

Engineering Physics By Satyaprakash

Written in lucid language, the book offers a detailed treatment of fundamental concepts of chemistry and its engineering applications.

The book is all about concern to Indian Science: "The standard of science education is declining alarmingly. The best minds are not turning to science, and those who do, do not remain in science. The Indian contribution to basic sciences in global context is reducing both in quality and quantity. What are the remedial measures?" It is strongly felt that there is an urgent need to take historic political decisions and to move fast to reverse the situation, the collective efforts all akin to Bosonic character.

Distributed Artificial Intelligence (DAI) came to existence as an approach for solving complex learning, planning, and decision-making problems. When we talk about decision making, there may be some meta-heuristic methods where the problem solving may resemble like operation research. But exactly, it is not related completely to management research. The text examines representing and using organizational knowledge in DAI systems, dynamics of computational ecosystems, and communication-free interactions among rational agents. This publication takes a look at conflict-resolution strategies for nonhierarchical distributed agents, constraint-directed negotiation of resource allocations, and plans for multiple agents. Topics included plan verification, generation, and execution, negotiation operators, representation, network management problem, and conflict-resolution paradigms. The manuscript elaborates on negotiating task decomposition and allocation using partial global planning and mechanisms for assessing nonlocal impact of local decisions in distributed planning. The book will attract researchers and practitioners who are working in management and computer science, and industry persons in need of a beginner to advanced understanding of the basic and advanced concepts.

Inorganic, bio-inorganic, physical, theoretical & analytical chemistry

Indian Journal of Pure & Applied Physics

Advanced Turbulent Combustion Physics and Applications

Partial Differential Equations

India

The Most Authentic Source Of Information On Higher Education In India The Handbook Of Universities, Deemed Universities, Colleges, Private Universities And Prominent Educational & Research Institutions Provides Much Needed Information On Degree And Diploma Awarding Universities And Institutions Of National Importance That Impart General, Technical And Professional Education In India. Although Another Directory Of Similar Nature Is Available In The Market, The Distinct Feature Of The Present Handbook, That Makes It One Of Its Kind, Is That It Also Includes Entries And Details Of The Private Universities Functioning Across The Country.In This Handbook, The Universities Have Been Listed In An Alphabetical Order. This Facilitates Easy Location Of Their Names. In Addition To The Brief History Of These Universities, The Present Handbook Provides The Names Of Their Vice-Chancellor, Professors And Readers As Well As Their Faculties And Departments. It Also Acquaints The Readers With The Various Courses Of Studies Offered By Each University.It Is Hoped That The Handbook In Its Present Form, Will Prove Immensely Helpful To The Aspiring Students In Choosing The Best Educational Institution For Their Career Enhancement. In Addition, It Will Also Prove Very Useful For The Publishers In Mailing Their Publicity Materials.

Even The Suppliers Of Equipment And Services Required By These Educational Institutions Will Find It Highly Valuable.

This textbook describes the basic physics of semiconductors, including the hierarchy of transport models, and connects the theory with the functioning of actual semiconductor devices. Details are worked out carefully and derived from the basic physical concepts, while keeping the internal coherence of the analysis and explaining the different levels of approximation. Coverage includes the main steps used in the fabrication process of integrated circuits: diffusion, thermal oxidation, epitaxy, and ion implantation. Examples are based on silicon due to its industrial importance. Several chapters are included that provide the reader with the quantum-mechanical concepts necessary for understanding the transport properties of crystals. The behavior of crystals incorporating a position-dependent impurity distribution is described, and the different hierarchical transport models for semiconductor devices are derived (from the Boltzmann transport equation to the hydrodynamic and drift-diffusion models). The transport models are then applied to a detailed description of the main semiconductor-device architectures (bipolar, MOS, CMOS), including a number of solid-state sensors. The final chapters are devoted to the measuring methods for semiconductor-device parameters, and to a brief illustration of the scaling rules and numerical methods applied to the design of semiconductor devices.

Competition Science Vision (monthly magazine) is published by Pratiyogita Darpan Group in India and is one of the best Science monthly magazines available for medical entrance examination students in India. Well-qualified professionals of Physics, Chemistry, Zoology and Botany make contributions to this magazine and craft it with focus on providing complete and to-the-point study material for aspiring candidates. The magazine covers General Knowledge, Science and Technology news, Interviews of toppers of examinations, study material of Physics, Chemistry, Zoology and Botany with model papers, reasoning test questions, facts, quiz contest, general awareness and mental ability test in every monthly issue.

