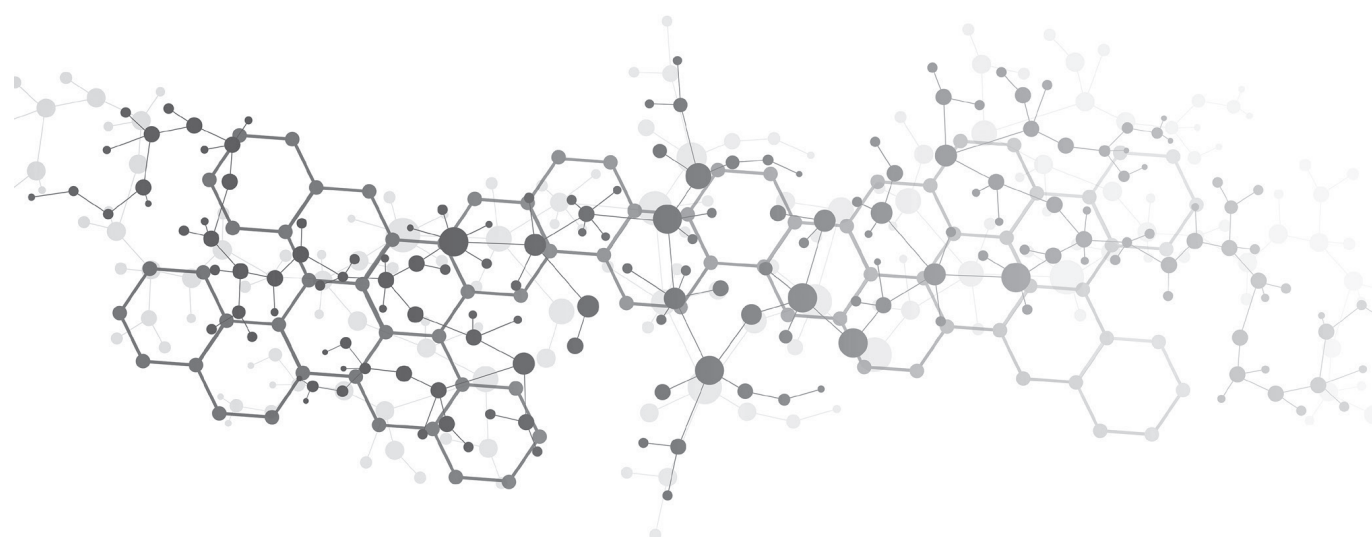


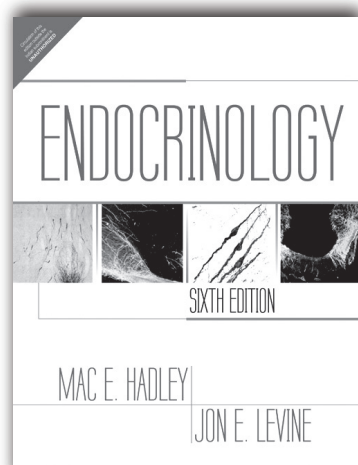
CONTENTS

| | |
|--|----------|
| Pharmacy | 2 |
| Human Anatomy And Physiology-i | 3 |
| Pharmaceutical Analysis | 4 |
| Pharmaceutics-i | 8 |
| Pharmaceutical Inorganic Chemistry | 9 |
| Communication Skills | 10 |
| Remedial Mathematics | 17 |
| Pharmaceutical Organic Chemistry | 18 |
| Biochemistry | 29 |
| Computer Applications In Pharmacy | 31 |
| Environmental Sciences | 33 |
| Physical Pharmaceutics-i | 35 |
| Pharmaceutical Microbiology | 36 |
| Pharmaceutical Engineering | 41 |
| Pharmaceutical Inorganic Chemistry-iii | 45 |
| Medical Chemistry-1 | 46 |
| Physical Pharmaceutics-ii | 47 |
| Pharmacology-i | 48 |
| Pharmacognosy And Phytochemistry-i | 49 |
| Industrial Pharmacy-i | 50 |
| Pharmaceutical Biotechnology | 51 |
| Instrumental Methods Of Analysis | 53 |

| | |
|---|-----------|
| Biostatistics and Research Methodology | 54 |
| Pharma Marketing Management | 56 |
| Cell And Molecular Biology/ Pharmaceuticals-i | 57 |
| Nursing | 59 |
| English | 63 |
| Biochemistry | 64 |
| Psychology | 65 |
| Microbiology | 66 |
| Pharmacology | 73 |
| Genetics | 74 |
| Midwifery And Obstetrical Nursing | 76 |
| Nursing Research And Statistics | 77 |
| Emergency And Medical Care | 79 |



Pharmacy



ISBN: 9788131726105

Endocrinology, 6/e

 Mac E. Hadley | Jonathan Levine

 608 | © 2009

Web Supplements



ABOUT THE BOOK

Appropriate for one-semester junior-graduate level courses in Endocrinology, Endocrine Physiology, as well as courses in medicine, dentistry, pharmacology, nutrition, nursing and other related medical or animal sciences where endocrinology is the focus. Hadley provides comprehensive coverage of endocrinology, centralizing on the critical roles of glands, hormones, receptors, and molecular signaling pathways in the control of physiological processes. This up-to-date Sixth Edition reviews

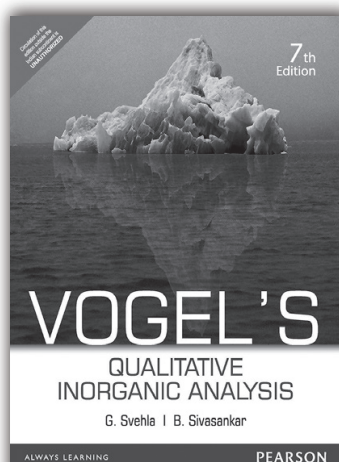
the basic concepts, research methodologies, and the “state-of-the-art” scientific understanding of each of the major endocrine systems, in examples designed specifically for premedical and related professional course

FEATURES

- Emphasizes that all aspects of hormone function—synthesis, secretion, delivery, action and disposal—are of great physiological significance.
- Special reference to the roles of chemical messengers in the control of homeostatic systems—In the overall discussion of homeostasis.
- Coverage of the most recent molecular, genetic, and physiological—As well as the more classical methodologies.
- Traces the evolution of hormone structure—In relation to the comparative endocrinology of neurohypophysial hormones.

CONTENTS

1. Introduction to Endocrinology.
2. The Vertebrate Endocrine System.
3. General Mechanisms of Hormone Action.
4. Endocrine Methodologies.
5. Pituitary Hormones.
6. The Endocrine Hypothalamus.
7. Neurohypophysial Hormones.
8. Melanotropic Hormones.
9. Hormonal Control of Calcium Homeostasis.
10. Gastrointestinal Hormones.
11. Pancreatic Hormones and Metabolic Regulation.
12. Growth Hormones.
13. Thyroid Hormones.
14. Catecholamines and the Sympathoadrenal System.
15. Adrenal Steroid Hormones.
16. Endocrinology of Sex Differentiation and Development.
17. Hormones and Male Reproductive Physiology.
18. Hormones and Female Reproductive Physiology.
19. Endocrinology of Pregnancy, Parturition and Lactation.
20. Endocrine Role of the Pineal Gland.



ISBN: 9788131773710

Vogel's Qualitative Inorganic Analysis, 7/e

 **G. Svehla | B. Sivasankar**

 **384 | © 2013**

ABOUT THE BOOK

Vogel's Qualitative Inorganic Analysis (in its seventh edition) follows the current trends and techniques in the field of analytical chemistry. Written for undergraduate and postgraduate students of chemistry, this revised and updated edition treats each concept and principle systematically to make the subject comprehensible to beginners as well as advanced learners.

FEATURES

- Updated nomenclature
- Addition of tests for metals based on flame atomic emission and atomic absorption spectrometry
- New classification of mixtures of common and less common ions
- Marginalia highlighting important facts
- Elaborate discussions on preliminary tests, dissolution and fusion of samples
- Health and hazard warnings throughout the text
- Details on the preparation of reagents provided in the appendix

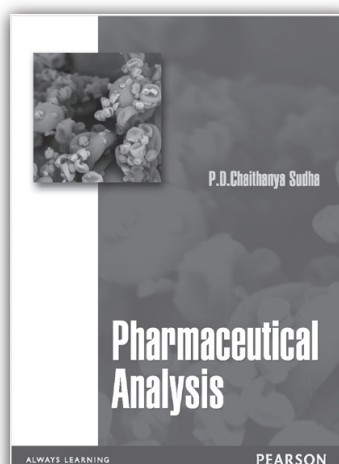
CONTENTS

- | | |
|-----------------------------|---------------------------------------|
| 1. Introduction | 4. Reactions of the Anions |
| 2. Experimental Techniques | 5. Selected Tests and Separations |
| 3. Reactions of the Cations | 6. Reactions of Some Less Common Ions |

ABOUT THE AUTHOR (S)

G. Svehla is a formerly professor from the department of chemistry, University College, York, Ireland.

B. Sivasankar is a visiting professor from the department of chemistry, Anna University, Chennai, Tamilnadu.



ISBN: 9788131773697

Pharmaceutical Analysis

 **P D Chaithanya Sudha**

 **668 | © 2012**



ABOUT THE BOOK

Pharmaceutical Analysis is a compulsory subject offered to all the under graduate students of Pharmacy. This book on Pharmaceutical Analysis has been designed considering the syllabi requirements laid down by AICTE and other premier institutes/universities. The book covers both the Titrimetric and Instrumental aspects of Pharmaceutical analysis which is helpful for use in multiple semesters.

FEATURES

- Spectroscopy and chromatography along with the latest techniques like affinity chromatography, super critical fluid chromatography and nano- flow liquid chromatography are explained in a student friendly manner
- Unique compilation of analysis of reagents, analysis of pharmaceutical agents, analysis of biological compounds, quality assurance and regulatory affairs and concept of validation in a single book.
- Detailed coverage of non -aqueous titrations, complexometric titrations and water analysis.
- Numerous review questions, solved problems and end of chapter exercises:



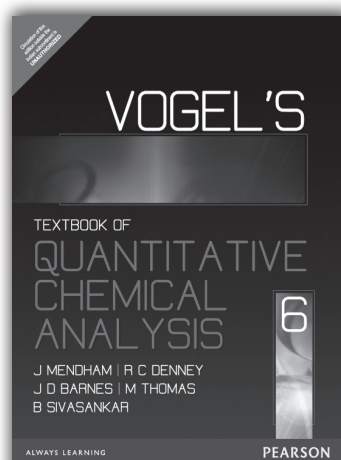
CONTENTS

1. Introduction to Analysis
2. Physical Analytical Methods
3. Titrimetric Methods
4. Electro analytical Methods
5. Spectroanalytical Methods
6. Chromatographic Techniques
7. Reagents
8. Radiometric Analysis
9. Analysis of Functional groups
10. Analysis of pharmaceutical agents
11. Analysis of packing materials
12. Analysis of Biological compounds (ELISA and other Bioassays)
13. Thermal analysis
14. Analysis of water
15. Analysis of food components
16. Quality Assurance and Regulatory Affairs
17. Concept of Validation
18. Statistical Analysis

ABOUT THE AUTHOR (S)

Shoba Ramakrishnan was Former Professor and Head, Department of Chemistry, Women's Christian College, Chennai, Tamil Nadu.

Banani Mukhopadhyay is Assistant Professor, Department of Chemistry, Women's Christian College, Chennai, Tamil Nadu.



ISBN: 9788131723258

Vogel's Quantitative Chemical Analysis, 6/e

 J. Mendham | David J. Barnes | R.C. Denney | M. J. K. Thomas

 836 | © 2009

ABOUT THE BOOK

Dr. Vogel's classic introduction to analytical methods has provided generations of chemists worldwide with a basis for teaching, learning and applying analytical chemistry. This 60th anniversary edition - the first for a decade - reflects major changes in the subject. Analysts need to understand the concepts behind methods and *Vogel's Quantitative Chemical Analysis* provides clear introductions to all the key analytical methods including those involving advanced computerised equipment available in many analytical laboratories.

The editors have built further on the work of Dr Vogel, modernising the approach while retaining the analytical concepts and ideas which were built into the original work. This new edition has been extensively revised to take into account developments in instrumental procedures and coupled techniques whilst maintaining the book's focus on quantitative chemical and problem-specific analyses. With excellent cross-referencing this book provides a wealth of examples and tables of data.

FEATURES

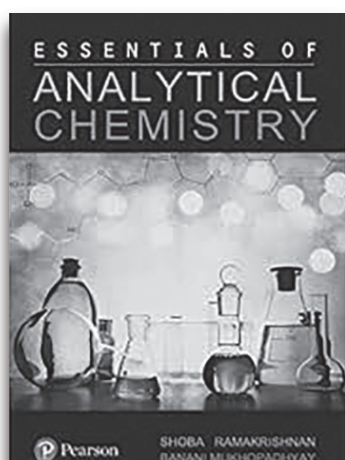
- Comprehensive coverage of methods with detailed easy-to-follow practical experiments.
- Basic analytical theory which is essential for understanding the subject.
- Greatly expanded sections on instrumental analysis including aspects of miniaturisation.
- Increased emphasis on minor/trace component analysis and revised statistical handling of data.
- New chapters on sampling, mass spectrometry and nuclear magnetic resonance.

CONTENTS

- | | | |
|---|--|--|
| 1. Preface to First Edition. | 8. Statistics, Introduction to Chemometrics. | 17. Direct Electroanalytical Methods. |
| 2. Preface to Sixth Edition. | 9. Sampling. | 18. Nuclear Magnetic Resonance Spectroscopy. |
| 3. Safety; Units. | 10. The Basis of Separative Methods. | 19. Atomic Absorption Spectroscopy. |
| 4. Reagent Purity. | 11. Thin Layer Chromatography. | 20. Atomic Emission Spectroscopy. |
| 5. Introduction. | 12. Liquid Chromatography. | 21. Molecular Electronic Spectroscopy. |
| 6. Fundamental Theoretical Principles of Reactions in Solution. | 13. Gas Chromatography. | 22. Vibrational Spectroscopy. |
| 7. Common Apparatus & Basic Techniques. | 14. Titrimetric Analysis. | 23. Mass Spectrometry |
| | 15. Gravimetric Analysis. | |
| | 16. Thermal Analysis. | |

ABOUT THE AUTHOR (S)

R.C. Denney, Consultant Forensic Scientist
J. Mendham, Consultant Analytical Chemist
J. D. Barnes, University of Greenwich.
M.J.K. Thomas, University of Greenwich



ISBN: 9789332545076

Essentials of Analytical Chemistry

 **Shobha Ramakrishnan | Banani Mukhopadhyay**

 **400 | © 2018**

ABOUT THE BOOK

The book elucidates the principles of analytical methods such as volumetric analysis, gravimetric analysis, statistical methods of analysis, electro-analytical, and thermoanalytical techniques. It also presents the basic principles and instrumentation of UV, IR, NMR, Mass and ESR spectral methods, accompanied by a discussion on the spectra of a number of molecules, intended to develop the skill of the reader and to interpret the spectra of common organic molecules. This text will benefit those preparing for competitive examinations such as NET, SLET, GATE, and the UPSC Civil Services exam.

