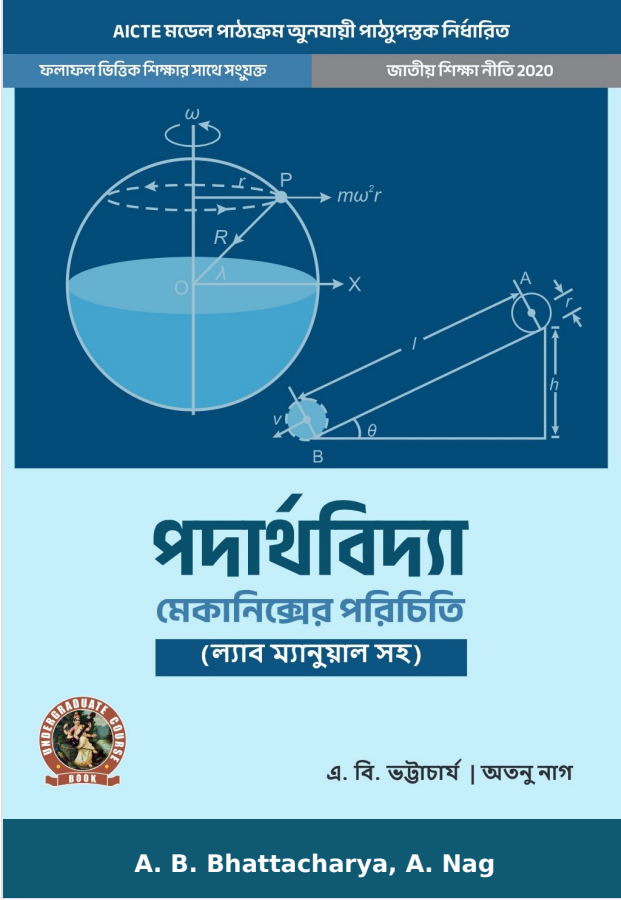




Physics (Introduction to Mechanics) (with Lab Manual)

Author : A. B. Bhattacharya, A. Nag

ISBN 13 : 978-93-55381-16-3

ISBN 10 : 9355381166

E-ISBN 13 : 978-93-55381-16-3

Edition : 1

Pages : 236

Type of book : Physical

Year : 2025

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 295.00

Categories : [AICTE Prescribed Textbooks,](#)
[Bengali Books, Book Store,](#)
[Ebooks](#)

Condition Type : New

Country Origin : India

Product Description

Physics: Introduction to Mechanics has been written for the first year students of B Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student's needs. Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Mechanics to tackle 21 century and onward engineering challenges and address the related questions.

Some Salient features of the book:

- Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject.
- To develop knowledge on critical questions solved and supplementary problems covering all type of medium and advanced level
- Under problems in a very logical and systematic manner.
- Some essential information for the user the heading "Know more" for clarifying some basic information as well as comprehensive synopsis of formulae for a quick revision of the basic principles.
- Constructive manner of presentation so that an Engineering degree students can prepare to work in different sectors or in national laboratories at the very forefront of technology.

Table Of Contents

- Foreword
- Acknowledgement
- Preface
- Outcome Based Education
- Course Outcomes
- Abbreviations and Symbols
- List of Figures
- Guidelines for Teachers
- Guidelines for Students
- Introductory Mechanics.
- Conservation Principles.
- Dynamics of Particles.
- Oscillations.
- Rotational Motion.
- Dynamics of a Rigid Body.
- Table of Physical Constants
- Appendices
- Annexures
- References for Further learning
- CO and PO Attainment Table
- Index

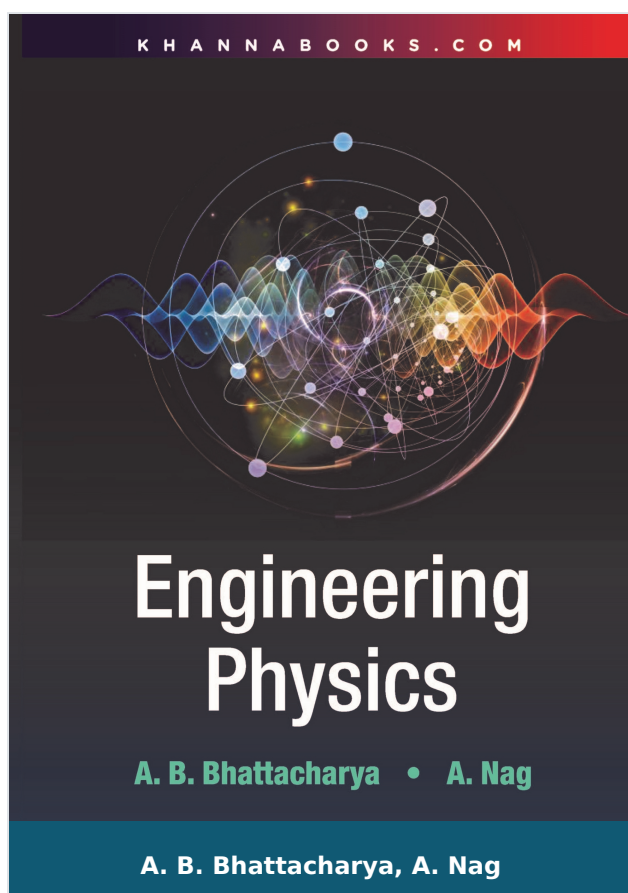
Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

A. Nag

A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.



Engineering Physics

Author :	A. B. Bhattacharya, A. Nag
ISBN 13 :	978-93-89139-07-5
ISBN 10 :	9389139074
E-ISBN 13 :	978-93-89139-07-5
Edition :	First
Pages :	686
Type of book :	Physical
Year :	2025
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 695.00
Categories :	Book Store, APPLIED SCIENCES & HUMANITIES
Condition Type :	New
Country Origin :	India

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

In this book titled 'Engineering Physics,' the authors have given sincere efforts to explain the concepts of Physics in a very judicial way for the Engineering students of different branches so that they can acquire a reasonably good knowledge on the subject without devoting much time. In order to implement it successfully, the authors have maintained the following two features throughout:

1. Learning objectives are outlined at the beginning of each chapter followed by their item-wise presentation lucidly for a better understanding of the readers.
2. Each chapter is enriched with solved numerical problems including exercises and supplementary problems for the routine practice helpful for the examinations.