Advanced Inorganic Chemistry - Volume II

Panel Reportsâ–"New Worlds, New Horizons in Astronomy and Astrophysics

Vision for Science Education

Distributed Artificial Intelligence

Engineering Physics: Vol. 1

Engineering Chemistry

To increase faculty participation and to recognize the strategic educational position held by undergraduate research, scholarship, and creative activities (URSCA) in many institutions, faculty mentorship of undergraduate students needs to be valued as a standard component of workload and formally included in activity reports and evaluations, including those that lead to reappointment, tenure, and promotion. This white paper presents the need for recognition of faculty mentorship of URSCA, recommends best practices for institutions to adopt, offers a selection of case studies where some of these practices are already established, and summarizes the challenges ahead.

Partial Differential Equations presents a balanced and comprehensive introduction to the concepts and techniques required to solve problems containing unknown functions of multiple variables. While focusing on the three most classical partial differential equations (PDEs)—the wave, heat, and Laplace equations—this detailed text also presents a broad practical perspective that merges mathematical concepts with real-world application in diverse areas including molecular structure, photon and electron interactions, radiation of electromagnetic waves, vibrations of a solid, and many more. Rigorous pedagogical tools aid in student comprehension; advanced topics are introduced frequently, with minimal technical jargon, and a wealth of exercises reinforce vital skills and invite additional self-study. Topics are presented in a logical progression, with major concepts such as wave propagation, heat and diffusion, electrostatics, and quantum mechanics placed in contexts familiar to students of various fields in science and engineering. By understanding the properties and applications of PDEs, students will be equipped to better analyze and interpret central processes of the natural world.

Mathematics is an essential ingredient in the education of a student of mathematics or physics of a professional physicist, indeed in the education of any professional scientist or engineer. The purpose of Mathematical Physics is to provide a comprehensive study of the mathematics underlying theoretical physics at the level of graduate and postgraduate students and also have enough depth for others interested in higher level mathematics relevant to specialized fields. It is also intended to serve the research scientist or engineer who needs a quick refresher course in the subject. The Fourth Edition of the book has been thoroughly revised and updated keeping in mind the requirements of students and the latest UGC syllabus.

Bulletin of the Institution of Engineers (India).

Principles and Applications

An Introduction

A Modern Approach

Mathematical Methods In Classical And Quantum Physics

Mathematical Physics

Every 10 years the National Research Council releases a survey of astronomy and astrophysics outlining priorities for the coming decade. The most recent survey, titled New Worlds, New Horizons in Astronomy and Astrophysics, provides overall priorities and recommendations for the field as a whole based on a broad and comprehensive examination of scientific opportunities, infrastructure, and organization in a national and international context. Panel Reports--New Worlds, New Horizons in Astronomy and Astrophysics is a collection of reports, each of which addresses a key sub-area of the field, prepared by specialists in that subarea, and each of which played an important role in setting overall priorities for the field. The collection, published in a single volume, includes the reports of the following panels: Cosmology and Fundamental Physics Galaxies Across Cosmic Time The Galactic Neighborhood Stars and Stellar Evolution Planetary Systems and Star Formation Electromagnetic Observations from Space Optical and Infrared Astronomy from the Ground Particle Astrophysics and Gravitation Radio, Millimeter, and Submillimeter Astronomy from the Ground The Committee for a Decadal Survey of Astronomy and Astrophysics synthesized these reports in the preparation of its prioritized recommendations for the field as a whole. These reports provide additional depth and detail in each of their respective areas. Taken together, they form an essential companion volume to New Worlds, New Horizons: A Decadal Survey of Astronomy and Astrophysics. The book of panel reports will be useful to managers of programs of research in the field of astronomy and astrophysics, the Congressional committees with jurisdiction over the agencies supporting this research, the scientific community, and the public.

This book is primarily designed to serve as a textbook for undergraduate students of electrical, electronics, and computer engineering, but can also be used for primer courses across other disciplines of engineering and related sciences. The book covers all the basic aspects of electronics engineering, from electronic materials to devices, and then to basic electronic circuits. The book can be used for freshman (first year) and sophomore (second year) courses in undergraduate engineering. It can also be used as a supplement or primer for more advanced courses in electronic circuit design. The book uses a simple narrative style, thus simplifying both classroom use and self study. Numerical values of dimensions of the devices, as well as of data in figures and graphs have been provided to give a real world feel to the device parameters. It includes a large number of numerical problems and solved examples, to enable students to practice. A laboratory manual is included as a supplement with the textbook material for practicals related to the coursework. The contents of this book will be useful also for students and enthusiasts interested in learning about basic electronics without the benefit of formal coursework.

This book is intended to provide an adequate background for various theoretical physics courses, especially those in classical mechanics, electrodynamics, quantum mechanics and statistical physics. Each topic is dealt with in a generally self-contained manner and the text is interspersed with a number of solved examples ad a large number of exercise problems.

