering worldwide.

CRC Press
Market: Rock Engineering
May 2015: 572pp
Hb: 978-1-138-02701-5: $119.95
ebook: 978-1-315-73857-4
* For full contents and more information, visit: www.crcpress.com/9781138027015

3rd Edition · TEXTBOOK · NEW EDITION

Occupational Health and Safety Management
A Practical Approach, Third Edition

Charles D. Reese, University of Connecticut, Storrs, USA

A complete practical guide for the development and management of occupational safety and health programs in any industry setting, this book includes examples and tools to facilitate development and implementation of a safety and health management approach. This is how to book not just an information providing text. It shows readers how to write a program, how to identify hazards, how to involve workers and attain their cooperation. It expounds on the need to place a particular emphasis on better and more effective communication regarding safety and health.

CRC Press
Market: Occupational Health and Safety
July 2015: 7 x 10: 608pp
Hb: 978-1-482-23133-5: $129.95
ebook: 978-1-482-23134-2
* For full contents and more information, visit: www.crcpress.com/9781482231335

Safety and Reliability in the Oil and Gas Industry
A Practical Approach

B.S. Dhillon, University of Ottawa, Department of Mechanical Engineering, Ontario, Canada

Each year billions of dollars are spent in the area of oil and gas to design, construct/manufacture, operate, and maintain various types of equipment/systems around the globe. Safety and reliability has become an important issue due to various types of accidents and problems over the years. There has been a large number of journal and conference proceedings articles on safety and reliability in the oil and gas industry. However, there is no book that covers both these topics within its framework. The main goal of this book is to combine these two topics into a single volume and to eliminate the need to consult many different and diverse sources in obtaining desired information.

CRC Press
Market: Occupational Health & Safety
April 2016: 6-1/8 x 9-1/4: 224pp
Hb: 978-1-498-74656-4: $139.95
ebook: 978-1-498-74657-1
* For full contents and more information, visit: www.crcpress.com/9781498746564

Safety and Reliability in the Oil and Gas Industry
A Practical Approach

B.S. Dhillon, University of Ottawa, Department of Mechanical Engineering, Ontario, Canada

Each year billions of dollars are spent in the area of oil and gas to design, construct/manufacture, operate, and maintain various types of equipment/systems around the globe. Safety and reliability has become an important issue due to various types of accidents and problems over the years. There has been a large number of journal and conference proceedings articles on safety and reliability in the oil and gas industry. However, there is no book that covers both these topics within its framework. The main goal of this book is to combine these two topics into a single volume and to eliminate the need to consult many different and diverse sources in obtaining desired information.

CRC Press
Market: Occupational Health & Safety
April 2016: 6-1/8 x 9-1/4: 224pp
Hb: 978-1-498-74656-4: $139.95
ebook: 978-1-498-74657-1
* For full contents and more information, visit: www.crcpress.com/9781498746564

Visit our website for more information:
www.crcpress.com
Safety and Reliability: Methodology and Applications
Edited by Tomasz Nowakowski, Institute of Civil Engineering, Wrocław University of Technology, Wrocław, Poland, Marek Mlynarczyk, Institute of Civil Engineering, Wrocław University of Technology, Wrocław, Poland, Anna Jodejkow-PIetruzzuk, Institute of Civil Engineering, Wrocław University of Technology, Wrocław, Poland, Sylwia Werbińska-Wojciechowska, Institute of Civil Engineering, Wrocław University of Technology, Wrocław, Poland

Discussing theories and methods and their applications in the areas of risk, safety and reliability, this abstract book (408 pages) + full paper CD-ROM (2496 pages) will be of interest to researchers and practitioners, academics and engineers working in academic, industrial and governmental sectors.

CRC Press
Market: Engineering
September 2014: 408pp
Hb: 978-1-482-20386-6 Pack - Book and CD: 978-1-138-02681-0: $440.00
* For full contents and more information, visit: www.crcpress.com/9781138026810

Safety Management in a Competitive Business Environment
Juraj Sinay
Series: Ergonomics Design & Mgmt. Theory & Applications

The book provides information necessary for systematic management of traditional as well as emerging risks in the man-machine-environment system, especially in industrial technologies. It is intended for managerial staff of various levels of management as well as product distribution workers, and for education of professionals in the fields of occupational safety and health (OSH), safety of technological systems and partially also civil security.

CRC Press
Market: Occupational Health & Safety
March 2014: 6-1/8 x 9-1/4: 204pp
Hb: 978-1-482-20385-1 $124.95
ebook: 978-1-482-20386-8
* For full contents and more information, visit: www.crcpress.com/9781482203851

Workplace Safety and Health
Assessing Current Practices and Promoting Change in the Profession

Thomas D. Schneid, Eastern Kentucky University, Richmond, USA
Series: Occupational Safety & Health Guide Series

The safety profession often clings to the basic believes and practices which evolved during the early years after the announcement of the Occupational Safety and Health Act in 1970. This book reviews and challenges many of the commonly accepted practices as well as misconceptions about safety in the workplace and provide new and innovative options for safety professionals to consider. It examines many of the basic assumptions in the safety profession and challenge the reader to assess and evaluation their activities in search of a better and more effective way of achieving the results necessary to be competitive in today’s workplace.

