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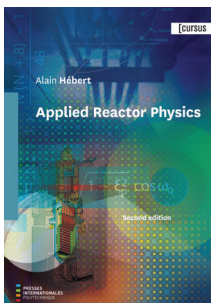
CHEMISTRY, PHYSICS, MATERIALS

APPLIED REACTOR PHYSICS, 2nd EDITION

Author(s) > Alain Hébert

ISBN > 978-2-553-01698-1

7/2009 > 424 pages > PDF



In *Applied Reactor Physics*, reactor physics is approached from the fundamental level. Legacy numerical techniques are introduced with sufficient details to permit their implementation in Matlab. More advanced and/or proprietary techniques may be available in a production environment, but these can be obtained as evolutions of the fundamental approaches presented in the book. A characteristic of *Applied Reactor Physics* is to emphasize the algorithmic nature of numerical solution techniques used in reactor physics. Many numerical solution

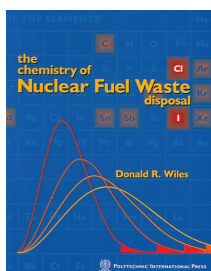
approaches described in the book are accompanied by Matlab scripts and readers are encouraged to write short Matlab scripts of their own in order to solve the End-of-Chapter exercises.

CHEMISTRY OF NUCLEAR FUEL WASTE DISPOSAL (THE)

Author(s) > Donald R. Wiles

ISBN > 978-2-553-01025-5

7/2002 > 182 pages



In this book, Dr. Wiles expertly describes the nature of radioactivity and nuclear power. The author discusses, in detail, the management of radioactive waste using the multi-barrier system as well as taking a rather unusual approach to risk assessment. This book is a must for anyone interested in nuclear waste disposal including the processes involved, the areas of uncertainty and the bases for statements about risk to human and other life.

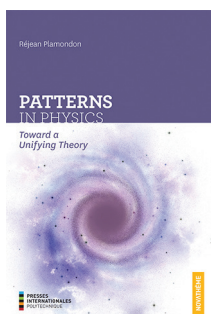
PATTERNS IN PHYSICS

Toward a Unifying Theory

Author(s) > Réjean Plamondon

ISBN > 978-2-553-01633-2

6/2012 > 172 pages



Why are there four basic forces of Nature and where do they come from? Why does any massive body in the Universe experience an intrinsic rotation? What is the link between the speed of light and the gravitational, Boltzmann and Planck constants? What are the relationships between electron mass, the Avogadro number, vacuum permittivity, and the masses of the Sun and the Earth? Are dark matter and dark energy necessary to explain the observable Universe? Can the lepton family be reduced to two members? These are just a few of the many questions that this scientific work addresses and to which it provides potential answers.

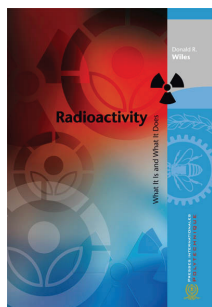
This book aims to lay out the groundwork from which a theory for bridging the gap between quantum mechanics and general relativity could be built.

RADIOACTIVITY

What It Is and What It Does

Author(s) > Donald R. Wiles**ISBN > 978-2-553-01430-7****6/2009 > 172 pages > PDF**

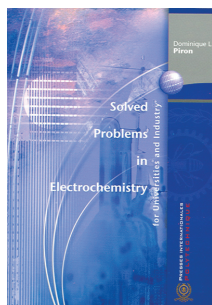
A number of good textbooks on radiochemistry have been published for experts and advanced students, but very few are written for the general public and the nonspecialist. This book takes no stand on the political controversy surrounding nuclear power; the facts are presented with no sermon attached, and anecdotes from the author's vast experience in the field provide a more personal insight into this complex subject. He gives detailed descriptions of several serious nuclear accidents, including that at Chernobyl. In the final chapter, the author asks the question, «Are we completely safe?» The answer, intriguingly, is «I hope not.» Read on to see why.