FEATURES

- Includes up-to-date developments in the field
- Detailed illustration of AES, AAS, and Flame Photometry
- Numerous review questions, solved problems and end of chapter exercises:

CONTENTS

Preface

Acknowledgements

About the Authors

UNIT I Statistical Methods of Analysis

1. Errors in Chemical Analysis and Statistical Data Treatment

UNIT II Quantitative Analysis

2. Volumetric (Titrimetric) Analysis
3. Gravimetric Analysis

UNIT III Thermal Methods of Analysis

4. Thermogravimetric Analysis
5. Differential Thermal Analysis
6. Thermometric Titration

UNIT IV Electroanalytical Techniques

7. Electrogravimetry
8. Polarography

UNIT V Atomic Spectroscopy

9. Atomic Emission Spectroscopy
10. Flame Emission Spectroscopy or Flame Photometry
11. Atomic Absorption Spectroscopy

UNIT VI Molecular Spectroscopy

12. Ultraviolet and Visible Spectroscopy
13. Infrared Absorption Spectroscopy
14. Nuclear Magnetic Resonance (NMR) Spectroscopy
15. Electron Spin Resonance Spectroscopy

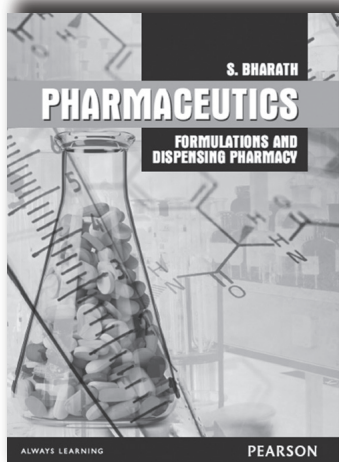
UNIT VII Mass Spectrometry

16. Mass Spectrometry
- Bibliography
Index

ABOUT THE AUTHOR (S)

Shoba Ramakrishnan was Former Professor and Head, Department of Chemistry, Women's Christian College, Chennai, Tamil Nadu.

Banani Mukhopadhyay is Assistant Professor, Department of Chemistry, Women's Christian College, Chennai, Tamil Nadu.



ISBN: 9788131795453

Pharmaceutics: Formulations and Dispensing Pharmacy

 S. Bharath

 304 | © 2013

Web Supplements



ABOUT THE BOOK

Pharmacy is a diverse field, of which pharmaceutics constitutes an integral part. This book has been designed to sensitize the students of pharmacy to the core concepts of pharmaceutics and to disseminate information on converting a drug into suitable dosage forms. It spells out fundamental theoretical aspects of the various dosage forms in a lucid language that enable students to grasp the basics effectively.

FEATURES

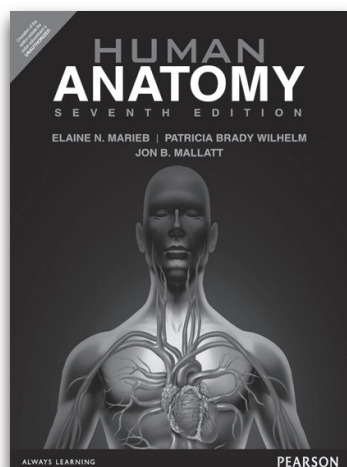
- Solid, liquid and semisolid dosage forms delineated with examples cited for each dosage form
- Emphasis on sterile dosage forms, aerosol technology and surgical aids to give students an insight into their role in therapy
- Exclusive chapter on herbal formulations
- Well-defined diagrams and flowcharts for unambiguous understanding of the concepts and principles.
- Numerous frequently asked questions and multiple choice questions

CONTENTS

- | | | |
|---------------------------------|---------------------------------------|------------------------------------|
| 1. Introduction To Pharmacy | Part I—Monophasic Liquid Dosage Forms | 9. Incompatibilities |
| 2. Prescription | | 10. Surgical Ligatures and Sutures |
| 3. Posology | Part II—Biphasic Liquid Dosage Forms | 11. Herbal Formulations |
| 4. Introduction To Dosage Forms | | 12. Pharmaceutical Aerosols |
| 5. Solid Dosage Forms | 7. Semi - Solid Dosage Forms | |
| 6. Liquid Dosage Forms | 8. Sterile Dosage Forms | |

ABOUT THE AUTHOR

S. Bharath is Professor of pharmaceutics at M. S. Ramaiah College of Pharmacy, Bengaluru. An established academician with 16 years of teaching and research experience enhanced by a strong industrial background, he has guided numerous postgraduate students in their project work. He is currently guiding doctoral students in research leading to their PhD degrees. He has to his credit more than 60 research articles and over 70 papers presented in national and international journals and conferences.



ISBN: 9788131769409

Human Anatomy, 7/e



N V Chenchu Lakshmi



430 | © 2012

Web Supplements



ABOUT THE BOOK

Pharmaceutical Inorganic chemistry is a compulsory subject offered to all the under graduate students of Pharmacy. This book on Pharmaceutical Inorganic chemistry has been designed considering the syllabi requirements laid down by AICTE and other premier institutes/universities. The book has two separate sections, one for the theory and the other for practical. Review questions, and viva voce questions have been included to make this book a unique offering to the students of Pharmacy.

FEATURES

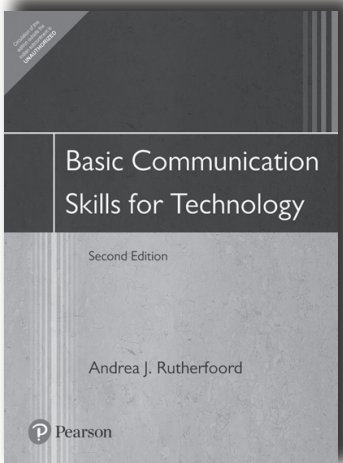
- The monographs of all the compounds are explained along with their preparation and formulations
- Detailed coverage on Radio pharmaceuticals
- Separate chapters on water, silicates, cement and fillers in dental products and pharmaceutical reagents and Pharmaceutically acceptable glass

CONTENTS

- | | |
|---|--|
| 1. Introduction | 12. Official compounds of Iodine |
| 2. Importance of Inorganic Chemistry in day to day life | 13. Gastrointestinal Agents |
| 3. Periodic classification of elements | 14. Dental products |
| 4. Pharmacopoeia | 15. Pharmaceutical acids |
| 5. Impurities in pharmaceuticals | 16. Topical agents |
| 6. Water | 17. Respiratory agents |
| 7. Acids and Bases | 18. Radio pharmaceuticals |
| 8. Buffer Solutions | 19. Miscellaneous |
| 9. Electrolytes | 20. Complexing agents |
| 10. Official compounds of Calcium | 21. Qualitative tests for anions and cations |
| 11. Official compounds of Iron | 22. Reagents |

ABOUT THE AUTHOR

N V Chenchu Lakshmi, is from the Department of Pharmaceutical chemistry at KVSR Siddhartha College of Pharmaceutical sciences, Vijayawada



ISBN: 9788177584073

Basic Communication Skills for Technology, 6/e

 **Andrea J. Rutherford**

 **416** | © **2005**

ABOUT THE BOOK

This book provides practical applications of writing in vocational/technical fields, Presenting clear, simplified explanations of key concepts and skills in written communication, Rutherford's guide covers the writing process in a systems approach that integrates reading, planning, writing, and revising.

FEATURES

- Fourteen technical reading passages that introduce or demonstrate each writing topic.
- Integration of reading, writing, spelling, word usage, and vocabulary exercises and assignments within each chapter.
- Complete and independent grammar and mechanics units for flexible planning and individualized study.
- Exercises and models using common technical vocabulary and concepts.
- Explanations of concepts in language that is easy to understand and apply.
- This book is designed to help readers gain a working knowledge of all the major skills for career-related communication, including e-mail, graphics, reports, business correspondence, presentations, job interviews, and resumes.

CONTENTS

- Audience
- Language and Style
- Organization

PART 2 Writing Elements

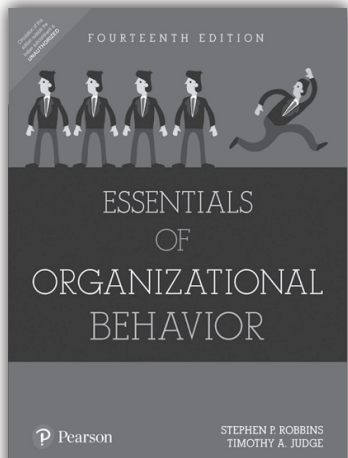
- Technical Definitions
- Technical Descriptions

- Summaries
- Graphics
- Instructions
- Comparison and Contrast

PART 3 Forms of Technical Communication

- Technical Reports

- Forms, Memos, and E-mail
- Business Letters
- Presentations
- The Job Search: Resumes and Letters



ISBN: 9789353067007

Essentials of Organizational Behavior, 14/e

 Stephen P. Robbins | Timothy A. Judge

 400 | © 2019



ABOUT THE BOOK

Essentials of Organizational Behavior teaches students how to communicate and interact within organizations, through real-world scenarios. The text offers comprehensive coverage of key organizational behavior (OB) concepts, making each lesson engaging and easy to absorb. Students can use the book's concepts to apply what they've learned to their own education, future career plans, and other organizational endeavors. Currently used at more than 500 colleges and universities worldwide, Essentials of Organizational Behavior serves as a popular resource so students can learn and understand the most important concepts in OB. With updated research and the integration of contemporary global issues, the 14th Edition focuses on the most relevant OB concepts that resonate with students.

FEATURES

- **UPDATED!** Increased coverage of contemporary global issues was added into topic discussions.
- Concise coverage of topics allows students to learn the full scope of the organizational behavior field of study, all in less than 350 pages.
- Balanced coverage features traditional organizational behavior concepts such as personality and leadership, and modern issues such as diversity and negotiation.
- A conversational writing style keeps the text fluid and engaging, using clear, real-life examples to further explain complex concepts.
- A practical approach ensures students see the connection between organizational behavior theories and the implications for practice in a real-world setting.

CONTENTS

Part 1: An Introduction

1. Welcome to the World of OB

Part 2: Individual Differences

2. Attitudes
3. Emotions
4. Personality Factors
5. Perceptual Processes
6. Valuing Diversity
7. Basic Motivation

8. Applied Motivation

Part 3: Groups in Organizations

9. Communication
10. Basics of Group Behavior
11. From Groups to Teams
12. Characteristics of Leaders
13. Power and Politics in Organizations
14. Conflict in Organizations

Part 4: Organizational Systems

15. Organization Structure and Design
16. Creating and Maintaining Organizational Culture
17. Organizational Change

ABOUT THE AUTHOR (S)

Stephen P. Robbins, San Diego State University

Timothy A. Judge, University of Notre Dame



ISBN: 9780273761747

CONTENTS

Part 1

- Chapter 1: What is communication? Knowing your communication style
- Chapter 2: Confident communication
- Chapter 3: Active listening and skilful questioning
- Chapter 4: Reading between the lines; feelings, emotions and attitudes

ABOUT THE AUTHOR

Gill Hasson is an associate tutor at the University of Sussex. She is also a freelance trainer and delivers courses for voluntary organisations, schools, parents and social workers, covering topics including assertiveness, confidence building and communication skills at work. Gill is a co-author of Bounce - use the power of resilience to live the life you want, (Pearson 2009) and 'How to be Assertive' (Pearson 2010) and also writes for magazines such as Psychologies and Natural Health

Brilliant Communication Skills: What the Best Communicators Know, Do and Say

 Gill Hasson

 192 | © 2012

ABOUT THE BOOK

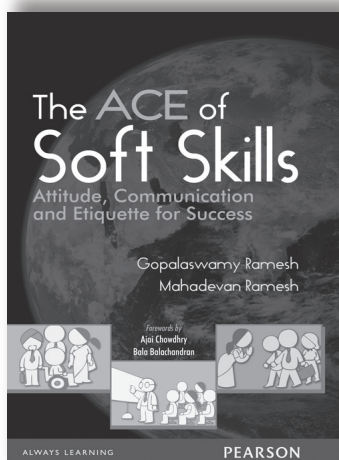
Learn and practice the powerful skills of good communication to get the very best from relationships both at work and home.

Clever tips, techniques, practical pointers and real life examples will help you boost and polish your communication skills as you learn the best ways to say what you mean to get what you want.