Table Of Contents

- SECTION I: INTRODUCTORY TO MECHANICS
 - Introductory Mathematical Concepts
 - Newton's laws and central force Problems
 - Motion of a Rigid Body
 - Oscillations
- SECTION II: WAVES AND OPTICS
 - Waves Motion
 - Geometric Optics: The propagation of Light
 - Wave Optics
 - Polarization
 - Chapter (: Lasers & Holography
- SECTION III: INTRODUCTION TO ELECTROMAGNETIC THEORY
 - Electrostatics & Dielectrics
 - Magnetostatics & Magnetic Properties
 - Electromagnetic Induction & Faraday's Laws
 - Maxwell's Equation & Electromagnetics Waves
- SECTION IV: QUANTUM MECHANICS FOR ENGINEERS
 - Quantum Physics
 - Quantum Mechanics
 - Introduction to Molecular Bonding
 - Statistical Mechanics
 - Introduction to Solids

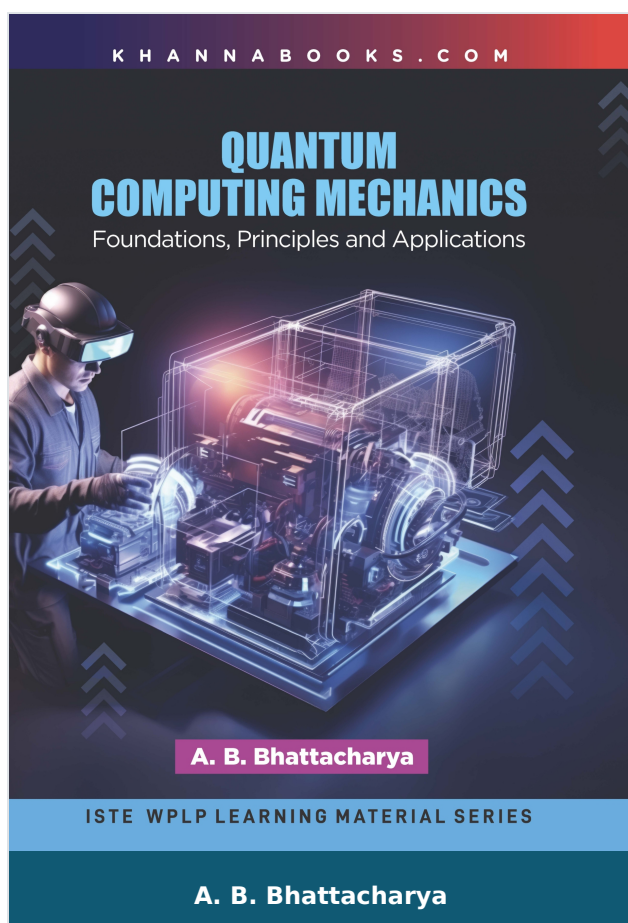
Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lightning is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

A. Nag

A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.



Quantum Computing Mechanics(Foundations, Principles and Applications)

Author :	A. B. Bhattacharya
ISBN 13 :	978-93-55388-85-8
ISBN 10 :	9355388853
E-ISBN 13 :	978-93-55388-85-8
Edition :	First
Pages :	312
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 548.00
Categories :	New Arrivals, Emerging Technologies, Book Store, ISTE Series
Condition Type :	New
Country Origin :	India

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

Quantum Computing Mechanics(Foundations, Principles and Applications) **Unlock the Quantum Frontier Quantum Computing Mechanics:** Foundations, Principles and Applications is a comprehensive journey into the heart of one of the 21st century's most transformative scientific revolutions. Bridging the disciplines of quantum mechanics and computational theory, this book presents a lucid and in-depth exploration of quantum computing—from its theoretical foundations to its real-world applications. **Whether you are a curious student, a passionate researcher, or an industry professional, this volume offers:**

- A rigorous yet accessible introduction to the principles of quantum mechanics and how they power next-generation computation.
- Core topics like qubits, quantum gates, superposition, entanglement, and interference, laid out clearly with diagrams, examples, and circuit design.
- Step-by-step walkthroughs of groundbreaking quantum algorithms including Grover's, Shor's, and the Quantum Fourier Transform.
- Essential coverage of error correction, fault tolerance, and the global push toward quantum supremacy.
- Extensive practice sections with short questions, multiple-choice quizzes, solved numerical problems, and innovative project ideas—making it ideal for self-study or academic use.

From the roots of classical logic to the surreal domain of entangled qubits, **Quantum Computing Mechanics** brings clarity to complexity. It does not merely teach you what quantum computing is—it shows you why it matters.