CRC Press
Market: Occupational Health and Safety
May 2014: 6-1/8 x 9-1/4: 272pp
Pb: 978-1-439-87410-3: $79.95
ebook: 978-1-439-87411-0
* For full contents and more information, visit: www.crcpress.com/9781439874103

Safety of Marine Transport
Marine Navigation and Safety of Sea Transportation

Edited by Adam Weintrit, Gdynia Maritime University, Poland and Tomasz Neumann, Gdynia Maritime University, Gdynia, Poland

Providing high-quality, scholarly research, addressing development, application and implications, in the field of maritime education, maritime safety management, maritime policy sciences, maritime industries, marine environment and energy technology. Contents include electronics, astronomy, mathematics, cartography, command and control, psychology, operational research, risk analysis, theoretical physics, operation in hostile environments, instrumentation, ergonomics, financial planning and law. The book provides a forum for transportation researchers, engineers, navigators, ergonomists, and policy-makers with an interest in maritime researches.

CRC Press
Market: Maritime Engineering
June 2015: 396pp
Hb: 978-1-138-02859-3: $99.95
ebook: 978-1-315-67261-8
* For full contents and more information, visit: www.crcpress.com/9781138028593

**Complimentary Exam Copy**
**e-Inspection**
**New in Paperback**
**Companion Website**

**SAFETY** 87
Computer Science in Industrial Application

Edited by Yang Ling, Wuhan Institute of Technology, China

CRC Press
Market: Industrial Engineering
July 2015: 512pp
Hb: 978-1-138-02662-9: $269.00
Pb: 978-1-498-70577-6: $49.95
* For full contents and more information, visit: www.crcpress.com/9781138028135

Control, Mechatronics and Automation Technology
Proceedings of the International Conference on Control, Mechatronics and Automation Technology (ICCMAT 2014), July 24-25, 2014, Beijing, China

Edited by Dawei Zheng, International Research Association of Information and Computer Science, Beijing, China
Series: IRAICS Proceedings
This proceedings volume contains selected papers presented at the 2014 International Conference on Control, Mechatronics and Automation Technology (ICCMAT 2014), held July 24-25, 2014 in Beijing, China. The objective of ICCMAT 2014 is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Control, Mechatronics and Automation Technology.

CRC Press
Market: Mechanical Engineering
December 2015: 512pp
Hb: 978-1-138-02662-9: $269.95
Pb: 978-1-498-72106-6: $49.95
* For full contents and more information, visit: www.crcpress.com/9781138026629

Engineering Writing by Design
Creating Formal Documents of Lasting Value

Edward J. Rothwell, Department of Electrical and Computer Engineering, Michigan State University, East Lansing, USA
Michael J. Cloud, Department of Electrical and Computer Engineering, Michigan State University, East Lansing, USA

This book presents a novel approach to technical writing, positioning formal writing tasks as engineering design problems. It describes how to avoid logical fallacies and use physical reasoning to catch mistakes in claims, covers the essentials of technical grammar and style as well as the elements of mathematical exposition, and emphasizes the centrality of the target audience. Complete with illustrative examples, chapter summaries and exercises, quick-reference tables, and recommendations for further reading, the text demonstrates how effective writing can be achieved through engineering-based thinking.

CRC Press
Market: Engineering - General
May 2014: 6-1/8 x 9-1/4: 199pp
Pb: 978-1-482-23432-9: $49.95
* For full contents and more information, visit: www.crcpress.com/9781482234312

Free Agent
The Independent Professional’s Roadmap to Self-Employment Success

Edward J. Rothwell, Department of Electrical and Computer Engineering, Michigan State University, East Lansing, USA
Michael J. Cloud, Department of Electrical and Computer Engineering, Michigan State University, East Lansing, USA

This book presents a novel approach to technical writing, positioning formal writing tasks as engineering design problems. It describes how to avoid logical fallacies and use physical reasoning to catch mistakes in claims, covers the essentials of technical grammar and style as well as the elements of mathematical exposition, and emphasizes the centrality of the target audience. Complete with illustrative examples, chapter summaries and exercises, quick-reference tables, and recommendations for further reading, the text demonstrates how effective writing can be achieved through engineering-based thinking.