- Chapter 5: What to say, how to say it.
- Chapter 6: Put it in writing

Part 2

- Chapter 7: Putting it into practice



ISBN: 9788131732854

The ACE of Soft Skills: Attitude, Communication and Etiquette for Success

 Gopalaswamy Ramesh | Mahadevan Ramesh

 472 | © 2010

ABOUT THE BOOK

Our world is witnessing a major change in communication patterns, with expanding social spheres, openness in communication and professionals working in multicultural environments. It is crucial, therefore, that India's workforce remains world-class, through re-training and continuous improvement, to remain competent, competitive and successful. To create and nurture successful professionals, the acquisition, cultivation and fine-tuning of soft skills are highly essential in the given business paradigm. **The ACE of Soft Skills** is a part of this educational process that produces top-notch professionals. Divided into three



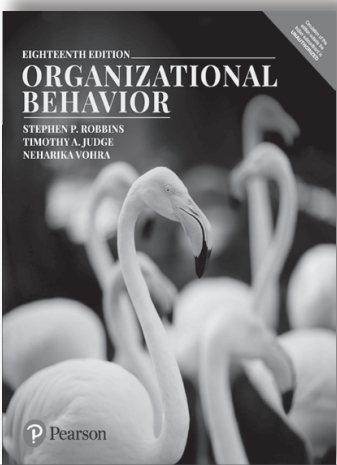
parts “Attitude, Communication and Etiquette” this unique book provides a broad-based coverage of what constitute soft skills. The foundations of soft skills lie in a strong attitude; this attitude gets manifested as communication, which gets further refined as etiquette. This book covers a wide range of topics “a gamut of nearly 40 essential soft skills” including personal accountability, listening skills, business proposals, and the role of small talk and humour at work. The numerous case studies, cartoons, figures, tables and quotations not only offer an insightful, practical and well rounded perspective into soft skills, but also make reading a joyful experience

CONTENTS

| | | |
|---|--|---|
| 1. Let Us Get Started! | Part II: Communication | 26. Proposals |
| Part I: Attitude | 13. Understanding the Communication Cycle | 27. Status Reports |
| 2. Big Picture, Pride, Passion and Process | 14. Distortion in Communication | 28. Giving and Receiving Feedback |
| 3. Vision | 15. The ‘Why’ and ‘To Whom’ Parts of Communication: | 29. Performance Appraisals |
| 4. Personal Accountability | 16. Knowing the Objective of Communication and Audience Analysis | 30. How to Present Bad News |
| 5. Teamwork and You | 17. Preparing for the Communication | 31. Presenting to the Senior Management |
| 6. Diversity Awareness | 18. Listening Skills | Part III: Etiquette |
| 7. Lifelong Learning | 19. Body Language | 32. Phone Etiquette |
| 8. Performance Expectations Management | 20. Vocal Variety: Using the Voice Channel | 33. E-mail Etiquette |
| 9. The Art of Time Management | 21. Visual Aids | 34. Foreign Business Trips |
| 10. Stepping Up to the Plate | 22. Putting It All Together | 35. Visits of Foreign Counterparts |
| 11. When Things Go Way Wrong at the Workplace | 23. Resume Writing | 36. The Big Deal About Small Talk |
| 12. Tying It All Together: Work Your Way to Success | 24. Interviews | 37. Respecting Privacy |
| | 25. Meetings | 38. Learning to Say ‘No’ |
| | | 39. The Role of Humour in the Workplace |
| | | 40. English-language Skills |
| | | 41. Reach for the Moon |

ABOUT THE AUTHOR (S)

Professor **Gopalaswamy Ramesh** has 30 years of international experience and is an independent consultant and Adjunct Professor at the International Institute of Information Technology Bangalore (IIIT-B), SSN School of Management and Computer Applications, Chennai, and Amrita School of Business, Coimbatore. He has also taught at the Indian Institute of Management Bangalore; Anna University, Chennai; Great Lakes Institute of Management, Chennai, and XLRI Jamshedpur. His vast industry experience covers both India and abroad. He played a key role in the establishment of Oracle India Development Center and was its former Senior Director. He is the author of the National Award “winning book **Managing Global Software Projects**, and has also authored **Software Testing Principles and Practices and Software Maintenance**. Two of these books have also been translated into Chinese. His most recent book is **The ACE of Soft Skills: Attitude, Communication and Etiquette for Success**. He currently offers consultancy services in the areas of project management and soft skills to several companies in India and abroad. He holds an MS in engineering management from Stanford University, California; MS in computer science from IIT Madras and BE from IISc Bangalore. **Mahadevan Ramesh** graduated from IIT Kanpur (five-year integrated MSc degree in Physics) and earned a PhD (Physics) from the Ohio State University, USA. Following a research stint in the electrical and computer engineering department in Carnegie Mellon University, Pittsburgh, he worked for Storage Technology Corporation (now a part of Sun Microsystems/Oracle), and for Maxtor Corporation (now a part of Seagate Technologies) at Colorado, USA. He held leadership positions in global product teams and spent considerable time on the factory floor in Singapore, working with stakeholders from many different cultures, and learnt first hand the importance of soft skills. He is currently an adjunct professor in the SSN School of Management and Computer Applications, and he also consults on management and engineering, specializing in production and operations management.



ISBN: 9789353067038

Organizational Behavior, 18/e



Stephen P. Robbins | Timothy A. Judge | Neharika Vohra



800 | © 2019

Web Supplements



ABOUT THE BOOK

Long considered the standard for all organizational behavior textbooks, the Eighteenth Edition continues its tradition of making current, relevant research available to students in the language that they understand. While maintaining its hallmark features “clear writing style, cutting-edge content, and engaging pedagogy” Organizational Behavior, 18/e has been updated to reflect the most recent research within the field of organizational behavior. In addition to comprehensive and thorough revisions of the core material, this edition reflects important research and topical issues facing organizations, managers, and employees. Examples from Indian organizations are added to make it relevant to the readers.

FEATURES

- An Employability Skills Matrix at the beginning of each chapter provides students with a visual guide to features that support the development of skills employers are looking for.
- Opening-Chapter Vignettes and cases bring current business trends and events to the forefront so students are kept up-to-date on the current managerial landscape. Some of the new cases are on OYO Rooms, Accenture Vaahini, Bengal Chemicals and Pharmaceuticals Limited, M.S. Dhoni, and Nestlé India (Maggi), to name a few.
- A modified Chapter 5: Personality, Learning, and Values including an extensive discussion on “Learning”
- New photos and captions link the chapter content to contemporary real-life worldwide situations to enhance students’ understanding of the hands-on application of concepts.
- New and updated profiles of real company leaders (for example, N.R. Narayan Murthy of Infosys, Riyaaz Amlani of MOCHA Coffees, Falguni Nayar of Nykaa, Uday Kotak of Kotak Mahindra Bank, etc.) throughout the text illustrate how course concepts have helped their success.
- Each end of chapter includes Experiential Activities, Ethical Dilemmas, and Cases. Also, 5 Comprehensive Cases at the end of the text provide more application practice than any other text available.

CONTENTS

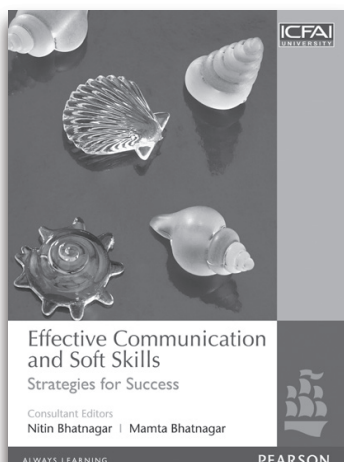
1. What Is Organizational Behavior?
2. Diversity in Organizations
3. Attitudes and Job Satisfaction
4. Emotions and Moods
5. Personality, Learning, and Values
6. Perception and Individual Decision Making
7. Motivation Concepts
8. Motivation: From Concepts to Applications
9. Foundations of Group Behavior
10. Understanding Work Teams
11. Communication
12. Leadership
13. Power and Politics
14. Conflict and Negotiation
15. Foundations of Organization Structure
16. Organizational Culture
17. Organizational Change and Stress Management

ABOUT THE AUTHOR (S)

Stephen P. Robbins, San Diego State University

Timothy A. Judge, The Ohio State University

Neharika Vohra, Indian Institute of Management Ahmedabad



ISBN: 9788131760345

Effective Communication and Soft Skills

 Nitin Bhatnagar | Mamta Bhatnagar

 448 | © 2011

ABOUT THE BOOK

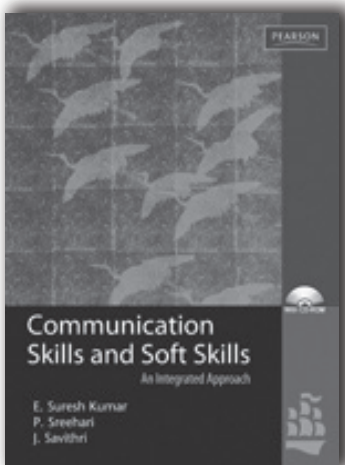
This book provides a clear understanding of the attributes of good communication vis-à-vis soft skills and hard skills. It guides you through each set of skills and provides practice and assessment modules to sharpen learning, while covering all the four tenets of language learning, listening, speaking, reading and writing. Covering all the topics essential for teachers and students of BCom, BBA and MBA and mass communications, as well as professionals in all industries, **Soft Skills and Communication Skills** is a complete manual to grooming yourself for inter-personal communication in the professional world.

FEATURES

- Situational case studies, illustrations and flow charts for clear grasp of concepts
- Model questions for practice and guidelines for answering difficult problems
- Highlights the linkages between soft skills and hard skills, illustrating the manner in which they can be utilized together in professional situations

CONTENTS

- | | |
|--|--|
| 1. Introduction | 11. Communication: Spoken English |
| 2. About the Editors | 12. Communication: Written English |
| 3. Soft Skills: Growing Importance | 13. Emotional Skills |
| 4. Understanding Communication | 14. Interpersonal Effectiveness |
| 5. Channels of Communication | 15. Assertiveness Skills |
| 6. Evolution and Theories of Communication | 16. Conflict Management and Negotiation Skills |
| 7. Models of Communication | 17. Team-building Skills |
| 8. Psychology and Communication | 18. Time-management Skills |
| 9. Pedagogy and Communication | 19. Model Question Papers |
| 10. Communication Skills | |



ISBN: 9788131734537

Communication Skills and Soft Skills : An Integrated Approach



E. Suresh Kumar | J. Savithri | P. Sreehari



208 | © 2010

ABOUT THE BOOK

Communication Skills and Soft Skills is an invaluable guide to students of professional courses, job seekers and people of various professions seeking to improve their soft skills. The unique feature of the book is that it integrates training in essential soft skills with all the four language skills "listening, speaking, reading and writing" and all the four language components, pronunciation, vocabulary, grammar and spelling. With its perfect blend of theory and practice, this book effectively meets the requirements of the present-day job market and other interactive spheres of their lives.

FEATURES

- Training in essential soft skills
- Uniquely designed practical approach to improving communication skills
- Guidance for all four language skills, listening, speaking, reading and writing
- Practice modules for all four language components, pronunciation, grammar, vocabulary and spelling

CONTENTS

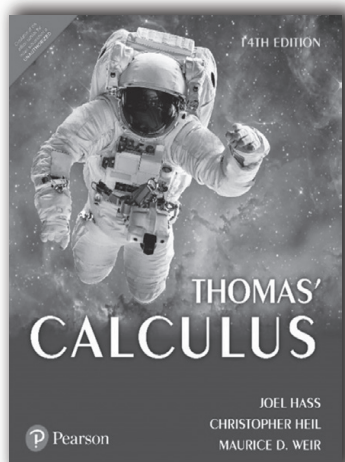
- | | |
|--------------------------------|------------------------------------|
| 1. Interpersonal Communication | 5. Stress Management |
| 2. Goal-setting | 6. Team Work |
| 3. Personality Development | 7. Time Management |
| 4. Critical Thinking | 8. Essential Written Communication |
| Appendixes | |

ABOUT THE AUTHOR (S)

E. Suresh Kumar is Head, Department of English, University College of Engineering, Osmania University, Hyderabad.

P. Sreehari teaches English at Al-Jabal Al-Gharbi University, Zawia, Libya.

J. Savithri teaches English at the Department of English, Osmania University, Hyderabad.



ISBN: 9789353060411

Thomas' Calculus, 14/e

 Joel Hass | Christopher Heil | Maurice D. Weir

 1,208 | © 2018

Web Supplements



ABOUT THE BOOK

Thomas' Calculus, Fourteenth Edition, introduces students to the intrinsic beauty of calculus and the power of its applications. For more than half a century, this text has been revered for its clear and precise explanations, thoughtfully chosen examples, superior figures, and time-tested exercise sets.

FEATURES

- Strong exercise sets feature a great breadth of problems—progressing from skills problems to applied and theoretical problems—to encourage students to think about and practice the concepts until they achieve mastery.

- Complete and precise multivariable coverage enhances the connections of multivariable ideas with their singlevariable analogues studied earlier in the book.

NEW TO THIS EDITION

- Updated graphics emphasize clear visualization and mathematical correctness.
- New examples and figures have been added throughout all chapters, based on user feedback.
- New types of homework exercises, including many geometric in nature, have been added to provide different perspectives and approaches to each topic.
- Short URLs have been added to the historical margin notes, allowing students to navigate directly to online information.
- New annotations within examples guide the student through the problem solution and emphasize that each step in a mathematical argument is rigorously justified.

CONTENTS

- | | |
|---------------------------------------|--|
| 1. Functions | 11. Parametric Equations and Polar Coordinates |
| 2. Limits and Continuity | 12. Vectors and the Geometry of Space |
| 3. Derivatives | 13. Vector-Valued Functions and Motion in Space |
| 4. Applications of Derivatives | 14. Partial Derivatives |
| 5. Integrals | 15. Multiple Integrals |
| 6. Applications of Definite Integrals | 16. Integrals and Vector Fields |
| 7. Transcendental Functions | 17. Second-Order Differential Equations (Online) |
| 8. Techniques of Integration | Appendices |
| 9. First-Order Differential Equations | Answers to Odd-Numbered Exercises |
| 10. Infinite Sequences and Series | |

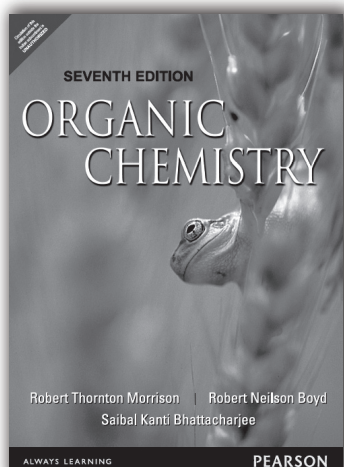
ABOUT THE AUTHOR (S)

George B. Thomas, Jr. (late) of the Massachusetts Institute of Technology, was a professor of mathematics for thirty-eight years; he served as the executive officer of the department for ten years and as graduate registration officer for five years. Thomas held a spot on the board of governors of the Mathematical Association of America and on the executive committee of the mathematics division of the American Society for Engineering Education.

Joel Hass received his PhD from the University of California Berkeley. He is currently a professor of mathematics at the University of California Davis. He has coauthored widely used calculus texts as well as calculus study guides. He is currently on the editorial board of several publications, including the Notices of the American Mathematical Society.

Christopher Heil received his PhD from the University of Maryland. He is currently a professor of mathematics at the Georgia Institute of Technology.

Maurice D. Weir (late) of the the Naval Postgraduate School in Monterey, California was Professor Emeritus as a member of the Department of Applied Mathematics. He held a DA and MS from Carnegie-Mellon University and received his BS at Whitman College.