Table Of Contents

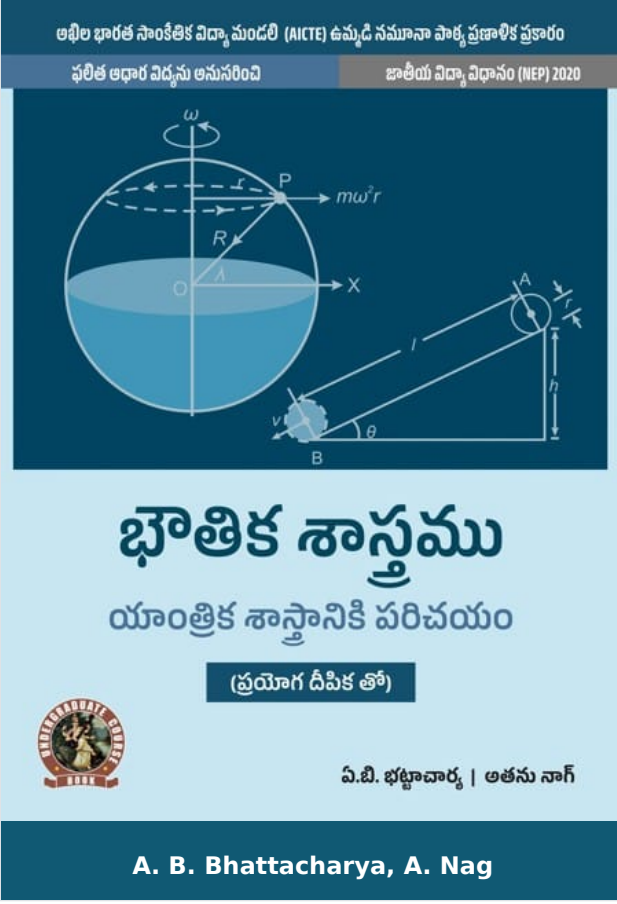
- Preface
- Acknowledgements
- FOUNDATIONS IN QUANTUM COMPUTING MECHANICS
- OUTLINES OF QUANTUM MECHANICS
- THE QUBIT AND QUANTUM GATES AS BUILDING BLOCKS
- QUANTUM LOGIC GATES AND CIRCUITS
- QUANTUM PARALLELISM AND INTERFERENCE
- QUANTUM ENTANGLEMENT AND NONLOCALITY
- QUANTUM ALGORITHMS
- QUANTUM ERROR CORRECTION AND FAULT TOLERANCE
- APPENDICES

Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars

received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.



Physics (Introduction to Mechanics) with Lab Manual

Author : A. B. Bhattacharya, A. Nag

ISBN 13 : 978-93-91505-96-7

ISBN 10 : 9391505961

E-ISBN 13 : 978-93-91505-96-7

Edition : 1

Pages : 256

Type of book : Physical

Year : 2025

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 295.00

Categories : [AICTE Prescribed Textbooks,](#)
[Telugu Books, Book Store, Ebooks](#)

Condition Type : New

Country Origin : India

Product Description

Physics: Introduction to Mechanics has been written for the first year students of B Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student's needs. Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Mechanics to tackle 21 century and onward engineering challenges and address the related questions.

Some Salient features of the book:

- Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject.
- To develop knowledge on critical questions solved and supplementary problems covering all type of medium and advanced level
- Under problems in a very logical and systematic manner.
- Some essential information for the user the heading "Know more" for clarifying some basic information as well as comprehensive synopsis of formulae for a quick revision of the basic principles.
- Constructive manner of presentation so that an Engineering degree students can prepare to work in different sectors or in national laboratories at the very forefront of technology.

Table Of Contents

- Foreword
- Acknowledgement
- Preface
- Outcome Based Education
- Course Outcomes
- Abbreviations and Symbols
- List of Figures
- Guidelines for Teacher
- Guidelines for Students
- Electrostatics in Vacuum.
- Electrostatics in Linear Dielectric Medium.
- Magnetostatics.
- Magnetostatics in Linear Dielectric Medium.
- Faraday's Law.
- Maxwell's Equations.
- Electromagnetic Waves.
- Table of Physical Constants
- Appendices
- Annexures
- References for Further learning
- CO and PO attainment Table
- Index

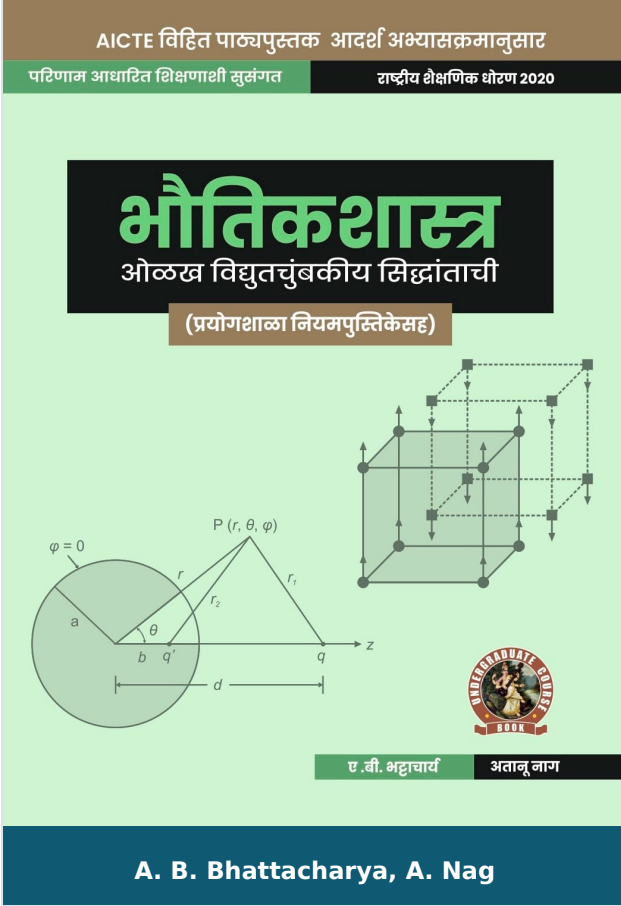
Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lightning is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

A. Nag

A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.



Physics (Introduction to Electromagnetic Theory with Lab Manual)

Author : A. B. Bhattacharya, A. Nag

ISBN 13 : 978-93-55380-29-6

ISBN 10 : 9355380291

E-ISBN 13 : 978-93-55380-29-6

Edition : First

Pages : 340

Type of book : Physical

Year : 2022

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 395.00

Categories : [AICTE Prescribed Textbooks,](#)
[Marathi Books, Book Store,](#)
[Ebooks](#)

Condition Type : New

Country Origin : India

Product Description

Engineering Physics: Introduction to Electromagnetic Theory has been written for the first year students of B. Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student's needs. Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Electromagnetic Theory to tackle 21st century and onward engineering challenges and address the related questions.