**SOLVED PROBLEMS IN ELECTROCHEMISTRY**

For Universities and Industry

Author(s) > Dominique L. Piron**ISBN > 978-2-553-01136-8****1/2004 > 220 pages**

The objective of this book is to develop the reader's ability to solve problems in electrochemistry. *Solved Problems in Electrochemistry* offers an interesting bridge between science and useful applications. Each chapter consists of three sections: (1) a clear and simple presentation of useful concepts, (2) the presentation and solution of some twenty problems, and (3) a set of unsolved problems proposed as exercises. The first five chapters use basic concepts in practical situations, and the last three chapters present more complex problems in electrolysis, corrosion rates and prevention, and electrochemical cells and batteries.



ELECTRICITY, ELECTRONICS, ELECTROTECHNICS

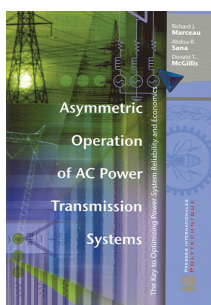
ASYMMETRIC OPERATION OF AC POWER TRANSMISSION SYSTEMS

The Key to Optimizing Power System Reliability
and Economics

**Author(s) > Richard J. Marceau, Abdou-R. Sana,
Donald T. McGillis**

ISBN > 978-2-553-01403-1

1/2006 > 200 pages > PDF



As will be seen in this book, asymmetric operation of three-phase transmission corridors brings new degrees of freedom to the planning and operation of point-to-point transmission, inter-area interconnections, single and multiple-line corridors, and networks feeding large metropolitan areas, either for new build or retrofit. *Asymmetric Operation of AC Power Transmission Systems* is a comprehensive review of all aspects of asymmetric operation ranging from system implementation to costs, reliability and economics.

ENVIRONMENT, SUSTAINABLE DEVELOPMENT, SOCIAL RESPONSIBILITY

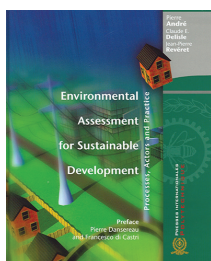
ENVIRONMENTAL ASSESSMENT FOR SUSTAINABLE DEVELOPMENT

Processes, Actors and Practice

**Author(s) > Pierre André, Claude E. Delisle,
Jean-Pierre Revéret**

ISBN > 978-2-553-01138-2

4/2004 > 522 pages



This book aims to reach three objectives. First, it introduces environmental assessment (EA) to people from different disciplines, and therefore it opens up the perspective of new disciplinary horizons. Second, the authors discuss EA as a socio-political process rather than emphasizing methodologies. Third, this book draws mainly on the experience in Francophone countries which is still poorly disseminated. This book targets professors and students interested in environmental assessment, and particularly in environmental impact assessment, as well as all actors involved in the environmental scene.

CIVIL ENGINEERING, PREVENTION AND EMERGENCY MEASURES

DRINKING-WATER DISTRIBUTION, SEWAGE, AND RAINFALL COLLECTION, 3rd EDITION

Author(s) > François G. Brière

ISBN > 978-2-553-01672-1

11/2014 > 544 pages > PDF

This book is entirely devoted to practical hydraulic problems as they occur in modern cities. It looks at the design and application of equipment for drinking water distribution, runoff and sewage collection. Fundamental hydraulic principles are presented clearly and their application is illustrated in examples representative of real-world situations. Exercises and problems enable students to test their knowledge in each chapter.

This book is aimed at professors and students of civil engineering and at practising engineers and technicians in consulting firms and municipalities.



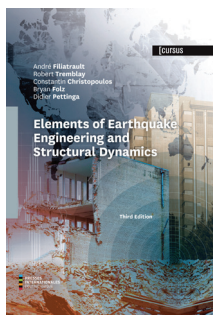
ELEMENTS OF EARTHQUAKE ENGINEERING, AND STRUCTURAL DYNAMICS 3rd EDITION

Author(s) > André Filiatrault, Robert Tremblay,
Constantin Christopoulos, Bryan Folz, Didier Pettinga

ISBN > 978-2-553-01649-3

4/2013 > 874 pages

This book presents the key elements of earthquake engineering and structural dynamics at an introductory level and gives readers the basic knowledge they need to apply the seismic provisions contained in Canadian and American building codes. It also discusses the basics of other relevant topics such as seismology, seismic risk analysis and geotechnical engineering, to help structural engineers work efficiently with other specialists on earthquake-resistant construction projects. Chapters end with a set of problems giving readers an insight into practical aspects of the subject.