ISBN: 9788131704813

Organic Chemistry, 7/e



Robert Thornton Morrison | Robert Neilson Boyd |

Saibal Kanti Bhattacharjee



1,508 | © 2010

Web Supplements



ABOUT THE BOOK

As in the earlier editions, the book conveys the important fundamentals and principles of the subject in a simple and easily understandable manner.

CONTENTS

Part 1: Fundamentals of Organic Chemistry

1. Structures of Organic Compounds
2. Structural Theory
3. Symmetry of Organic Molecules (Molecular Dissymmetry)
4. Types of Reactions of Organic Compounds
5. Alkanes, Cycloalkanes and Aromatic Hydrocarbons

Part 2: Chemistry of Functional Groups Alkenes

6. Alkynes
7. Alkyl Halides Nucleophilic Substitutions, S_N Reactions
8. Aryl Halides Nucleophilic Aromatic Substitution (S_NAr Reactions)
9. Alcohols and Ethers
10. Phenols
11. Aldehydes and Ketones Nucleophilic Addition
12. Carboxylic Acids
13. Functional Derivatives of Carboxylic Acids Nucleophilic Acyl Substitution
14. Amines

Part 3: Special Topics

15. Heterocyclic Compounds
16. Purification and Identification of Organic Compounds: Spectroscopic Analysis of Organic Compounds
17. Organic Synthesis
18. Oxidation and Reduction Electroorganic Synthesis
19. Molecular Orbitals; Orbital Symmetry (Pericyclic Reactions)
20. Organic Photochemistry

21. Synthetic Organic Compounds of Commercial Importance: Synthetic Dyes and Macromolecules
22. Symphoria (Anchimeric Assistance) Neighboring Group Effects. Catalysis by Transition Metal Complexes
23. Introduction to Supramolecular Chemistry Host-Guest Chemistry

Part 4: (Biomolecules and Bioorganic Chemistry)

24. Lipids Fats, Steroids, Terpenes, and Prostaglandins
25. Carbohydrates I: Monosaccharides. Carbohydrates

II: Disaccharides and Polysaccharides

26. Alkaloids
27. Amino Acids and Proteins Molecular Biology
28. Enzymes, Co-Enzymes and Vitamins
29. Nucleic Acids Nucleotides, Polynucleotides and Nucleosides
30. Drugs Chemotherapeutic and Pharmacodynamic Agents

Part 5: Contemporary and Future Organic Chemistry

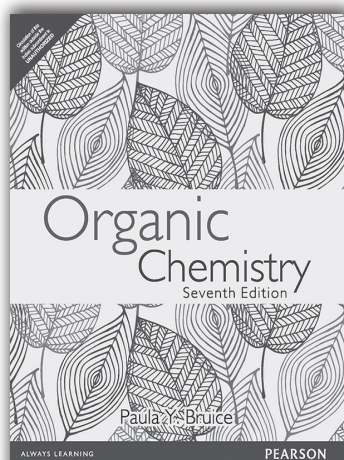
31. Nanoparticles (Size-Dependent Chemistry)
32. Future Devices and Challenges of Chemistry of this Century Molecular Machines or Nanomachines

ABOUT THE AUTHOR (S)

Robert Thornton Morrison, New York University

Robert Neilson Boyd, New York University

Saibal Kanti Bhattacharjee, Gauhati University



ISBN: 9789332519046

Organic Chemistry, 7/e



Paula Yurkanis Bruice



1,344 | © 2013

Web Supplements



ABOUT THE BOOK

All of Paula Bruice's extensive revisions to the Seventh Edition of Organic Chemistry follow a central guiding principle: support what modern students need in order to understand and retain what they learn in organic chemistry for successful futures in industry, research, and medicine.

FEATURES

- A modern organization emphasizing unifying principles of reactivity offers an economy of presentation and discourages memorization:
- Group I electrophilic addition reactions;
- Group II nucleophilic substitution reactions and elimination reactions;
- Group III nucleophilic addition reactions and nucleophilic addition-elimination reactions; and
- Group IV electrophilic (and nucleophilic) aromatic substitution reactions.
- Students are introduced to synthetic chemistry and retrosynthetic analysis early in the book (Chapters 6 and 7, respectively), so they can start designing multistep syntheses early in the course.
- Seven special Design a Synthesis sections introduce and help students through the iterative process of solving complex problems.
- Problem-Solving Strategies teach students how to approach various types of simple and complex problems, encourage students to organize their thoughts, and reinforces the development of critical thinking skills.
- Over 1,900 in-chapter and end-of-chapter problems include solved examples, problem-solving strategies, and cumulative problems. End-of-chapter problems are tied to each chapter's Learning Outcomes and vary in difficulty.
- End-of-chapter summaries review the major concepts of the chapter in a concise narrative format to help students synthesize the key points. Reaction summaries, included in each chapter on reactions, ensure that students understand and can explain how each reaction occurs.

CONTENTS

Part 1: An Introduction to the Study of Organic Chemistry

1. Remembering General Chemistry: Electronic Structure and Bonding
2. Acids and Bases: Central to Understanding Organic Chemistry
3. An Introduction to Organic Compounds: Nomenclature, Physical Properties, and Representation of Structure

Part 2: Electrophilic Addition Reactions, Stereochemistry, and Electron Delocalization

4. Isomers: The Arrangement of Atoms in Space
5. Alkenes: Structure, Nomenclature, and an Introduction to Reactivity • Thermodynamics and Kinetics
6. The Reactions of Alkenes: The Stereochemistry of Addition Reactions
7. The Reactions of Alkynes: An Introduction to Multistep Synthesis
8. Delocalized Electrons and Their Effect on Stability, pKa, and the Products of a Reaction

Part 3: Substitution and Elimination Reactions

9. Substitution Reactions of Alkyl Halides
10. Elimination Reactions of Alkyl Halides • Competition between Substitution and Elimination
11. Reactions of Alcohols, Ethers, Amines, Thiols, and Thioethers
12. Organometallic Compounds
13. Radicals • Reactions of Alkanes

Part 4: Identification of Organic Compounds

14. Mass Spectrometry, Infrared Spectroscopy, and Ultraviolet/Visible Spectroscopy
15. NMR Spectroscopy

Part 5: Carbonyl Compounds

16. Reactions of Carboxylic Acids and Carboxylic Derivatives
17. Reactions of Aldehydes and Ketones
 - More Reactions of Carboxylic Acid Derivatives
 - Reactions of Unsaturated Carbonyl Compounds
18. Reactions at the α -Carbon of Carbonyl Compounds

Part 6:

19. Reactions Of Benzene And Substituted Benzenes
20. More About Amines• Reactions of Heterocyclic Compounds

Part 7: Bioorganic Compounds

21. The Organic Chemistry Of Carbohydrates
22. The Organic Chemistry Of Amino Acids, Peptides, And Proteins
23. Catalysis in Organic Reactions and in Enzymatic Reactions
24. The Organic Chemistry Of The Coenzymes Compounds Derived From Vitamins

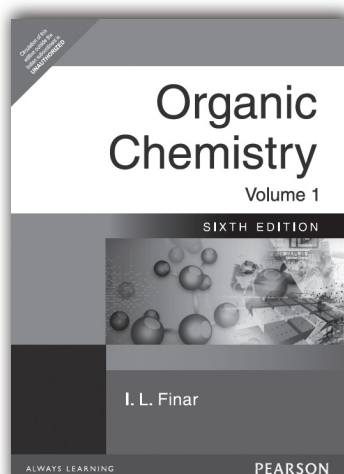
25. The Organic Chemistry of the Metabolic Pathways
 - Terpene Biosynthesis
26. The Chemistry of the Nucleic Acids

Part 8: Special Topics in Organic Chemistry

- Appendix I Values
Appendix II Derivations of Rate Laws
Appendix III Summary of Methods Used to Synthesize a Particular Functional Group
Appendix IV Summary of Methods Employed to Form Carbon-Carbon Bonds

ABOUT THE AUTHOR

Paula Y. Bruice, University of California, Santa Barbara



ISBN: 9788177585421

Organic Chemistry, Volume 1, 6/e

 **I. L. Finar**

 **966** | © **2005**

ABOUT THE BOOK

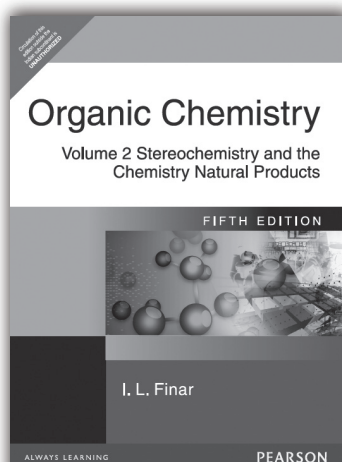
In the sixth edition of Dr. Finar's best-selling student text, a great deal of material has been rewritten and many new topics have been added. The arrangement of the subject matter is based on homologous series and SI units have been used throughout the text.

CONTENTS

1. Determination of Structure
2. Properties of Molecules
3. Alkanes
4. Alkenes and Alkynes
5. Halogen derivatives of the alkanes
6. Monohydric alcohols
7. Ethers
8. Aldehydes and ketones
9. Saturated monocarboxylic acids and their derivatives
10. Polycarbonyl compounds
11. Polyhydric alcohols
12. Unsaturated alcohols, ethers, carbonyl compounds and acids
13. Nitrogen compounds
14. Aliphatic compounds of sulphur, phosphorus, silicon and boron
15. Organometallic compounds
16. Saturated dicarboxylic acids
17. Hydroxyacids, stereochemistry, unsaturated dicarboxylic acids
18. Carbohydrates
19. Alicyclic compounds
20. Monocyclic aromatic hydrocarbons
21. Aromatic halogen compounds
22. Aromatic nitro-compounds
23. Aromatic amino-compounds
24. Diazonium salts and their related compounds
25. Aromatic sulphonic acids
26. Phenols and quinones
27. Aromatic alcohols, aldehydes and ketones
28. Aromatic acids
29. Polynuclear hydrocarbons and their derivatives
30. Heterocyclic compounds
31. Dyes and photochemistry

ABOUT THE AUTHOR

The late **Dr. Finar** was Principal Lecturer in Organic Chemistry at the Polytechnic of North London.



ISBN: 9788177585414

Organic Chemistry, Volume 2: Stereochemistry and the Chemistry Natural Products, 5/e

I. L. Finar

956 | © 2005

ABOUT THE BOOK

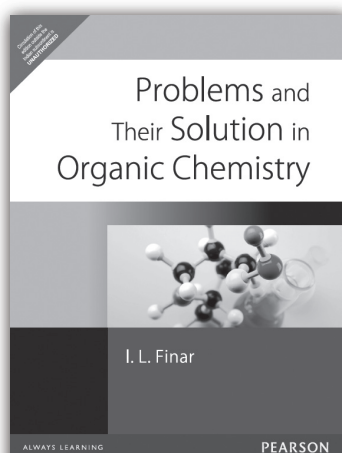
Organic Chemistry is a well-established two-volume textbook for students studying chemistry at degree level. Volume 2 carries the material of Volume 1: Fundamental Principles to a more advanced level. The author provides a comprehensive introduction to the relationship between physical properties and chemical structures, and then proceeds to a detailed account of stereochemistry. The later chapters are devoted to the most typical compounds of natural products and the problems involved. A selected number of reading references are given at the end of each chapter.

CONTENTS

- | | |
|---|--|
| 1. Physical properties and chemical constitution | 10. Polycyclic aromatic hydrocarbons |
| 2. Optical isomerism | 11. Steroids |
| 3. Nucleophilic substitution at a saturated carbon atom, asymmetric synthesis | 12. Heterocyclic compounds containing two or more hetero-atoms |
| 4. Geometrical isomerism, stereochemistry of alicyclic compounds | 13. Amino-acids and proteins |
| 5. Stereochemistry of biphenyl compounds | 14. Alkaloids |
| 6. Stereochemistry of some elements other than carbon | 15. Anthocyanins |
| 7. Carbohydrates | 16. Purines and nucleic acids |
| 8. Terpenoids | 17. Vitamins |
| 9. Carotenoids | 18. Chemotherapy |
| | 19. Haemoglobin, chlorophyll and phthalocyanines |

ABOUT THE AUTHOR

The late **Dr. Finar** was Principal Lecturer in Organic Chemistry at the Polytechnic of North London.



ISBN: 9788131700938

Problems and Their Solution in Organic Chemistry

I. L. Finar

360 | © 2006

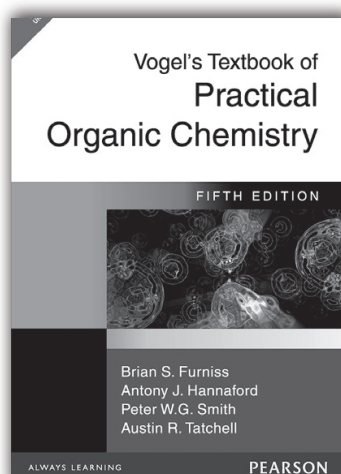
ABOUT THE BOOK

The first part of this book collects together the questions set out at end of each chapter in the authors Textbook of Organic Chemistry, Volume 1 (sixth edition). The second part of this book gives the possible solutions, which are linked with an explanation of the sort of reasoning used in order to arrive at one of the answers. In many cases, several answers are given for one question; and in each set of questions, there is at least one which involves the completion of equations. The result is a book which can be used independently of the main volume. This book helps in acquiring a better understanding of the basic principles of organic chemistry and in revising a large amount of the subject matter quickly.

1. Determination of Structure
2. Properties of Molecules
3. Alkanes
4. Alkenes and Alkynes
5. Halogen derivatives of the alkanes
6. Monohydric alcohols
7. Ethers
8. Aldehydes and ketones
9. Saturated monocarboxylic acids and their derivatives
10. Polycarbonyl compounds
11. Polyhydric alcohols
12. Unsaturated alcohols, ethers, carbonyl compounds and acids
13. Nitrogen compounds
14. Aliphatic compounds of sulphur, phosphorus, silicon and boron
15. Organometallic compounds
16. Saturated dicarboxylic acids
17. Hydroxyacids, stereochemistry, unsaturated dicarboxylic acids
18. Carbohydrates
19. Alicyclic compounds
20. Monocyclic aromatic hydrocarbons
21. Aromatic halogen compounds
22. Aromatic nitro-compounds
23. Aromatic amino-compounds
24. Diazonium salts and their related compounds
25. Aromatic sulphonic acids
26. Phenols and quinones
27. Aromatic alcohols, aldehydes and ketones
28. Aromatic acids
29. Polynuclear hydrocarbons and their derivatives
30. Heterocyclic compounds
31. Dyes and photochemistry

ABOUT THE AUTHOR

The late **Dr. Finar** was Principal Lecturer in Organic Chemistry at the Polytechnic of North London.