Some Salient Features of the Book:

1. Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject.
2. To develop knowledge on critical questions, solved and supplementary problems covering all types of medium and advanced level problems in a very logical and systematic manner.
3. Some essential information for the users under the heading "know More" for clarifying some basic
4. Information as well as comprehensive synopsis of formulae for a quick revision of the basic principles.
5. Constructive manner of presentation so that an Engineering degree students can prepare to work in different sector or in national laboratories at the very forefront of technology.

Table Of Contents

- Foreword
- Acknowledgement
- Preface
- Outcome Based Education
- Course Outcomes
- Abbreviations and Symbols
- List of Figures
- Guidelines for Teacher
- Guidelines for Students
- Electrostatics in Vacuum
- Electrostatics in Linear Dielectric Medium
- Magnetostatics
- Magnetostatics in Linear Dielectric Medium
- Faraday's Law
- Maxwell's Equations
- Electromagnetic Waves
- Table of Physical Constants
- Appendices
- Annexures
- References for Further learning
- CO and PO attainment Table
- Index

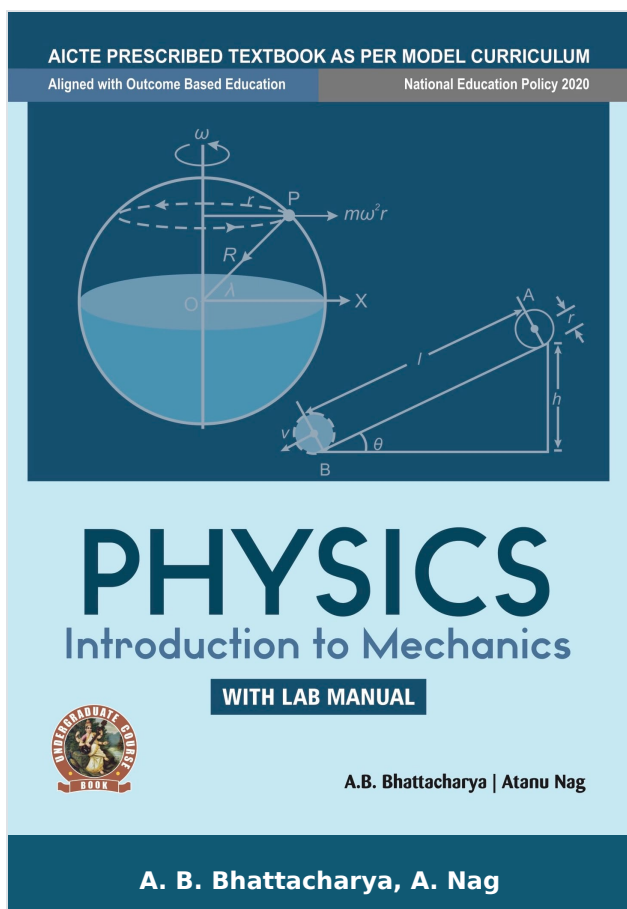
Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lightning is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

A. Nag

A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.



Physics (Introduction to Mechanics) (with Lab Manual)

Author : A. B. Bhattacharya, A. Nag

ISBN 13 : 978-93-91505-05-9

ISBN 10 : 9391505058

E-ISBN 13 : 978-93-91505-05-9

Edition : First

Pages : 228

Type of book : Physical

Year : 2024

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 295.00

Categories : [AICTE Prescribed Textbooks,](#)
[English Books, Book Store,](#)
[Ebooks, APPLIED SCIENCES &](#)
[HUMANITIES](#)

Condition Type : New

Country Origin : India

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

Physics: Introduction to Mechanics has been written for the first year students of B Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student's needs. Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Mechanics to tackle 21 century and onward engineering challenges and address the related questions.

Some Salient features of the book:

- Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject.
- To develop knowledge on critical questions solved and supplementary problems covering all type of medium and advanced level
- Under problems in a very logical and systematic manner.
- Some essential information for the user the heading "Know more" for clarifying some basic information as well as comprehensive synopsis of formulae for a quick revision of the basic principles.
- Constructive manner of presentation so that an Engineering degree students can prepare to work in different sectors or in national laboratories at the very forefront of technology.

Table Of Contents

- Foreword
- Acknowledgement
- Preface
- Outcome Based Education
- Course Outcomes
- Abbreviations and Symbols
- List of Figures
- Guidelines for Teachers
- Guidelines for Students
- Introductory Mechanics
- Conservation Principles
- Dynamics of Particles
- Oscillations
- Rotational Motion
- Dynamics of a Rigid Body
- Table of Physical Constants
- Appendices
- Annexures
- References for Further learning
- CO and PO Attainment Table
- Index

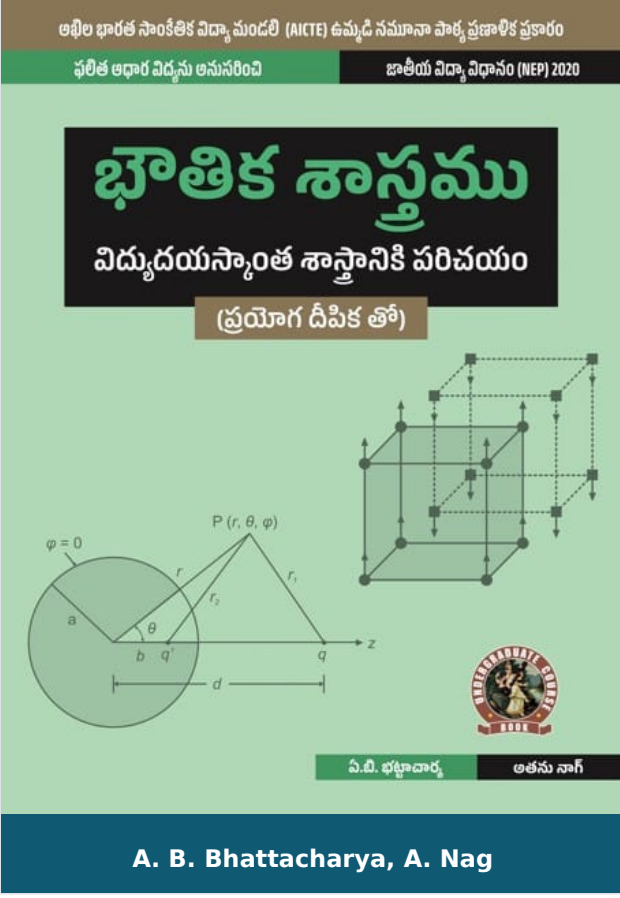
Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

A. Nag

A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.