REDUCING VULNERABILITY OF CRITICAL INFRASTRUCTURES

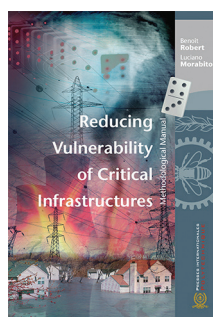
Methodological Manual

Author(s) > Luciano Morabito, Benoît Robert

ISBN > 978-2-553-01597-7

8/2011 > 68 pages > PDF

This book results from years of exceptional collaboration between multiple public and private partners. It offers a concrete methodology for identifying and assessing interdependencies between critical infrastructures. Using an original approach based on the consequences of failures rather than their causes, the methodology enables the creation of tools that integrate spatial and temporal parameters for anticipating and managing domino effects resulting from the failure of a given infrastructure in order to reduce the vulnerability of all infrastructures.



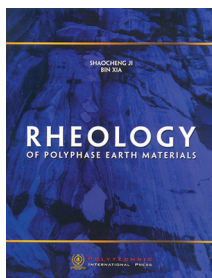
This book is primarily aimed at municipal risk managers, government services and essential services suppliers but also offers academics and students in management and engineering a new theoretical approach to risk.

RHEOLOGY OF POLYPHASE EARTH MATERIALS

Author(s) > Shaocheng Ji and Bin Xia

ISBN > 978-2-553-01033-0

11/2002 > 260 pages



This is the most comprehensive compilation on elastic and plastic deformation and the rheological properties of polyphase rocks that form the Earth's crust and mantle. An improved understanding of deformation and flow of Earth materials is of primary importance in studies of geodynamic processes. This book presents a comprehensive review of the subject and encourages students and scientists to engage in challenging research to solve the many remaining problems.

BUSINESS AND MANAGEMENT

INTERNATIONAL DEVELOPMENT PROJECT APPRAISAL, EXECUTION PLANNING AND MONITORING

Author(s) > Joseph Martial Ribeiro

ISBN > 978-2-553-01556-4

6/2011 > 148 pages > PDF



The author has adopted a pragmatic approach in preparing this book, taking advantage of his wide range of practical experience and his many enriching interactions with development project stakeholders from various backgrounds. Figures, tables and examples are used throughout the text to explain the key concepts and illustrate the relationships among the many activities involved in preparing and appraising a development project. Development pillars, the project cycle and project formulation studies are discussed in the introduction, followed by a detailed

examination of project appraisal activities. The book goes on to discuss project implementation planning and monitoring before addressing the issue of the funding of recurrent costs generated by development projects in developing countries and concluding with some observations on the best way to move forward.

MANAGING IN A SEA OF UNCERTAINTY

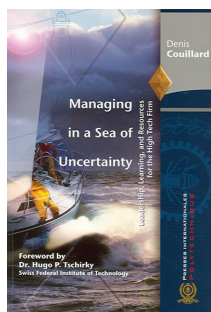
Leadership, Learning, and Resources
for the High Tech Firm

Author(s) > Denis Couillard

ISBN > 978-2-553-01150-4

1/2006 > 272 pages > PDF > ePUB

This book proposes two simple models for understanding the inter-relationships among the technology management concepts that underlie the management of a high tech organization. The “Corporate Ship” analogy illustrates the dynamic nature of strategy making, and the need to reconcile the pursuit of short-term opportunity with long-term objectives in turbulent high technology environments. The “Corporate Diamond” model uncovers the strong inter-relationships that exist between key concepts in technology management: leadership, learning, managing resources and developing successful new products and services.

**PROCUREMENT OF GOODS, WORKS AND SERVICES
IN DEVELOPMENT PROJECTS**

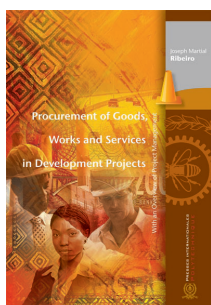
With an Overview of Project Management

Author(s) > Joseph Martial Ribeiro

ISBN > 978-2-553-01431-4

7/2009 > 118 pages > PDF

The author's practical experience in capacity building in the areas of project management and procurement throughout the African continent has led him to take a simple and direct approach in preparing this book. The reader is taken step by step from the concept of a development project and its preparation cycle to its actual management, and is given many details related to the initiation, control and closure processes. The reader is then introduced to public concepts and the various cycles specific to goods, civil works or services. Procurement planning and monitoring, the various types of contracts and the intricacies of contract administration are also discussed.