ISBN: 9788177589573

Vogel's Textbook of Practical Organic Chemistry, 5/e



Brian S. Furniss | Antony J. Hannaford | Peter W.G. Smith | Austin R. Tatchell



1,544 | © 2006

ABOUT THE BOOK

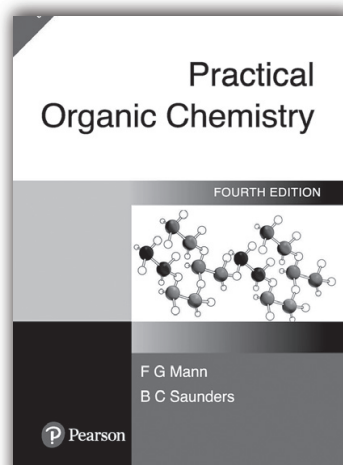
Still recognized as the definitive text on practical topics related to organic chemistry, this text is relied upon by undergraduates, postgraduate students, and professional organic chemists. Topics covered include the structural and theoretical principles required when designing a synthesis; the disconnection or synthon approach; the principles of retrosynthetic analysis applied to relevant aliphatic, aromatic, alicyclic and heterocyclic compounds; and developments in reaction techniques.

FEATURES

- An introductory chapter on the structural and theoretical principles required when designing a synthesis.
- The disconnection on synthon approach now integrated into the text, and the principles of retrosynthetic analysis applied to relevant aliphatic, aromatic, alicyclic and heterocyclic compounds.
- Synthesis methodology is expanded to cover a range of new reagents, including oxidants and reductants; reagents for asymmetric synthesis; and those derived from lithium, boron, silicon, phosphorous and sulphur.
- Recent developments in reaction techniques which include: handling of air-sensitive and moisture-sensitive compounds; new chromatographic procedures; phase transfer catalysis; and solid support reagents.
- Over 100 new experiments selected from the literature to illustrate new reagents and techniques, and the operation of protection, selectivity and control in synthesis.
- A more detailed treatment of carbon-13 n.m.r. spectroscopy, and the interpretation of spectroscopic data for many of synthesized compounds.

CONTENTS

- | | | |
|---|----------------------------------|---|
| 1. Organic Synthesis. | 4. Solvents and Reagents. | 8. Selected Heterocyclic Compounds. |
| 2. Experimental Techniques. | 5. Aliphatic Compounds. | 9. Investigation and Characterization of Organic Compounds. |
| 3. Spectroscopic Methods and the Interpretation of Spectra. | 6. Aromatic Compounds. | 10. Physical Constants of Organic Compounds. |
| | 7. Selected Alicyclic Compounds. | |



ISBN: 9788131727102

Practical Organic Chemistry

F.G. Mann | B.C. Saunders

600 | © **2009**

ABOUT THE BOOK

This book has proved useful for research as well as for teaching purpose. The fourth edition of this book was distinguished from its predecessors by a greater emphasis on semi-micro methods and modern techniques and reactions. While updating the book in several important aspects, namely, chromatography, reaction mechanism, and safety and first-aid measures.

CONTENTS

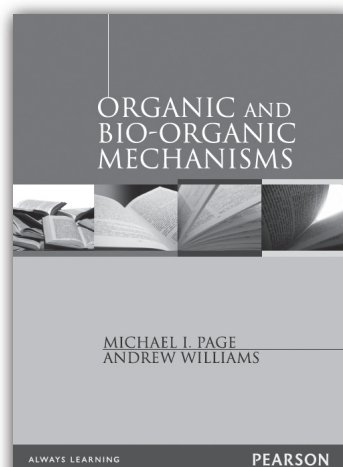
Part I: Methods and Manipulation

Part II: Preparations

Part III: Reactions and Identification of Organic Compounds

Part IV: Quantitative Analysis

Part V: Simple Enzyme Reactions



ISBN: 9788131729496

Organic and Bio-Organic Mechanisms

Michael I. Page | Andrew Williams

312 | © **2009**

ABOUT THE BOOK

This text provides a comprehensive and detailed discussion of the investigation of organic and bioorganic reaction mechanisms. It addresses questions such as: 'How are bonds between atoms rearranged?', 'What sort of structural changes take place to cause bond fission and formation?' and 'How do catalysts lower the activation energies of reactions?'

FEATURES

- Techniques for diagnosis of mechanism not previously compiled from research literature.
- An important bridge between fundamental studies and mechanisms in solution.
- Key references from classic papers to the latest research literature.

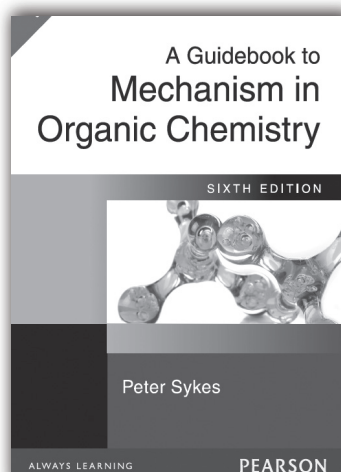
CONTENTS

- | | |
|--|--|
| 1. The Transition State | 6. Transition State Structures - Anomalies |
| 2. Kinetics and Mechanism | 7. Bioorganic Group Transfer Reactions |
| 3. The Effect of Changes in Reactant Structure | 8. Catalysis |
| 4. Kinetic and Equilibrium Isotope Effects | 9. Complexation Catalysis |
| 5. Transition States from External Effects | 10. Some Enzyme Systems |

ABOUT THE AUTHOR (S)

Michael I. Page, Huddersfield University

Andrew Williams, University of Kent at Canterbury



ISBN: 9788177584332

A Guidebook to Mechanism in Organic Chemistry, 6/e

 **Peter Sykes**

 **428** | © **2005**

ABOUT THE BOOK

This classic textbook on mechanistic organic chemistry, characterized by its clarity, careful choice of examples, and its general approach designed to lead to a greater understanding of the subject matter. The book is aimed clearly at the needs of the student, with a thorough understanding of, and provision for, the potential conceptual difficulties he or she is likely to encounter. The book's success in achieving these goals is reflected in the opinion of one reviewer who says, "Sykes remains the bible of mechanistic organic chemistry for thousands of undergraduates, and there is certainly no English language publication of which I am aware which comes even close to challenging it in terms of clarity and coverage."

FEATURES

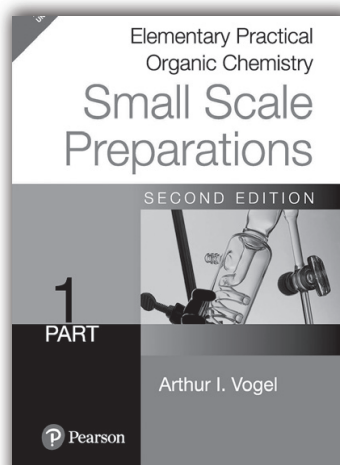
- New – topics introduced in this edition : ipso aromatic substitution; the mechanistic borderline in nucleophilic substitution; more use of activation parameters; Dimorth's ET parameter; Hammett's \tilde{A}^3x and spectroscopic data; and ^{13}C n.m.r. in biogenesis.
- New – thoroughly revised text with improved explanations, more examples and increased clarity.

CONTENTS

1. Structure, Reactivity, and Mechanism.
2. Energetics, Kinetics, and the Investigation of Mechanism.
3. The Strengths of Acids and Bases.
4. Nucleophilic Substitution at a Saturated Carbon Atom.
5. Carbocations, Electron-deficient N and O Atoms and Their Reactions.
6. Electrophilic and Nucleophilic Substitution in Aromatic Systems.
7. Electrophilic and Nucleophilic Addition to $\text{C}=\text{C}$.
8. Nucleophilic Addition to $\text{C}=\text{O}$.
9. Elimination Reactions.
10. Carbanions and Their Reactions.
11. Radicals and Their Reactions.
12. Symmetry Controlled Reactions.
13. Linear Free Energy Relationships.

ABOUT THE AUTHOR

Peter Sykes, Christ's College, Cambridge



ISBN: 9788131756867

Elementary Practical Organic Chemistry: Small Scale Preparations Part 1, 2/e

 **Arthur I. Vogel**

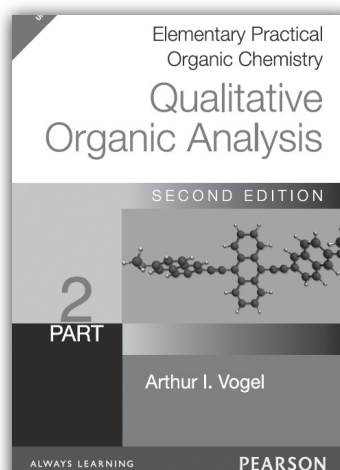
 **456** | © **2010**

FEATURES

- Experimental Techniques
- Mechanism of all reactions described
- Introduction of a number of reactions and experimental procedures of general interest

CONTENTS

- | | |
|--------------------------------|--|
| 1. Theory of General Technique | 4. Aromatic Compounds |
| 2. Experimental Technique | 5. Miscellaneous Compounds and Miscellaneous Reactions |
| 3. Aliphatic Compounds | |



ISBN: 9788131756874

Elementary Practical Organic Chemistry: Qualitative Organic Analysis Part 2, 2/e

 **Arthur I. Vogel**

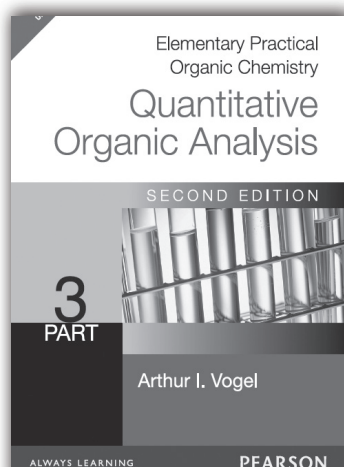
 **448** | © **2010**

ABOUT THE BOOK

A dedicated chapter on "The use of spectroscopic methods in qualitative organic analysis" which includes the essentials from a practical viewpoint of ultraviolet and visible spectroscopy and infrared spectroscopy and mass spectroscopy. These spectroscopy techniques are now-days of such great importance that no book on qualitative organic analysis can be regarded complete without their inclusion.

CONTENTS

1. Determination of physical constants
2. Qualitative analysis for the elements
3. The solubility classes
4. Reactions and characterization of selected classes of organic compounds
5. Class reactions
6. The preparation of derivatives
7. Qualitative analysis of mixtures of organic compounds
8. The use of spectroscopic methods in qualitative organic analysis
9. Physical constants of organic compounds



ISBN: 9788131756881

Elementary Practical Organic Chemistry: Quantitative Organic Analysis Part 3, 2/e

 **Arthur I. Vogel**

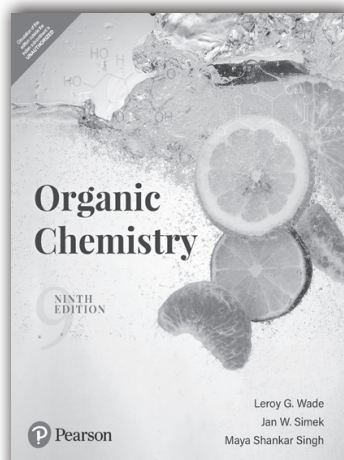
 **382** | © **2010**

FEATURES

- Numerous Experiments
- Coverage of quantitative organic analysis through the medium of functional groups

CONTENTS

1. Determination of selected elements in organic compounds
2. General discussion of titrations in non-aqueous solvents
3. Hydroxyl groups (Alcohols)
4. Adjacent hydroxyl groups
5. Hydroxyl groups (Phenols)
6. Amino groups
7. Salts of amines
8. Amino acids
9. Carboxyl groups
10. Salts of carboxylic acids
11. Anhydrides of carboxylic acids
12. Esters of carboxylic acids
13. Aldehydes and ketones
14. Carbohydrates (Sugars)
15. Nitro, Nitrates and azo groups
16. Unsaturation
17. Alkoxyl groups
18. C-Methyl, O-acetyl and N-acetyl groups
19. Active Hydrogen
20. Enols
21. Imides
22. Sulphonamides, Thiols, Sulphides and disulphides
23. Determination using ION exchange resins
24. Some application of the karl fischer reagent
25. Alpha-epoxy groups
26. Miscellaneous determinations



ISBN: 9789389342673

Organic Chemistry, 9/e

 **Leroy G. Wade, Jr. | Maya Shankar Singh | Jan William Simek**

 **1,578** | © **2020**

ABOUT THE BOOK

Organic Chemistry, Ninth Edition gives students a contemporary overview of organic principles and the tools for organizing and understanding reaction mechanisms and synthetic organic chemistry with unparalleled and highly refined pedagogy. This text presents key principles of organic chemistry in the context of fundamental reasoning and problem solving. Authored to complement how students use a textbook today, new Problem Solving Strategies, Partially Solved Problems, Visual Reaction Guides and Reaction Starbursts encourage students to use the text before class as a primary introduction to organic chemistry as well as a comprehensive study tool for working problems and/or preparing for exams.

FEATURES

- New chapters on Phenols and Quinones and Asymmetric Synthesis.
- Green Chemistry is emphasized with presentation of less-toxic, and environmentally friendly reagents.
- Enriched and updated treatment of Acid/Base Chemistry, Study of Chemical Reactions, Stereochemistry, Alkyl Halides, Alkenes, Dienes, Alkynes, Thiols, Aromatic Compounds, Amines, and Polymers.

- Over 100 new problems include more synthesis problems and problems based on recent literature.
- Over 80 Mechanism boxes help students understand how specific reactions occur by zooming in on each individual step in detail.
- Updated art throughout to provide consistency and clarity in the text, giving detailed representations of molecular and orbital art.