Science Reporter

Physics of Semiconductor Devices

Universities Handbook

American Book Publishing Record

Explore an Entirely Different Viewpoint on the Deep Mysteries of the Universe

Competition Science Vision

This book presents research advances in the theory of medical physics and its application in various sectors of biomedical engineering. It gathers best selected research papers presented at International Conference on Advances in Medical Physics and Healthcare Engineering (AMPHE 2020), organized by the Department of Physics (in collaboration with the School of Engineering and Technology) Adamas University, Kolkata, India. The theme of the book is interdisciplinary in nature; it interests students, researchers and faculty members from biomedical engineering, biotechnology, medical physics, life sciences, material science and also from electrical, electronics and mechanical engineering backgrounds nurturing applications in biomedical domain.

The Second Edition of this concise and compact text offers students a thorough understanding of the basic principles of quantum mechanics and their applications to various physical and chemical problems. This thoroughly class-texted material aims to bridge the gap between the books which give highly theoretical treatments and the ones which present only the descriptive accounts of quantum mechanics. Every effort has been made to make the book explanatory, exhaustive and student friendly. The text focuses its attention on problem-solving to accelerate the student's grasp of the basic concepts and their applications. What is new to this Edition: Includes new chapters on Field Quantization and Chemical Bonding, Provides new sections on Rayleigh Scattering and Raman Scattering. Offers additional worked examples and problems illustrating the various concepts involved. This textbook is designed as a textbook for postgraduate and advanced undergraduate courses in physics and chemistry. Solutions Manual containing the solutions to chapter-end exercises is available for instructors. Solution Manual is available for adopting faculty. Click here to request...

In spite of the fact that the story of Blind Students and the Elephant is merely a story, the same has been repeated several times in the history of the mankind right from the primordial times till to-date; in fact this is the way science has gradually grown on its journey of evolution. Scientists have to face similar situations on many occasions; they never get full information before devising any theory, instead they discover part-truths in several steps, each of which is discovered after long periods of time. This is analogous to concept developed by a blind man who forms an idea about the elephant by touches only one of its body-part. Scientists can therefore consider only one aspect of a problem at a time; they encounter with other aspects of the same problem at a much later point of time. At times such a situation might lead to misconceptions. Sometimes such misconceptions, conceived by some renowned personalities, are even considered to be very brilliant ideas and valuable achievements. As a result heritage of falsified knowledge had been transferred, several times in the past, to at least next 3-4 generations. This becomes possible because common man blindly follows renowned persons who are considered to be wise; normally no one even bothers to verify the truth; this is the greatest misfortune of the human kind. Misjudging or regarding such misconceptions as valuable discoveries might cause science to divagate from its path to find out absolute truth; a very long and valuable time might also be lost in elimination of such misconceptions.

Directory of Research in Physics/astronomy at Primarily Undergraduate Institutions

QUANTUM MECHANICS

Let's Ponder

Calendar

Techniques and Applications

Handbook of Universities

The thoroughly Revised & Update 2nd Edition of the book General Science & Technology for Civil Services PT & Mains, State PSC, CDS, NDA, SSC, & other UPSC Exams been designed with special focus on IAS Prelims & Main Exams. The book is prepared as per the trend of questions asked in previous years question papers of various UPSC/ State PSC/ SSC exams. • In nutshell the book consists of complete theory of Physics, Chemistry, Biology and Technology with MCQ Exercise including past questions of various exams. • The book also covers past questions of IAS Mains GS III and various State PSC exams. • The book also covers Technology in the development of India and its future prospects in the field of research. The part deals with Energy, Nuclear Technology, Information Technology, Space research, Communication and Defence. • The book is empowered with a variety of questions (Simple MCQs, Statement Based MCQs, Match the column MCQs, Assertion-Reason MCQs) and thus more than 3800 questions are included in the book. Solutions are also provided in the book. • Past MCQs of last ten year questions of various competitive exams have also been included in the book.

Pratiyogita Darpan (monthly magazine) is India's largest read General Knowledge and Current Affairs Magazine. Pratiyogita Darpan (English monthly magazine) is known for quality content on General Knowledge and Current Affairs. Topics ranging from national and international news/ issues, personality development, interviews of examination toppers, articles/ write-up on topics like career, economy, history, public administration, geography, polity, social, environment, scientific, legal etc, solved papers of various examinations, Essay and debate contest, Quiz and knowledge testing features are covered every month in this magazine.

Pratiyogita Darpan

World Directory of Crystallographers and of Other Scientists Employing Crystallographic Methods

Mathematical Physics, 4th Edition

Indian Book Industry

Fundamentals and Applications

With Numerous Examples For Degree, Honours, Engineering and Post-graduate Students of Physics, Mathematics and Chemistry in Different Indian and Foreign Universities

Proceedings of AMPHE 2020

Explore a thorough and up to date overview of the current knowledge, developments and outstanding challenges in turbulent combustion and application. The balance among various renewable and combustion technologies are surveyed, and numerical and experimental tools are discussed along with recent advances. Covers combustion of gaseous, liquid and solid fuels and subsonic and supersonic flows. This detailed insight into the turbulence-combustion coupling with turbulence and other physical aspects, shared by a number of the world leading experts in the field, makes this an excellent reference for graduate students, researchers and practitioners in the field.