Physics (Introduction to Electromagnetic Theory) with Lab Manual

Author :	A. B. Bhattacharya, A. Nag
ISBN 13 :	978-93-91505-88-2
ISBN 10 :	9391505880
E-ISBN 13 :	978-93-91505-88-2
Edition :	1
Pages :	384
Type of book :	Physical
Year :	2025
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 295.00
Categories :	AICTE Prescribed Textbooks, Telugu Books, Book Store, Ebooks
Condition Type :	New
Country Origin :	India

Product Description

Engineering Physics: Introduction to Electromagnetic Theory has been written for the first year students of B. Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student's needs. Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Electromagnetic Theory to tackle 21st century and onward engineering challenges and address the related questions.

Some Salient Features of the Book:

1. Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject.
2. To develop knowledge on critical questions, solved and supplementary problems covering all types of medium and advanced level problems in a very logical and systematic manner.
3. Some essential information for the users under the heading "know More" for clarifying some basic
4. Information as well as comprehensive synopsis of formulae for a quick revision of the basic principles.
5. Constructive manner of presentation so that an Engineering degree students can prepare to work in different sector or in national laboratories at the very forefront of technology.

Table Of Contents

- Foreword
- Acknowledgement
- Preface
- Outcome Based Education
- Course Outcomes
- Abbreviations and Symbols
- List of Figures
- Guidelines for Teacher
- Guidelines for Students
- Electrostatics in Vacuum.
- Electrostatics in Linear Dielectric Medium.
- Magnetostatics.
- Magnetostatics in Linear Dielectric Medium.
- Faraday's Law.
- Maxwell's Equations.
- Electromagnetic Waves.
- Table of Physical Constants
- Appendices
- Annexures
- References for Further learning
- CO and PO attainment Table
- Index

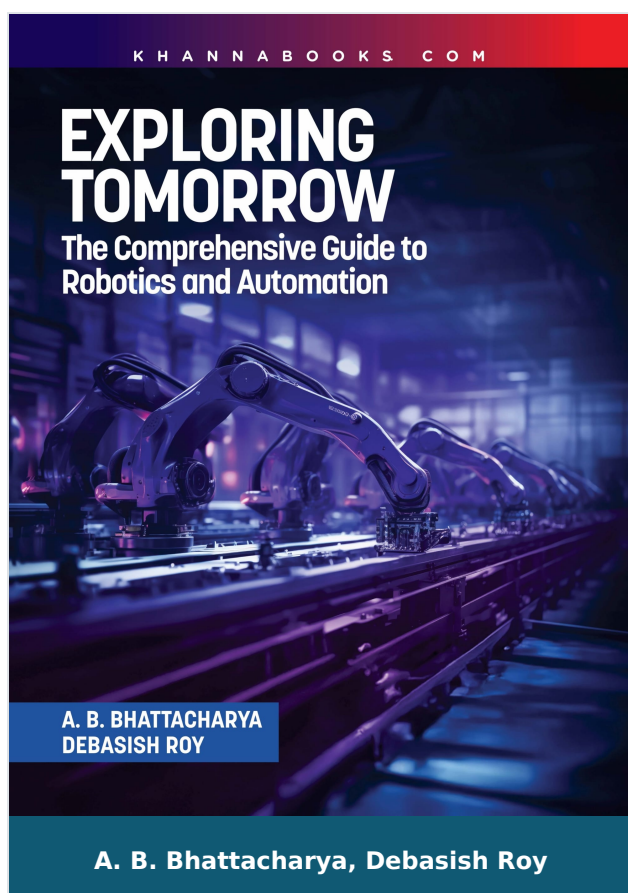
Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

A. Nag

A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.



Exploring Tomorrow (The Comprehensive Guide to Robotics and Automation)

Author : A. B. Bhattacharya, Debasish Roy

ISBN 13 : 978-93-55387-25-7

ISBN 10 : 9355387253

E-ISBN 13 : 978-93-55387-25-7

Edition : 1

Pages : 416

Type of book : Physical

Year : 2025

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 575.00

Categories : [Emerging Technologies, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

Salient Features of the Book:

1. Covers industrial, service, domestic, healthcare, education, entertainment robots, and autonomous vehicles.
2. Focuses on human-robot collaboration, ethical challenges, privacy, and job displacement issues.
3. Details the technologies behind self-driving cars and autonomous drones. Covering AI, sensor fusion, computer vision, and control systems.
4. Explores surgical robots, rehabilitation robotics, telemedicine, and their contributions to healthcare.
5. Discusses agricultural robots for tasks like planting, weeding, harvesting, and livestock management.
6. Examines educational robots like LEGO Mind storms, Ozobot, and Sphero, and their integration into curricula.
7. Highlights the role of robotics in space missions, including rovers, unmanned spacecraft, and teleportation.
8. Explores robots used in search and rescue, hazard environments, mapping, and medical assistance.
9. Discusses robots inspired by biological systems, focusing on design, locomotion, and sensory systems.
10. Looks at the use of robots in theme parks, robotic performers, customer service, and logistics.

11. Discusses trends in automation, collaborative robotics, and their impact on the workforce.
12. Focuses on automation in manufacturing, robotic arms, robots, and cyber security.
13. Addresses technical challenges, research efforts, and the future of robotics.
14. Envisions future developments like swarm robotics and human- like androids.
15. Numerical problems, short questions, MCQs, project works, and others for all the chapters.