CONTENTS

Preface

1. Introduction to Organic Chemistry
2. Structure and Properties of Organic Molecules: Acids and Bases
3. The Study of Chemical Reactions
4. Structure and Stereochemistry of Alkanes and Cycloalkanes
5. Structure and Synthesis of Alkenes
6. Reactions of Alkenes and Dienes
7. Alkynes
8. Alkyl Halides; Nucleophilic Substitution and Elimination
9. Alcohols and Thiols: Structure and Synthesis
10. Reactions of Alcohols
11. Ethers and Thioethers
12. Stereochemistry
13. Aromatic Compounds
14. Reactions of Aromatic Compounds
15. Ketones and Aldehydes
16. Carboxylic Acids

17. Carboxylic Acid Derivatives

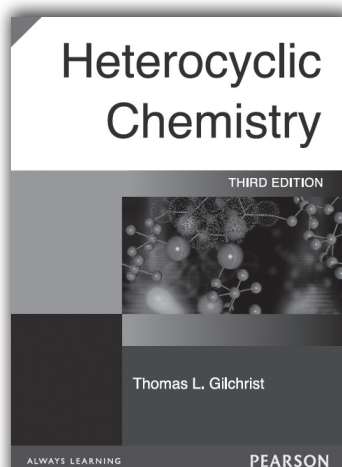
18. Condensations and Alpha Substitutions of Carbonyl Compounds
 19. Phenols and Quinones
 20. Amines
 21. Carbohydrates
 22. Amino Acids, Peptides, Proteins and Nucleic Acids
 23. Polymeric Materials
 24. Asymmetric Synthesis
 25. Conjugated Systems, Orbital Symmetry, and Ultraviolet Spectroscopy
 26. Infrared Spectroscopy and Mass Spectrometry
 27. Nuclear Magnetic Resonance Spectroscopy
 28. Lipids
- Appendices
 Brief Answers to Selected Problems
 Photo Credits
 Index
 Color Illustrations

ABOUT THE AUTHOR (S)

Leroy G. Wade, Whitman College

Jan W. Simek, Cal Poly State University

Maya Shankar Singh Department of Chemistry, Institute of Science, Banaras Hindu University



ISBN: 9788131707937

Heterocyclic Chemistry, 3/e

 **Thomas L. Gilchrist**

 **432** | © **2006**

ABOUT THE BOOK

This popular text has been completely revised to reflect recent advances in the subject. Deals with the properties of ring systems and general methods of synthesis, providing a unique overview of the subject area. Includes a guide to the naming of the ring systems, invaluable to those unfamiliar with the area.

FEATURES

- Includes recent examples of organometallic reagents which are increasingly used in the synthesis and reactions of heterocyclic compounds.
- New reaction schemes illustrating the use of heterocycles as synthetic intermediates.



CONTENTS

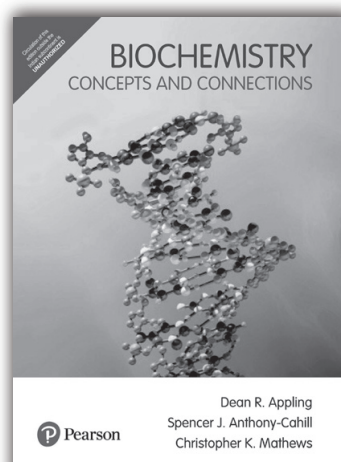
1. Introduction
2. Aromatic Heterocycles
3. Nonaromatic Heterocycles
4. Methods of Ring Synthesis
5. Six-membered Rings
6. Five-membered Rings with One Heteroatom
7. Six-membered Rings with Two or More Heteroatoms
8. Five-membered Rings with Two or More Heteroatoms
9. Three and Four Membered Rings
10. Seven and Larger Membered Ring Compounds
11. Nomenclature

ABOUT THE AUTHOR (S)

Gary L. Miessler, St. Olaf College

Donald A. Tarr, St. Olaf College

BIOCHEMISTRY



ISBN: 9789332585454

Biochemistry: Concepts and Connections

 **Dean R. Appling | Spencer J. Anthony-Cahill | Christopher K. Mathews**

 **920 | © 2016**

ABOUT THE BOOK

A highly visual, precise and fresh approach to guide today's mixed-science majors to a deeper understanding of biochemistry.

Biochemistry: Concepts and Connections engages students in the rapidly evolving field of biochemistry, better preparing them for the challenges of 21st century science through quantitative reasoning skills and a rich, chemical perspective on biological processes.

This concise first edition teaches mixed-science-majors the chemical logic underlying the mechanisms, pathways, and processes in living cells through groundbreak

ing biochemical art and a clear narrative that illustrates biochemistry's relation to all other life sciences. Integration of biochemistry's experimental underpinnings alongside the presentation of modern techniques encourages students to appreciate and consider how their understanding of biochemistry can and will contribute to solving problems in medicine, agricultural sciences, environmental sciences, and forensic

FEATURES

- A striking art program designed specifically for teaching
- Modern science presented in a relevant way
- Organized with students in mind

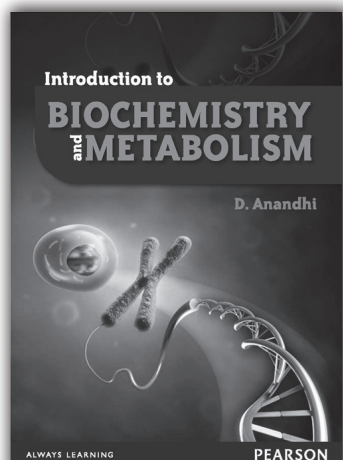
CONTENTS

1. Biochemistry and the Language of Chemistry
2. The Chemical Foundation of Life: Weak Interactions in an Aqueous Environment
3. The Energetics of Life
4. Nucleic Acids
5. Introduction to Proteins: The Primary Level of Protein Structure
6. The Three-Dimensional Structure of Proteins
7. Protein Function and Evolution
8. Enzymes: Biological Catalysts
9. Carbohydrates: Sugars, Saccharides, Glycans
10. Lipids, Membranes, and Cellular Transport
11. Chemical Logic of Metabolism
12. Carbohydrate Metabolism: Glycolysis, Gluconeogenesis, Glycogen Metabolism, and the Pentose Phosphate Pathway
13. The Citric Acid Cycle
14. Electron Transport, Oxidative Phosphorylation, and Oxygen Metabolism
15. Photosynthesis
16. Lipid Metabolism
17. Interorgan and Intracellular Coordination of Energy Metabolism in Vertebrates

18. Amino Acid and Nitrogen Metabolism
19. Nucleotide Metabolism
20. Mechanisms of Signal Transduction
21. Genes, Genomes, and Chromosomes
22. DNA Replication
23. DNA Repair, Recombination, and Rearrangement
24. Transcription and Post-transcriptional Processing
25. Information Decoding: Translation and Posttranslational Protein Processing
26. Regulation of Gene Expression

ABOUT THE AUTHOR (S)

Dean R. Appling, The University of Texas at Austin
Spencer J. Anthony-Cahill, Western Washington University
Christopher K. Mathews, Oregon State University



ISBN: 9788131774854

Introduction to Biochemistry and Metabolism

 **D. Anandhi**

 **416** |  **2014**

ABOUT THE BOOK

Designed as per the UGC curriculum, Introduction to Biochemistry and Metabolism meets the syllabus requirements of all universities offering a course on biochemistry and metabolism.

The subject, a core paper for the students of botany, zoology, biotechnology and bioinformatics, is dealt with in detail across 13 chapters with emphasis on the metabolism of amino acids, carbohydrates, lipids and high energy compounds. Replete with illustrations and schematic representations, the book reinforces theoretical concepts with its concise, easy-to- follow approach making it an ideal textbook on the subject.

FEATURES

- Comprehensive coverage of free radicals, antioxidation and proteins.
- Focus on enzymes, fatty acids and their metabolic activities.
- Elucidation of the detoxification mechanism.
- Disseminates information on diseases caused due to enzyme deficiencies.

CONTENTS

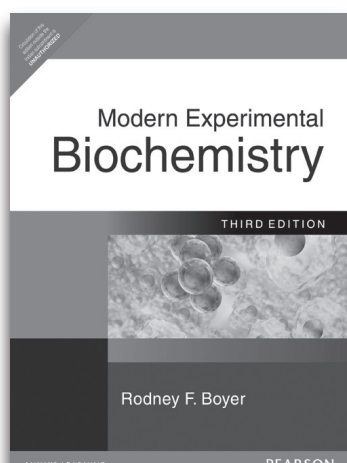
Preface

1. Chapter 1 Cell
2. Chapter 2 Carbohydrates
3. Chapter 3 Amino acids
4. Chapter 4 Lipids
5. Chapter 5 Nucleic acid
6. Chapter 6 Enzymes
7. Chapter 7 High energy compounds

8. Chapter 8 Introduction to metabolism
9. Chapter 9 Amino acid metabolism
10. Chapter 10 Lipid metabolism
11. Chapter 11 Nucleotide metabolism
12. Chapter 12 Detoxication mechanism
13. Chapter 13 Antibiotics
- Index

ABOUT THE AUTHOR

D Anandhi is from the department of biochemistry, D G Vaishnav College, Chennai.



ISBN: 9788177588842

Modern Experimental Biochemistry, 3/e

 **Rodney F. Boyer**

 **480** | © **2000**

ABOUT THE BOOK

Modern Experimental Biochemistry, Third Edition offers a unique two-part organization. This provides you with in-depth theoretical discussion organized around important techniques and 15 tested experiments that represent all of the core biochemistry topics.

FEATURES

- State-of-the-art theory and procedures are included for each experiment.
- The latest safety and environmental precautions in each experiment inform you of potential hazards and proper disposal of materials.

CONTENTS

Part I: Theory and Experimental Techniques

1. Introduction to the Biochemistry Laboratory
2. General Laboratory Procedures
3. Purification and Identification of Biomolecules by Chromatography
4. Characterization of proteins and Nucleic Acids by Electrophoresis
5. Spectroscopic Analysis of Biomolecules
6. Radioisotopes in Biochemical Research
7. Centrifugation in Biochemical Research

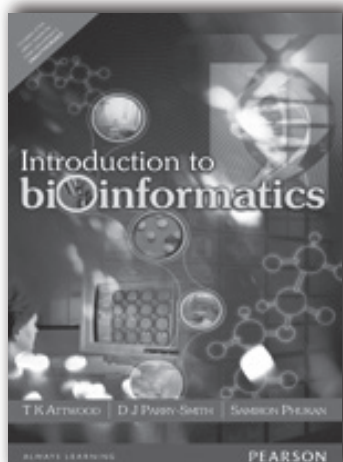
Part II: Experiments

8. Using the Computer in Biochemical Research
9. Structural Analysis of a Dipeptide
10. Using Gel Filtration to Study Ligand-Protein Interactions
11. Isolation and Characterization of Bovin Milk β -Lactalbumin
12. Kinetic Analysis of Tyrosinase

13. Purification and Characterization of Triacylglycerols in Natural Oils
14. Identification of Serum Glycoproteins by SDS-PAGE and Western Blotting
15. Isolation and Characterization of Plant Pigments
16. Photoinduced Proton Transport through Chloroplast Membranes
17. Isolation, Subfractionation, and Enzymatic Analysis of Beef Heart Mitochondria
18. Measurement of Cholesterol and Vitamin C in Biological Samples
19. Activity and Thermal Stability of Gel-immobilized Peroxidase
20. Extraction and Characterization of Bacterial DNA
21. Plasmid DNA Isolation and Characterization by Electrophoresis
22. The Action of Restriction Endonucleases on Plasmid or Viral DNA

ABOUT THE AUTHOR

Rodney F. Boyer, Hope College



ISBN: 9788177586411

Introduction to Bioinformatics

 **Teresa Attwood | David J. Parry-Smith | Dr Samiron Phukan**

 **920 | © 2007**

ABOUT THE BOOK

Bioinformatics, the application of computers in the biological sciences, especially analysis of biological sequence data, is becoming an essential tool in molecular biology as genome projects generate vast quantities of data. With new sequences being added to DNA databases on an average of once a minute, there is a pressing need to convert this information into biochemical and biophysical knowledge by deciphering the structural, functional and evolutionary clues encoded in the language of biological sequences.

FEATURES

- Unique guide to bioinformatics linked to an interactive practical on the World Wide Web
- Introduces key databases, tools and resources, and outlines pitfalls of methods
- The Web link integrates conventional and Webbased publishing, allowing interactive exploration of concepts discussed in the book
- Includes numerous Further Reading suggestions, Web references and a useful Glossary

CONTENTS

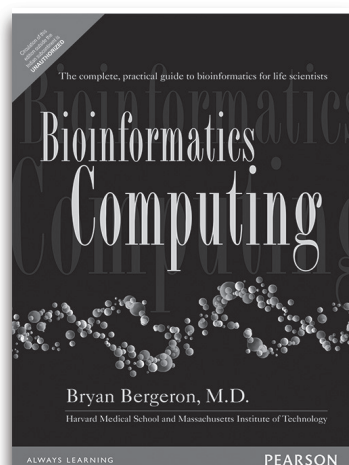
1. Overview
2. Introduction
3. Information networks
4. Protein information resources
5. Genome information resources
6. DNA sequence analysis
7. Pairwise alignment techniques
8. Multiple sequence alignment
9. Secondary database searching
10. Building a sequence search protocol
11. Analysis packages
12. Probability and statistics

ABOUT THE AUTHOR (S)

Dr Teresa K. Attwood is a Royal Society University Research fellow and Senior Lecturer in the School of Biological Sciences, University of Manchester, UK, Visiting Fellow at the European Bioinformatics Institute, and author and curator of the PRINTS protein fingerprint database.

Dr David J. Parry-Smith is Informatics Director at Cambridge Drug Discovery Limited, Cambridge, UK, and works mainly with algorithm development.

Dr Samiron Phukan is Senior Scientist, SDMD Drug Discovery at Jubilant Biosys Limited, Bangalore, India.



ISBN: 9789332549418

Bioinformatics Computing

 **Bryan Bergeron**

 **920** | © **2015**

ABOUT THE BOOK

Appropriate for all courses in bioinformatics, for molecular biology students at all levels.

The field of bioinformatics is growing at an unprecedented rate, as molecular biologists discover the extraordinary range of computational techniques and applications that apply directly to their work. Now, Harvard Medical School and MIT faculty member Bryan Bergeron has written a comprehensive, practical guide to bioinformatics for biology students at every level. Bergeron illuminates key advances in computer

visualization, large database design, advanced pattern matching, machine learning, statistical methods, and distributed computing, and demonstrates exactly how these advances can be used to advance research into biological systems. Bergeron also identifies technologies and approaches on the near horizon that will have a significant impact on bioinformatics, and introduces the key global and societal issues most likely to shape bioinformatics in the coming years.