MATHEMATICS

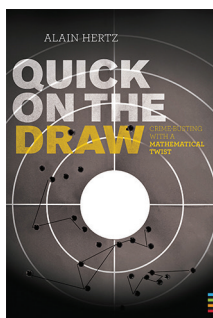
QUICK ON THE DRAW

Crime Busting with
a mathematical twist

Author(s) > Alain Hertz

ISBN > 978-2-553-01626-4

6/2012 > 208 pages > PDF > ePUB



English version of *L'Agrapheur*

A theft and a hold-up, an impostor trying to collect an inheritance, the disappearance of a lab mouse worth several hundred thousand dollars, and a number of other cases: these are the investigations led by Maurice Manori, a police inspector known for being quick on the draw. He owes his reputation to his highly effective—but very unconventional—methods. His secret weapon? Graph theory. In search of the truth, Inspector Manori draws graphs that will introduce you to the ins and outs of a mathematical discipline with countless handy applications.

MECHANICS

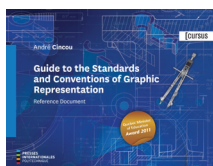
GUIDE TO THE STANDARDS AND CONVENTIONS OF GRAPHIC REPRESENTATION

Reference Document

Author(s) > André Cincou

ISBN > 978-2-553-01670-7

7/2013 > 56 pages



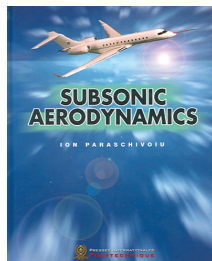
English version of *Guide des normes et conventions de représentation graphique*

This book presents the theory from its most basic principles to the notion of experimental aerodynamics while emphasizing the in-depth study of aerodynamic profiles in subsonic regime and the finite-wing span in two and three

dimensions. In addition, to the benefit of all concerned, this work is a complement to the theoretical part as it offers a multitude of practical applications related to the physical phenomena characteristic to aerodynamics. This book is both theoretical and practical and contains a wealth of practical examples.

SUBSONIC AERODYNAMICS**Author(s) > Ion Paraschivoiu****ISBN > 978-2-553-01130-6****11/2003 > 534 pages**

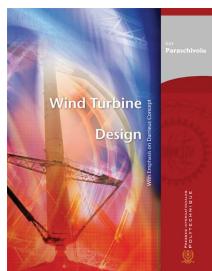
This book presents the theory from its most basic principles to the notion of experimental aerodynamics while emphasizing the in-depth study of aerodynamic profiles in subsonic regime and the finite-wing span in two and three dimensions. In addition, to the benefit of all concerned, this work is a complement to the theoretical part as it offers a multitude of practical applications related to the physical phenomena characteristic to aerodynamics. This book is both theoretical and practical and contains a wealth of practical examples.

**ALSO AVAILABLE****SUBSONIC AERODYNAMICS - COLLECTION OF EXERCISES****ISBN > 978-2-553-01131-3****11/2003 > 230 pages****WIND TURBINE DESIGN**

With Emphasis on Darrieus Concept

Author(s) > Ion Paraschivoiu**ISBN > 978-2-553-00931-0****6/2002 > 442 pages > PDF**

Wind energy is the fastest growing alternate source of energy in the world since its purely economic potential is complemented by its great positive environmental impact. The wind turbine, whether it may be a Horizontal-Axis Wind Turbine (HAWT) or a Vertical-Axis Wind Turbine (VAWT), offers a practical way to convert the wind energy into electrical or mechanical energy. Although this book focuses on the aerodynamic design and performance of VAWTs based on the Darrieus concept, it also discusses the comparison between HAWTs and VAWTs, future trends in design and the inherent socio-economic and environmental friendly aspects of wind energy as an alternate source of energy.



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