Table Of Contents

- Various Types of Robotics.
- Human-Robot Collaboration: Ethics and Social Implications of Robotics.
- Autonomous Vehicles and Drones: Part of the broader of Robotics and AI.
- Robotics in Healthcare.
- Robotics in Agriculture.
- Robots in Education.
- Robotics in Space Exploration.
- Role of Robotics in Disaster Response.
- Biologically-Inspired Robotics.
- Robotics in Entertainment and Service Industries.
- Autonomation and the Workforce: Emerging Trends.
- Interconnected Domains of Industrial Automation and Robotics.
- Robotics and Automation Technologies used in Modern Warfare.
- Challenges in Robotics and Automation.

Author

A. B. Bhattacharya

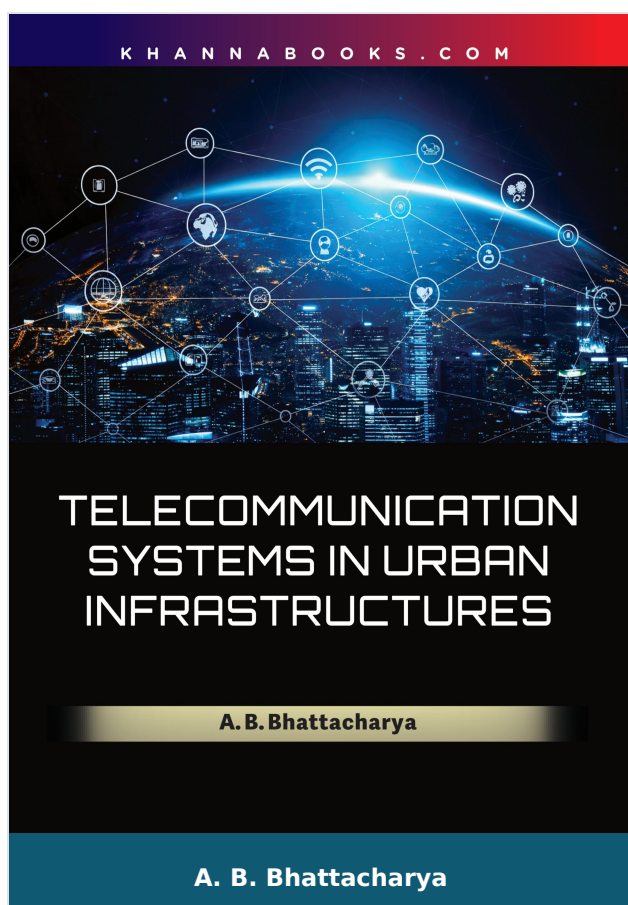
Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor

of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

Debasish Roy

Dr. Debasish Roy is a highly accomplished and motivated professional with a robust academic background in Information Technology, including an MCA, MBA M. Tech, and PhD. He was currently the Director General(Railways) at a top-level position in the Indian Police Service (IPS). He received the Indian Police Medal and President's Police Medal in 2000 and 2010. He is well known for pioneering contributions in land mobile radio systems. He is highly recognized for spearheading strategic planning and execution of security measures for the railways network, implementing innovative technologies to enhance railway security and counteract emerging day-to-day operations efficiently. He has provided expert guidance on implementing land mobile radio system for public safety agencies and conducted groundbreaking research in cryptanalysis, leading to

development of advanced techniques for enhancing cyber security. He successfully led a team in designing and implementing secure communication protocols for land mobile radio systems, ensuring robust and encrypted communication. He has published numerous research papers in reputed conferences. He mentored and guided students at the postgraduate and doctoral levels. He has a proven track record of effective leadership and team management, besides all his strategies planning and execution in high-stakes environments. He received many honors and awards for his outstanding contributions to the field and was recognized for exceptional leadership and innovation in technology-driven security initiatives. He completed an Executive Program in Quantum Computing and Machine Learning from IIT Delhi in 2023. He participated in the Workshop on Machine Learning for Cryptology (ML4Crypto 2023) at ISI, Kolkata from November 8-10, 2023, organized by SAG, DRDO. His recent paper on " Iterative Quantum Algorithm for Linear System Solving" has been accepted at the International Conference SAI, Computing, 2024 London, organized by Microsoft Corporation.



Telecommunication Systems In Urban Infrastructures

Author :	A. B. Bhattacharya
ISBN 13 :	978-93-74542-78-1
ISBN 10 :	9374542781
E-ISBN 13 :	978-93-74542-78-1
Edition :	First
Pages :	344
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 495.00
Categories :	Electrical, Electronics & Communication Engineering, New Arrivals, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

Telecommunication Systems In Urban Infrastructures

Modern cities run on connectivity. From smart transport and energy grids to IoT-enabled homes and resilient emergency networks, telecommunication on systems form invisible backbone of urban life. Telecommunication systems in Urban Infrastructure delivers a comprehensive, practical, and future-focused exploration of how communication technologies design, support, and transform smart cities.

This book bridges theory and real-world application, guiding students, engineers, planners, and policymakers through the full ecosystem of urban telecommunication – from foundational signal principles to emerging 6G, AI- driven networks, and cyber-resilient infrastructure.

Readers will explore:

- Core principles of wired and wireless telecommunication systems
- Smart city connectivity for transport, utilities, building, and public spaces
- IoT integration, cyber security, and urban data privacy
- Planning, deployment, and economic challenges in dense urban environments
- Cutting-edge technologies including AI optimization, edge/cloud computing, and quantum communication
- Global smart city case studies and future sustainability trends

Each chapter is carefully structured with:

- Concept explanations grounded in real urban scenarios
- Numerical problems and technical exercises
- Short questions and multiple-choice assessments
- Projects ideas with guided solution

- Practical insights into standards, regulations, and infrastructure planning

With coverage spanning telecom fundamentals, smart utilities, mobility systems, urban IoT, security frameworks, and next-generation networks, this book provides a complete roadmap for designing and managing connected cities. Whether you are preparing for academic study, professional deployment, or research in smart infrastructure, this text equips you with the technical depth, analytical tools, and systems perspective required building the cities of tomorrow.