"Let's Ponder" by Satya Prakash Verma is the second edition of the book named "Mysteries of the Universe - Unveiled," published in 2015 through M/S Partridge Publications, India. Although the market is flooded with different books on Astrophysics, this book is much different from all of them; this book is neither a Science-Fiction nor a Research-Paper that is based on the Mainstream Science; this book is, in fact, a Disquisition in which the Prominent Theories of mainstream science have been very boldly analyzed, and their probable Limitations have been logically explored.Since this book has been written to convey the message that our scientific theories might contain a few loose ends, the first part describes the circumstances under which shortcomings are likely to creep into any theory. In the following two parts, the author has first very boldly described the alternate angle of some of the modern scientific theories, in brief, portraying some of the probable loose ends that might exist in the eminent theories that are supposed to govern the functioning of the universe; these theories are: - the Wave Theory, the Theory of Relativity, Quantum Mechanics, String Theory, Theory of Gravity, the Big-Bang Theory and the Standard Model of Particle Physics, etc. Next, based on the alternate angle disclosed herein, an altogether new perspective on the creation of the galaxies, stars, and their planets, etc., has been presented; this part also sheds light on some of the mysteries that hitherto remained unresolved. This book also discloses his idea to carry out the experiment to determine the unidirectional speed of a light-beam. Though this experiment is considered impossible to perform by many, he has shared an idea by which this experiment may possibly be conducted successfully. The author's main aim in writing such a book is to spread the idea worldwide that time has now come to review our eminent scientific theories and modify them if felt necessary.

Mathematical Physics

Advances in Medical Physics and Healthcare Engineering

An Entirely Different Perspective- on the Laws That Govern the Universe and Its Functioning

(Free Sample) General Science & Technology for Civil Services PT & Mains, State PSC, CDS, NDA, SSC, & other UPSC Exams 2nd Edition

Indian Books in Print

Basic Electronics Engineering

Publisher's Monthly

This textbook is written as a basic introduction to Quantum Mechanics for use by the undergraduate students in physics, who are exposed to this subject for the first time. Providing a gentle introduction to the subject, it fills the gap between the available books which provide comprehensive coverage appropriate for postgraduate courses and the ones on Modern Physics which give a rather incomplete treatment of the subject leaving out many conceptual and mathematical details. The author sets out with Planck 's quantum hypothesis and takes the student along through the new concepts and ideas, providing an easy-to-understand description of core quantum concepts and basic mathematical structures. The fundamental principles and the mathe-matical formalism introduced, are amply illustrated through a number of solved examples. Chapter-end exercises and review questions, generally designed as per the examination pattern, serve to reinforce the material learnt. Chapter-end summaries capture the key points discussed in the text. Beside the students of physics, the book can also be used by students of chemistry and first-year students of all branches of engineering for gaining a basic understanding of quantum mechanics, otherwise considered a difficult subject.

Edited by professionals with years of experience, this book provides an introduction to the theory of evolutionary algorithms and single- and multi-objective optimization, and then goes on to discuss to explore applications of evolutionary algorithms for many uses with real-world applications. Covering both the theory and applications of evolutionary computation, the book offers exhaustive coverage of several topics on nontraditional evolutionary techniques, details working principles of new and popular evolutionary algorithms, and discusses case studies on both scientific and real-world applications of optimization

The book presents a comprehensive study of important topics in Mechanics of pure and applied sciences. It provides knowledge of scalar and vector in optimum depth to make the students understand the concepts of Mechanics in simple, coherent and lucid manner and grasp its principles & theory. It caters to the requirements of students of B.Sc. Pass and Honours courses. Students of engineering disciplines and the ones aspiring for competitive exams such as AIME and others, will also find it useful for their preparations.

Evolutionary Computation
A TEXTBOOK FOR UNDERGRADUATE
Including Laboratory Manual
Applied Mechanics Reviews
BPR cumulative
Indian Journal of Chemistry

Advanced Inorganic Chemistry - Volume II is a concise book on basic concepts of inorganic chemistry. Beginning with Coordination Chemistry, it presents a systematic treatment of all Transition and Inner-Transition chemical elements and their compounds according to the periodic table. Special topics such as Pollution and its adverse effects, chromatography, use of metal ions in biological systems, to name a few, are discussed to provide additional relevant information to the students. It primarily caters to the undergraduate courses (Pass and Honours) offered in Indian universities.

Mechanics
Elementary Solid State Physics
Pratigyogita Darpan
Mysteries of the Universe-Unveiled
Times of India Illustrated Weekly