FEATURES

- Comprehensive introduction to computing techniques for Molecular Biologists
- Bioinformatics is an IT growth sector (\$10.4 Billion in 2000, forecasted to \$38 Billion by 2006)
- Chapters on computing visualization, large database

designs, advanced pattern matching and other key bioinformatics techniques

- Bryan Bergeron is on the faculty at both Harvard Medical School and MIT

CONTENTS

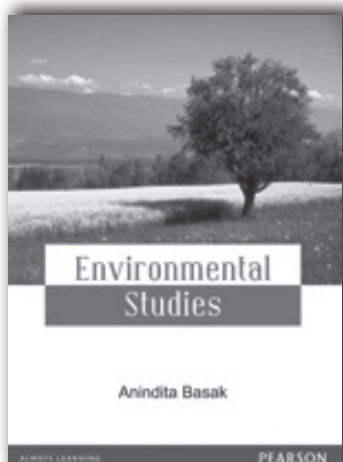
Preface.

Acknowledgments.

1. The Central Dogma.
The Killer Application. Parallel Universes. Watson's Definition. Top-Down Versus Bottom-Up. Information Flow. Convergence. Endnote.
2. Databases.
Definitions. Data Management. Data Life Cycle. Database Technology. Interfaces. Implementation. Endnote.
3. Networks.
Geographical Scope. Communications Models. Transmissions Technology. Protocols. Bandwidth. Topology. Hardware. Contents. Security. Ownership. Implementation. Management. On the Horizon. Endnote.
4. Search Engines.
The Search Process. Search Engine Technology. Searching and Information Theory. Computational Methods. Search Engines and Knowledge Management. On the Horizon. Endnote.
5. Data Visualization.
Sequence Visualization. Structure Visualization. User Interface. Animation Versus Simulation.
6. Statistics.
Statistical Concepts. Microarrays. Imperfect Data. Basics. Quantifying Randomness. Data Analysis. Tool Selection. Statistics of Alignment. Clustering and Classification. On the Horizon. Endnote.
7. Data Mining.
Methods. Technology Overview. Infrastructure. Pattern Recognition and Discovery. Machine Learning. Text Mining. Tools. On the Horizon. Endnote.
8. Pattern Matching.
Fundamentals. Dot Matrix Analysis. Substitution Matrices. Dynamic Programming. Word Methods. Multiple Sequence Alignment. Tools. On the Horizon. Endnote.
9. Modeling and Simulation.
Drug Discovery. Fundamentals. Protein Structure. Systems Biology. Tools. On the Horizon. Endnote. Bibliography.
10. Collaboration.
Collaboration and Communications. Standards. Issues. On the Horizon. Endnote.

ABOUT THE AUTHOR

BRYAN BERGERON is a faculty member at both Harvard Medical School and MIT, Editor-in-Chief of e.MD, editorial board member of Healthcare Informatics, and Fellow of the American College of Medical Informatics. He has authored more than 300 publications on topics ranging from AI to computers in medicine.



ISBN: 9788131721186

Environmental Studies

 **Anindita Basak** **920** | © **2009**

Web Supplements



ABOUT THE BOOK

This book covers the course requirements for Environmental Studies for undergraduate students of all disciplines. It aims to educate the readers about nature, ecosystems, natural resources, biodiversity, pollution, and the current challenges faced by environmentalists. It integrates the social impact associated with environmental issues through national and international case studies.

FEATURES

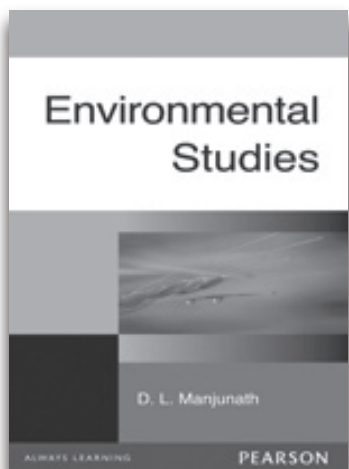
- This book completely follows the UGC model curriculum.
- Discusses current topics in the global environment scenario such as ecological footprint, carbon trading, and emission trading
- Equipped with a complete list of ISO standards for environment management systems
- Entire unit devoted to field work with more than 10 experiments for quantitative evaluation of ecosystems
- Has more than 30 case studies to illustrate environmental issues
- An updated list of international conventions and protocols
- Comprehensive glossary for quick recapitulation of technical terms
- Updated statistical information on air quality standards, permissible exhaust limit, and so on.

CONTENTS

1. Definition, scope and importance, need for public awareness, environment and its components
2. Natural resources: Renewable and non-renewable resources Natural Resources and associated problems
3. Ecosystems
4. Biodiversity and its conservation
5. Environmental pollution
6. Social Issues and the environment
7. Human population and the environment
8. Field work

ABOUT THE AUTHOR

Dr. Anindita Basak is presently Reader in Chemistry at Sushilavati Government Women's College, Rourkela. She was also deputed as a visiting scientist at National Institute of Technology, Rourkela from 2004 to 2006. She has published 16 papers in journals of national and international repute. She has extensive research experience in different fields of chemistry, polymer science, and environmental science.



ISBN: 9788131709122

Environmental Studies

 **D. L. Manjunath**

 **920** | © **2007**

ABOUT THE BOOK

Environmental Studies, focuses in clear and simple language, on the basic scientific content necessary to understand environmental issues. It details the latest developments in the field and reflects several major shifts in environmental science education this century. Designed as a foundational text for environmental science courses and spread over eleven chapters, the book includes various aspects of ecology such as ecosystems, environmental impacts, and current environmental issues.

FEATURES

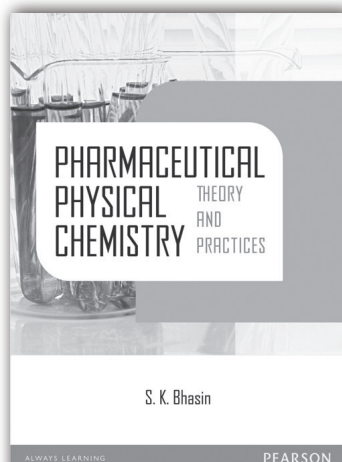
- Pedagogical treatment of the subject to help students grasp fundamentals
- A strong focus on statistical data that illustrates the deterioration of our surroundings, with emphasis on environmental abuse
- Images that portray the current degeneration of our environment

CONTENTS

1. The Earth, Fact File
2. Environment and Ecology
3. Environmental Impacts of Human Activities
4. Water Resources and Water Quality
5. Mineral Resources and Mining
6. Forests
7. Bio-Geo-Chemical Cycles
8. Matter and Energy Fundamentals
9. Environmental Pollution
10. Current Environmental Issues of Importance
11. Environmental Protection

ABOUT THE AUTHOR

D. L. Manjunath, Head, Department of Civil Engineering, Malnad College of Engineering, Hassan



ISBN: 9788131765272

Pharmaceutical Physical Chemistry : Theory and Practices

 **Dr S K Bhasin**

 **920** | © **2012**

ABOUT THE BOOK

Physical Chemistry is a compulsory paper offered to all the students of Pharmacy. There is a dearth of good books that exclusively cover the syllabi of physical chemistry offered to pharmacy courses. Pharmaceutical Physical Chemistry has been designed considering their requirements laid down by AICTE and other premier institutes/universities. Apart from the theory 20 most common laboratory experiments have been included to make this book a unique offering to the students of pharmacy.

FEATURES

- 20 Most common laboratory experiments
- 350 Review questions
- 125 Solved problems
- 280 MCQs
- 152 Line Diagrams
- 35 Tables

CONTENTS

Preface

Part A

1. Behaviour of Gases
2. The Liquid state
3. Solution
4. Thermodynamic
5. Adsorption and Catalysis
6. Photochemistry
7. Chemical Kinetics
8. Quantum Mechanics

9. Ionic Equilibria

10. Distribution Law

11. Electrochemistry

12. Electromotive Force and Oxidation–Reduction System

13. Solid State (Crystalline State)

14. Chemical Bonding

15. Phase Equilibria

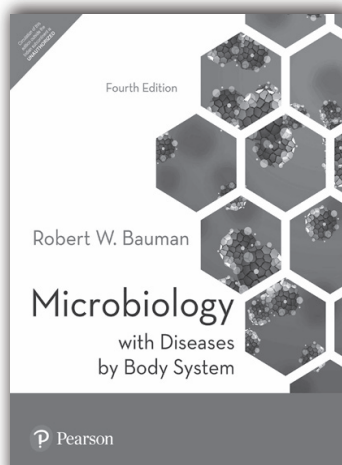
Part B

16. Experiments

Index

ABOUT THE AUTHOR

Dr S K Bhasin is the Director and Professor of Chemistry at Himalayan Group of Professional institute, Kala Amb, Ambala, Haryana. He has been teaching undergraduate and postgraduate students for more than 40 years.



ISBN: 9789332587441

Microbiology with Diseases by Body System, 4/e

 Robert W. Bauman

 944 | © 2017

ABOUT THE BOOK

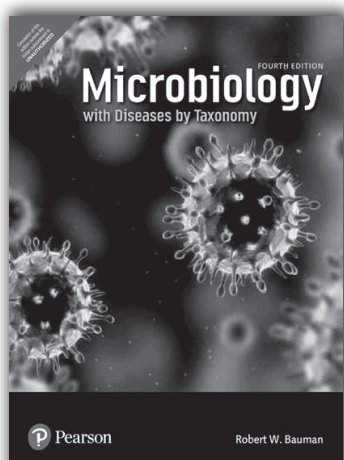
Designed for pre-nursing and allied health students (and also mixed-majors courses), Microbiology with Diseases by Body System, Third Edition retains the hallmark art program and clear writing style that have made Robert Bauman's book a success. This Third Edition features compelling clinical content related to students' future healthcare careers and abundant opportunities for applied student practice. Chapter-opening Clinical Cases, Emerging Diseases boxes, and Clinical Applications boxes introduce students to real-world clinical situations. Student comprehension is ensured with end-of-chapter practice that encompasses applied, visual, and conceptual understanding.

CONTENTS

- | | |
|---|---|
| 1. A Brief History of Microbiology | 13. Infection, Infectious Diseases, and Epidemiology |
| 2. Cell Structure and Function | 14. Innate Immunity |
| 3. Microscopy, Staining, and Classification | 15. Adaptive Immunity |
| 4. Microbial Metabolism | 16. Immunization and Immune Testing |
| 5. Microbial Nutrition and Growth | 17. AIDS and Other Immune Disorders |
| 6. Microbial Genetics | 18. Microbial Diseases of the Skin and Wounds |
| 7. Recombinant DNA Technology | 19. Microbial Diseases of the Nervous System and Eyes |
| 8. Controlling Microbial Growth in the Environment | 20. Microbial Cardiovascular and Systemic Diseases |
| 9. Controlling Microbial Growth in the Body: Antimicrobial Drugs | 21. Microbial Diseases of the Respiratory System |
| 10. Characterizing and Classifying Prokaryotes | 22. Microbial Diseases of the Digestive System |
| 11. Characterizing and Classifying Eukaryotes | 23. Microbial Diseases of the Urinary and Reproductive Systems |
| 12. Characterizing and Classifying Viruses, Viroids, and Prions | 24. Applied and Environmental Microbiology |

ABOUT THE AUTHOR

Robert W. Bauman, Amarillo College



ISBN: 9789332587274

Microbiology with Diseases by Taxonomy, 4/e

 **Robert W. Bauman**

 **900** | © **2017**

ABOUT THE BOOK

The Fourth Edition of *Microbiology with Diseases by Taxonomy, 4e* is the most cutting-edge microbiology book available, offering unparalleled currency, accuracy, and assessment. The state-of-the-art approach includes 18 new Video Tutors written and developed by the author to walk students through key microbiology concepts, bringing the textbook to life. QR codes in the textbook enable students to use their smartphone or tablet to instantly interact with these step-by-step tutorials and visualize important concepts and processes. Compelling clinical case studies

and emerging disease case studies give students opportunities to apply new knowledge and explore real-world microbiology. Student comprehension is ensured with end-of-chapter practice that encompasses both visual and conceptual understanding. This edition retains the hallmark art program and clear writing style that have made Robert W. Bauman's book an engaging and successful introductory text.

FEATURES

- Organization and Currency
 - The taxonomic organization of the disease chapters (Chapters 19—25) presents microbial diseases by type of pathogenic microbe, helping students recognize shared characteristics among categories of microbes.
 - Chapter 3 (Cell Structure and Function) de-emphasizes the term “prokaryote” (a term that is based on an outdated perception of taxonomy and is thus misleading to students) and instead emphasizes the three domains of living organisms, matching the latest taxonomic research. This state-of-the-science organization sets this book apart from all other allied health microbiology books.
 - The immunology chapters (Chapters 15—18), which have been and continue to be reviewed in-depth by immunology specialists, reflect the most current understanding of this rapidly-evolving field of any microbiology book available.
- Student Interest Features
 - Microbe-at-a-Glance boxes showcase representative microbes in each of the disease chapters. They feature an illustration of a microbe accompanied by very brief summaries of taxonomy, morphology, virulence factors, diseases caused, and treatment/prevention. These “snapshots” also appear as flashcards on the book's website, giving students extra “on-the-go” practice and review opportunities.
 - Beneficial Microbe boxes emphasize the practical or benevolent nature and uses of microbes and help students overcome the common misconception that all microbes cause disease.
 - Clinical Case Study and Emerging Disease Case Study boxes are written in an engaging narrative voice and feature a patient's experience with microbial diseases and follow-up critical thinking questions for students.
 - Highlight boxes appear throughout the text and focus on interesting topics in microbiology; e.g., what causes that “fishy” smell in fish markets, what allows some organisms to glow in the dark, how gold-mining microbes are used, and which cutting-edge molecular techniques are used in microbiology.
- Visually Superior Art Program
 - Half-illustration/half-micrograph 3D cellular art sets a new standard for teaching cellular structure.
 - Superior text-art integration breaks complex processes into smaller, more manageable pieces for students.
 - Colors and icons are used consistently throughout the text to make it easier for students to recognize structures and processes from chapter to chapter.
- Student Text Resources
 - Figure Legend Questions encourage critical thinking.
 - Critical Thinking Questions appear throughout the chapters and in the EOC section.
 - Answers to all end-of-chapter review questions (except Short Answers) are at the back of the book; answers to Short Answer questions are in the Instructor's Manual. The answer section and appendices in this edition are tabbed for easy reference.