Build smarter networks. Design resilient cities. Shape the connected future.

Table Of Contents

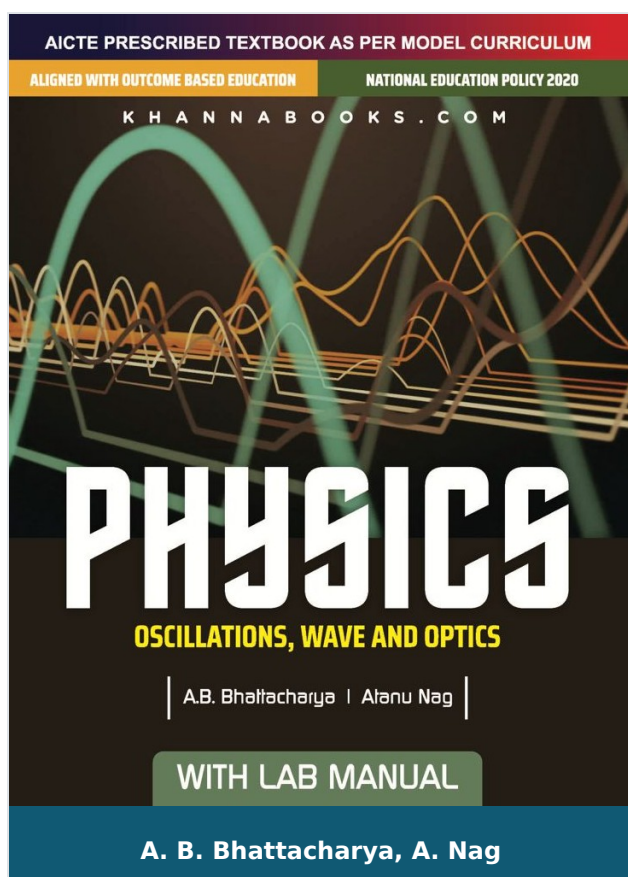
- Preface
- Acknowledgement
- Introduction to Telecommunication in Urban Infrastructure
- Fundamentals of Telecommunication Systems
- Wired Telecommunication Infrastructure in Cities
- Wireless Telecommunication Systems
- Telecommunication for Urban Mobility and Transportation
- Telecommunication in Urban Utilities and Services
- Telecommunication in Buildings and Urban Spaces
- Internet of Things (IoT) in Urban Infrastructure
- Cyber Security and Data Privacy in Urban Telecom Systems
- Planning and Deployment of Telecom Infrastructure in Cities
- Emerging Technologies In Urban Telecommunications
- Case Studies of Telecommunication in Smart Cities
- Future Trends and Challenges
- Visual Architectures and System Diagrams In Urban Telecommunication Infrastructure
- Appendix

Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences

division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.



Physics (Oscillations, Waves and Optics) With Lab Manual

Author : A. B. Bhattacharya, A. Nag

ISBN 13 : 978-93-91505-13-4

ISBN 10 : 9391505139

E-ISBN 13 : 978-93-91505-13-4

Edition : 1

Pages : 272

Type of book : Physical

Year : 2025

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 295.00

Categories : [AICTE Prescribed Textbooks,](#)
[English Books, Ebooks](#)

Condition Type : New

Country Origin : India

Product Description

For the implementation of an outcome based education the first requirement is to develop an outcome based curriculum and incorporate an outcome based assessment in the education system. By going through outcome based assessments evaluators will be able to evaluate whether the students have achieved the outlined standard, specific and measurable outcomes. With the proper incorporation of outcome based education there will be a definite commitment to achieve a minimum standard for all learners without giving up at any level. At the end of the Programme running with the aid of outcome based education, a student will be able to arrive at the following outcomes

Table Of Contents

- Oscillations
- Units 2: Wave Propagation and Dispersion
- The Propagation of Light and Geometric Optics
- Units 4: Wave Optics
- Lasers
- Table of Physical Constants
- Appendices
- Annexures
- Reference for Future learning
- CO and PO Attainments Table
- Index

Author

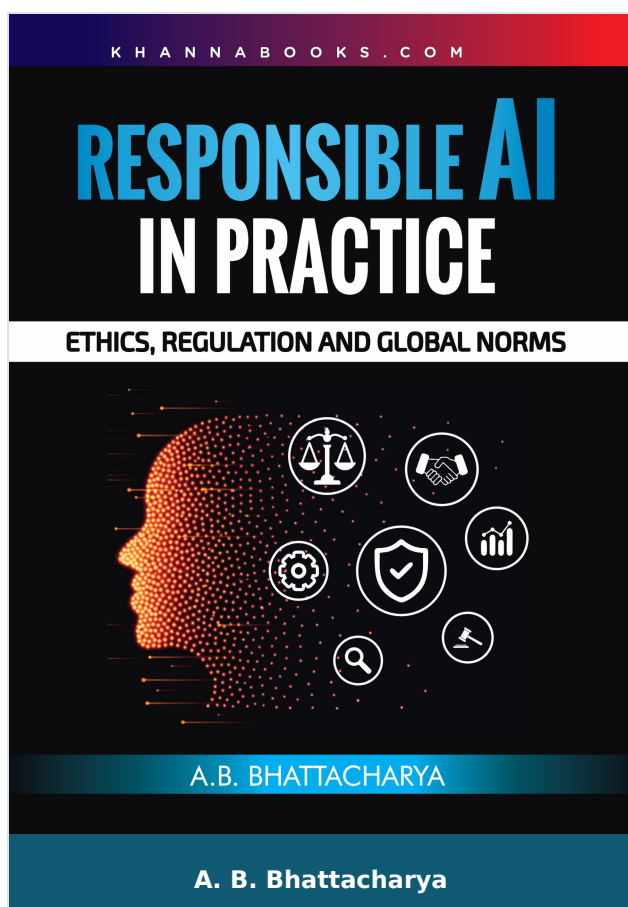
A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars

received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

A. Nag

A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.