CRC Press
Market: Engineering - General
May 2014: 6-1/8 x 9-1/4: 199pp
Pb: 978-1-482-23432-9: $49.95
* For full contents and more information, visit: www.crcpress.com/9781482234312

**For full contents and more information, visit: www.crcpress.com**
INDEX BY TITLE

Safety Differently ................................................................. 7
Safety Management in a Competitive Business Environment .............................................. 87
Safety of Marine Transport ....................................................... 87
Science of Compression Bandages ............................................................. 79
Search and Foraging ............................................................. 43
Selecting and Validating Successful Innovation Projects for the Asian Marketplace ................. 29
Self-Made Problem Leader, The ........................................................... 54
Self-Regulation in Activity Theory .......................................................... 10
Sensory Evaluation Techniques, Fifth Edition ........................................................ 82
Situational Project Management .......................................................... 54
Six Sigma Approach to Sustainability, A ...................................................... 62
Six Sigma Case Studies with Minitab®, 4th Edition .................................................. 47
Software and Systems Architecture in Action ........................................................ 73
Software Patterns, Knowledge Maps, and Domain Analysis .............................................. 73
Solutions to Problems in Textile and Garment Industry .................................................. 79
Solving Complex Industrial Problems without Statistics .................................................... 63
Sports Technology and Engineering .......................................................... 7
Stabilization Theory for Linear Boundary Control Systems .................................................. 73
Stable Analysis Patterns for Software and Systems ...................................................... 73
Stable Design Patterns ............................................................... 73
Stakeholder Engagement ............................................................. 54
Standardized Work Field Guide, The ................................................................... 63
Standardized Work with TWI .............................................................. 29
Statistics for Engineering and the Sciences, Sixth Edition ................................................ 73
Statistics for Engineering and the Sciences, Sixth Edition Student Solutions Manual ........... 74
Statistics for Textile Engineers .......................................................... 79
Strategic Project Leader, The ............................................................. 54
Strategic Project Management .............................................................. 29
Strategic Winery: Tourism and Management .............................................................. 15
Strategy + Teamwork = Great Products ........................................................... 34
Supply Chain Management and Logistics .......................................................... 67
Supply-Chain-Optimization through Segmentation and Analytics ..................................... 68
Supply-Chain Risk Management ............................................................... 68
Sustainability, Social Responsibility, and Innovations in the Hospitality Industry ............... 15
Sustainable Bridge Structures .............................................................. 28
Synergic Influence of Gaseous, Particulate, and Biological Pollutants on Human Health ....... 82
Synthesis, Design, and Resource Optimization in Batch Chemical Plants ....................... 44
System Safety Engineering and Risk Assessment ...................................................... 74
Systemic Improvement Planning for Results-Based Positive Operational Changes .......... 34
Systems Design and Engineering .............................................................. 74
Systems Engineering ................................................................. 74
Systems Engineering and Analysis of Electro-Optical and Infrared Systems ....................... 74
Systems Engineering Simplified ............................................................. 74
Systems Perspective on Financial Systems, A ...................................................... 75

Tactical Guide to Six Sigma Implementation, The .......................................................... 29
Techniques and Sample Outputs that Drive Business Excellence ..................................... 29
Technological Challenges and Management .............................................................. 47
Testing and Measurement: Techniques and Applications ............................................. 43
Textiles and Human Thermophysiological Comfort in the Indoor Environment ............... 80
Theory and Practice in Hospitality and Tourism Research .......................................... 16
Total Productive Maintenance .............................................................. 63
Total Project Control ................................................................. 54
TPM Playbook, The ................................................................. 34
Transforming Business with Program Management ..................................................... 54
Transport Planning and Traffic Safety .............................................................. 63
Trends in Fish Processing Technologies .............................................................. 63
TWI Workbook, The ................................................................... 30

Understanding Statistics and Statistical Myths ............................................................... 34
UpTime ..................................................................................... 34
Usability Testing of Medical Devices, Second Edition ..................................................... 11
Usability Testing of Video Games ........................................................................... 10

Value Analysis and Engineering Reengineered .............................................................. 63
Value Stream Mapping for the Process Industries ........................................................... 39
Variability in Human Performance ........................................................................... 7
Vehicle Scheduling in Port Automation .............................................................. 43
Visualization Analysis and Design ........................................................................... 10

Warranty Claims Reduction .............................................................. 64
WASTES 2015 - Solutions, Treatments and Opportunities ............................................ 82
Workplace Safety and Health ............................................................................. 87
Woven Fabric Structure Design and Product Planning .................................................... 80
Written English ....................................................................................... 30

You’re the Boss ................................................................................... 30

Browse and order online: www.crcpress.com
The following subject catalogs are also available from CRC Press. Visit www.crcpress.com/catalogs or contact your local sales representative for copies.

www.crcpress.com/catalogs

- Agriculture & Life Sciences
- Biomedical Sciences
- Business & Management
- Chemistry & Chemical Engineering
- Civil & Mechanical Engineering
- Computer Science, Information Technology, & Game Development
- Electrical Engineering
- Environmental Science & Engineering
- Ergonomics & Human Factors, Industrial Engineering & Manufacturing
- Food Science & Nutrition
- Forensic Science, Law Enforcement, & Homeland Security
- Mathematics & Statistics
- Medicine & Veterinary Medicine
- Physics & Materials Science

Find More at

www.crcpress.com

- Authoritative STM references that cover the latest developments and emerging trends
- Textbooks with ancillary materials that make teaching easier
- Digital content delivery that provides anywhere, anytime access in multiple formats

Go to www.crcpress.com for detailed information on every book.

With More Than a Century of Publishing Excellence, as Science Evolves, So Do We

Go to www.crcpress.com to find out more.