Responsible AI in Practice (Ethics, Regulation and Global Norms)

Author : A. B. Bhattacharya

ISBN 13 : 978-93-74541-46-3

ISBN 10 : 9374541467

E-ISBN 13 : 978-93-74541-46-3

Edition : First

Pages : 424

Type of book : Physical

Year : 2026

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 590.00

Categories : [New Arrivals, Emerging Technologies, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

Responsible AI in Practice (Ethics, Regulation and Global Norms)

Responsible AI in Practice: Ethics, Regulation and Global Norms serves as a vital compass for navigating the complex intersection of cutting-edge technology and human values. In an era where Artificial Intelligence has moved from science fiction to a pervasive social force, this book addresses the urgent question of how to ensure AI serves humanity rather than undermining it. It transcends abstract academic debate by bridging the gap between philosophical reflection and real-world implementation, offering a practical guide to transforming high-level ethical principles into actionable product designs and regulatory enforcement.

The text meticulously explores the evolving tapestry of global AI governance, from the European Union's AI Act to UNESCO's global guidelines, providing a multidimensional view of how different nations are crafting a shared ethical language for machines. Designed for a broad audience, it speaks directly to policymakers drafting laws, engineers embedding ethics into code, researchers probing machine learning boundaries, and engaged citizens seeking to understand the societal mirror that AI represents. By weaving together case studies, ethical checklists, and comparative legal insights, the book empowers readers to act as responsible custodians of transformative technology.

Salient Features: -

- **Practical Frameworks for Ethical Design:** The book moves beyond theory to provide a "roadmap" for embedding fairness and accountability directly into AI architecture. It offers technical toolkits for mitigating bias and solving the "Black Box" problem through Explainable AI (XAI), ensuring systems are both transparent and trustworthy.

- **Global Regulation and Human Rights:** It provides a comprehensive analysis of the international regulatory landscape, including the EU AI Act and UNESCO guidelines. This focus extends to protecting fundamental human rights against risks like mass surveillance, profiling, and the unethical use of autonomous systems.
- **Sustainable and Future-Ready Innovation:** The text prepares readers for emerging shifts-such as Generative AI and deepfakes-while advocating for "Green AI." This vision balances technological advancement with ecological sustainability and the promotion of equitable economic opportunities worldwide.

Table Of Contents

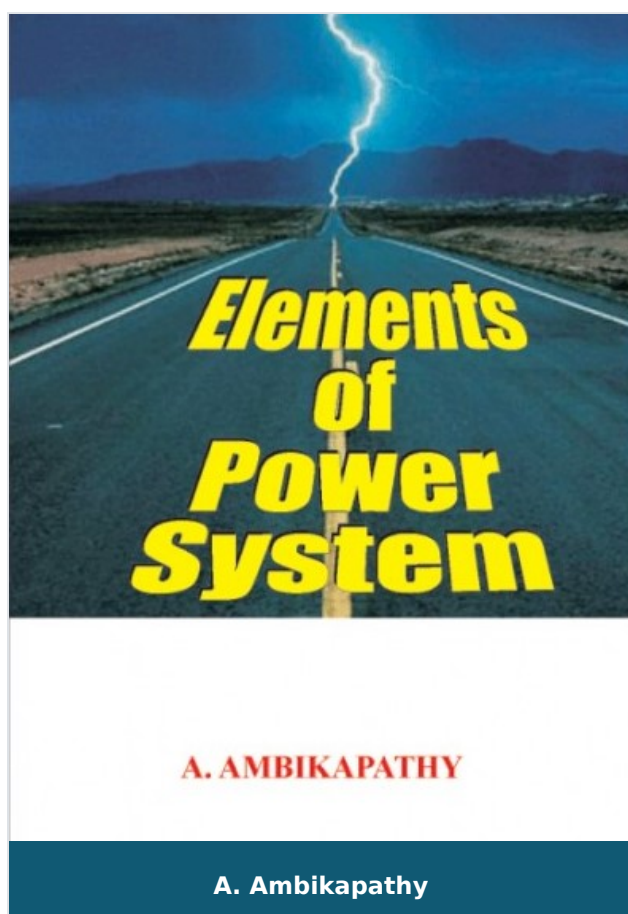
- Preface
- Acknowledgement
- Introduction to Responsible AI
- Foundations of AI Ethics
- Bias, Fairness and Inclusion in AI
- Transparency and Explainability in AI
- Privacy and Data Protection in AI
- Accountability and Governance of AI
- AI and Human Rights
- AI Laws and Regulations: A Global Perspective
- Ethical Challenges in Emerging AI Applications
- Building Ethical AI: Frameworks, Tools and Best Practices
- AI and the Future of Work: Ethics and Social Justice
- The Road Ahead: Future Challenges and Ethical Imperatives
- Appendices

Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of

Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness honored him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.



Elements of Power System

Author :	A. Ambikapathy
ISBN 13 :	978-93-80016-93-1
ISBN 10 :	938001693X
E-ISBN 13 :	978-93-80016-93-1
Edition :	1
Pages :	260
Type of book :	Physical
Year :	2010
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 295.00
Categories :	Electrical, Electronics & Communication Engineering, Book Store
Condition Type :	New
Country Origin :	India

Product Description

The textbook on "Elements of Power System" tell about the basic concepts of power system in a detailed manner. This book contains the brief explanation string and their efficiency and sag calculations. All the concepts are explained in a easy way so that students can understand them well. The clear information's are given about the construction of cables and insulators in detail with neat diagram.

Table Of Contents

- Power System Components
- Overhead Transmission Lines
- Corona Interference
- Mechanical Design of Transmission Line
- Neutral Grounding
- Question and Answers
- Review Questions

Author

A. Ambikapathy

A. Ambikapathy currently working as an assistant professor in " Galgotia Colege of Engineering and Technology " holds M. Tech degree. She has presented five papers in national level conferences. She worked under three different universities and having ten years of teaching experience.