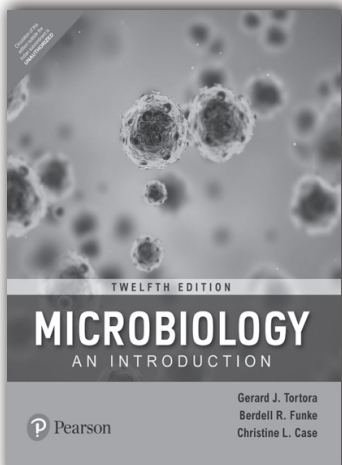
- TEM/SEM Designations, a feature regularly requested by instructors, appear in all micrographs and many illustrations.
- Pronunciations and Etymology Guides help students with pronouncing and remembering vocabulary.
- Concept Mapping exercises appear in the end-of-chapter material, guiding students to create their own concept maps from a list of key terms focused around an important chapter topic.

CONTENTS

- | | |
|--|---|
| 1. A Brief History of Microbiology | Prions |
| 2. The Chemistry of Microbiology | 14. Infection, Infectious Disease, and Epidemiology |
| 3. Cell Structure and Function | 15. Innate Immunity |
| 4. Microscopy, Staining, and Classification | 16. Adaptive Immunity |
| 5. Microbial Metabolism | 17. Immunization and Immune Testing |
| 6. Microbial Nutrition and Growth | 18. Immune Disorders |
| 7. Microbial Genetics | 19. Pathogenic Gram-Positive Bacteria |
| 8. Recombinant DNA Technology | 20. Pathogenic Gram-Negative Cocci and Bacilli |
| 9. Controlling Microbial Growth in the Environment | 21. Rickettsias, Chlamydias, Spirochetes, and Vibrios |
| 10. Controlling Microbial Growth in the Body: Antimicrobial Drugs | 22. Pathogenic Fungi |
| 11. Characterizing and Classifying Prokaryotes | 23. Parasitic Protozoa, Helminths, and Arthropod Vectors |
| 12. Characterizing and Classifying Eukaryotes | 24. Pathogenic DNA Viruses |
| 13. Characterizing and Classifying Viruses, Viroids, and | 25. Pathogenic RNA Viruses |
| | 26. Applied and Environmental Microbiology |

ABOUT THE AUTHOR

Robert W. Bauman, Amarillo College



ISBN: 9789353437855

Microbiology: An Introduction, 12/e

Gerard J. Tortora | Berdell R. Funke | Christine L. Case |
Derek Weber | Warner Bair

960 | © 2019

ABOUT THE BOOK

Praised for its exceptionally clear presentation of complex topics, this #1-selling text for microbiology non-majors provides a careful balance of concepts and applications, and proven art that teaches. The **Twelfth Edition** of Tortora, Funke, and Case’s **Microbiology: An Introduction** focuses on big picture concepts and themes in microbiology, encouraging students to visualize and synthesize tough topics such as microbial metabolism, immunology, and microbial genetics. The text and accompanying resources also help students make connections between microbiology theory and disease diagnosis, treatment, and prevention.

FEATURES

- **An appropriate balance between microbiological fundamentals and applications, and between medical applications and other applied areas of microbiology**—Basic microbiological principles are given greater emphasis, and health-related applications are featured.
- **Straightforward presentation of complex topics**—Each section of the text is written with the student in mind.
- **Clear, accurate, and pedagogically effective illustrations and photos**—Step-by-step diagrams that closely coordinate with narrative descriptions aid student comprehension of concepts.

CONTENTS

Part One: Fundamentals of Microbiology

- 1. The Microbial World and You
- 2. Chemical Principles
- 3. Observing Microorganisms through a Microscope
- 4. Functional Anatomy of Prokaryotic and Eukaryotic Cells
- 5. Microbial Metabolism
- 6. Microbial Growth
- 7. The Control of Microbial Growth

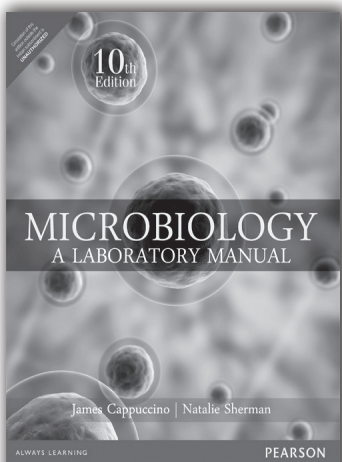
- 8. Microbial Genetics
- 9. Biotechnology and DNA Technology

Part Two: A Survey of the Microbial World

- 10. Classification of Microorganisms
- 11. The Prokaryotes: Domains Bacteria and Archaea
- 12. The Eukaryotes: Fungi, Algae, Protozoa, and Helminths
- 13. Viruses, Viroids, and Prions

ABOUT THE AUTHOR (S)

Gerard J. Tortora, Bergen Community College
Berdell R. Funke, North Dakota State University
Christine L. Case, Skyline College



ISBN: 9789332535190

Microbiology: A Laboratory Manual, 10/e

James G. Cappuccino | Natalie Sherman

576 | © 2014

ABOUT THE BOOK

Versatile, comprehensive, and clearly written, this competitively priced laboratory manual can be used with any undergraduate microbiology text-and now features brief clinical applications for each experiment, MasteringMicrobiology®quizzes that correspond to each experiment, and a new experiment on hand washing. Microbiology: A Laboratory Manual is known for its thorough coverage, descriptive and straightforward procedures, and minimal equipment requirements. A broad range of experiments helps to convey basic principles and techniques. Each experiment includes an overview, an in-depth discussion of the principle involved,

easy- to-follow procedures, and lab reports with review and critical thinking questions. Ample introductory material and laboratory safety instructions are provided.

FEATURES

- Comprehensive coverage of the core microbiology topics includes experiments in the areas of genetics, immunology, and biotechnology.
- A wide range of experiments progressing from simple to complex enable instructors to tailor their laboratory classes to the topics they wish to cover.
- Experiments use the most common and affordable laboratory materials, designed to accommodate any lab.
- Over 90 photographs in full color and numerous illustrations appear directly alongside the experiments, helping students visualize techniques and expected results.
- Spiral binding makes student-use easier and minimizes space on a lab bench.
- A detailed introductory section on basic lab techniques and safety thoroughly prepares students for lab work during the semester.
- “Caution” icons alert users to experiments that pose a potential risk.
- Six appendices cover the topics of Scientific Notification, Methods for Preparation of Dilutions, Microbiological Media, Biochemical Test Reagents, Staining Reagents, and Experimental Microorganisms.
- A Guide to Serial Dilutions is printed on the inside back cover for students’ quick reference in completing exercises.



- Art demonstrating lab procedures appears consistently in a special box design that distinguishes it from other art, and catches the student’s eye.
- A bold and modern four-color design adds distinction to each individual element, and allows for easier navigation within each experiment.

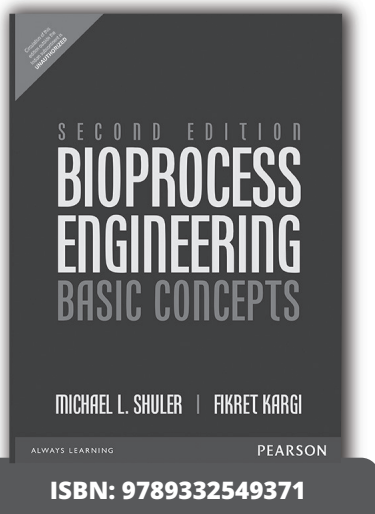
CONTENTS

- | | |
|--|---|
| 1. Part 1: Basic Laboratory Techniques for Isolation, Cultivation, and Cultural Characterization of Microorganism | 6. Part 6: The Protozoa |
| 2. Part 2: Microscopy | 7. Part 7: The Fungi Part 8: The Viruses |
| 3. Part 3: Bacterial Staining | 8. Part 9: Physical and Chemical Agents for the Control of Microbial Growth Part 10: Microbiology of Food |
| 4. Part 4: Cultivation of Microorganisms: Nutritional and Physical Requirements, and Enumeration of Microbial Poulations | 9. Part 11: Microbiology of Water Part 12: Microbiology of Soil Part 13: Bacterial Genetics |
| 5. Part 5: Biochemical Activities of Microorganisms | 10. Part 14: Biotechnology |
| | 11. Part 15: Medical Microbiology Part 16: Immunology |

ABOUT THE AUTHOR (S)

James Cappuccino is a Professor Emeritus at the State University of New York (SUNY) system at Rockland Community College.

Natalie Sherman is at the State University of New York (SUNY) system at Rockland Community College.



Bioprocess Engineering: Basic Concepts, 2/e

 **Michael L. Shuler**

 **984** | © **2015**

Web Supplements



ABOUT THE BOOK

This is the definitive, up-to-the-minute guide to systems management for every IT professional responsible for maintaining stable, responsive IT production environments. Top IT system management expert Rich Schiesser illuminates both the theoretical and practical aspects of systems management, using methods and examples drawn from decades of professional experience in roles ranging from data center leadership to infrastructure design. Schiesser covers every systems management discipline, every type of IT environment, and all elements of success: technology, processes, and people. This edition adds detailed new coverage of the

popular IT Infrastructure Library, showing how ITIL's 10 processes align with the 12 processes Schiesser presents. Another new chapter addresses key issues related to ethics, legislation, and outsourcing. Additional new coverage ranges from managing wireless networks, VoIP, and "ultra-speed" Internet to strategic security and new approaches to facilities management

FEATURES

- NEW - Concepts of validation and Good Manufacturing Practice (GMP) are introduced.
 - Helps students to better understand regulatory constraints on bioprocess development.
- NEW - Updated coverage of concepts.
 - Shows students the connection between traditional ideas and emerging areas, such as tissue engineering and gene therapy.
- NEW - Material on functional genomics and cellular engineering.
 - Provides students with new developments in biology as they impact bioprocess engineering.
- NEW - Expanded discussion of modeling approach.
 - Presents students with a clarified section on models in continuous cultures and adds cybernetic modeling.
- NEW - Expanded coverage of chromatography.
 - Introduces students to discussions of IMAC (immobilized metal affinity chromatography), use of fusion proteins, and porous supports.
- NEW - Expanded sections on metabolic engineering, animal cell culture, and protein processing.
 - Offers students information on analysis of metabolic pathways, bioreactor considerations for animal cells, and includes some recent examples.
- NEW - Additional examples and homework problems, e.g., on topics such as enzyme reaction; reactor operation and scale-up; purification; waste treatment; and genetically engineered cells.
 - Enables students to more thoroughly test their understanding of applied concepts.
- NEW - Reorganized coverage.
 - Gives students a more logical presentation of genetic instability, strategies for genetic engineering, and then an approach to selection of host expression system for production of a heterologous protein.
- Emphasis on novel bioprocessing technologies.
 - Provides students with discussions on metabolic pathways and regulation, bioreactors, and separation processes.
- Coverage on production of proteins from recombinant DNA technology.
 - Allows students to critically compare and evaluate the various techniques involved.
- Applications-To special systems and the particular characteristics of mixed cultures; genetically engineered cells; and plant and animal cells.
 - Reinforces the previously covered engineering and biological concepts while providing more detailed information about important new biological systems.
- Chapter-end suggested readings.
 - Encourages students to obtain a more in-depth understanding of key biological



CONTENTS

Preface to the Second Edition.

Preface to the First Edition.

I. INTRODUCTION.

1. What is a Bioprocess Engineer?
Introductory Remarks. Biotechnology and Bioprocess Engineering. Biologists and Engineers Differ in Their Approach to Research. The Story of Penicillin: How Biologists and Engineers Work Together. Bioprocesses: Regulatory Constraints. Suggestions for Further Reading. Problems.

II. THE BASICS OF BIOLOGY: AN ENGINEER'S PERSPECTIVE.

2. An Overview of Biological Basics. Are All Cells the Same? Cell Construction. Cell Nutrients. Summary. Suggestions for Further Reading. Problems.
3. Enzymes. Introduction. How Enzymes Work. Enzyme Kinetics. Immobilized Enzyme Systems. Large-scale Production of Enzymes. Medical and Industrial Utilization of Enzymes. Summary. Suggestions for Further Reading. Problems.
4. How Cells Work. Introduction. The Central Dogma. DNA Replication: Preserving and Propagating the Cellular Message. Transcription: Sending the Message. Translation: Message to Product. Metabolic Regulation. How the Cell Senses Its Extracellular Environment. Summary. Appendix: Examples of Regulation of Complex Pathways. Suggestions for Further Reading. Problems.
5. Major Metabolic Pathways. Introduction. Bioenergetics. Glucose Metabolism: Glycolysis and the TCA Cycle. Respiration. Control Sites in Aerobic Glucose Metabolism. Metabolism of Nitrogenous Compounds. Nitrogen Fixation. Metabolism of Hydrocarbons. Overview of Biosynthesis. Overview of Anaerobic Metabolism. Overview of Autotrophic Metabolism. Summary. Suggestions for Further Reading. Problems.
6. How Cells Grow. Introduction. Batch Growth. Quantifying Growth Kinetics. How Cells Grow in Continuous Culture. Summary. Suggestions for Further Reading. Problems.
7. Stoichiometry of Microbial Growth and Product Formation.
Introduction. Some Other Definitions. Stoichiometric Calculations. Theoretical Predictions of Yield Coefficients. Summary. Suggestions for Further Reading. Problems.
8. How Cellular Information is Altered.
Introduction. Evolving Desirable Biochemical Activities through Mutation and Selection. Natural Mechanisms for Gene Transfer and Rearrangement. Genetically Engineering Cells. Genomics. Summary. Suggestions for Further Reading. Problems.


III. ENGINEERING PRINCIPLES FOR BIOPROCESSES.

9. Operating Considerations for Bioreactors for Suspension and Immobilized Cultures.
Introduction. Choosing the Cultivation Method. Modifying Batch and Continuous Reactors. Immobilized Cell Systems. Solid-state Fermentations. Summary. Suggestions for Further Reading. Problems.
10. Selection, Scale-Up, Operation, and Control of Bioreactors.
Introduction. Scale-up and Its Difficulties. Bioreactor Instrumentation and Control. Sterilization of Process Fluids. Summary. Suggestions for Further Reading. Problems.
11. Recovery and Purification of Products.
Strategies to Recover and Purify Products. Separation of Insoluble Products. Cell Disruption. Separation of Soluble Products. Finishing Steps for Purification. Integration of Reaction and Separation. Summary. Suggestions for Further Reading. Problems.

IV. APPLICATIONS TO NONCONVENTIONAL BIOLOGICAL SYSTEMS.

12. Bioprocess Considerations in Using Animal Cell Cultures.
Structure and Biochemistry of Animal Cells. Methods Used for the Cultivation of Animal Cells. Bioreactor Considerations for Animal Cell Culture. Products of Animal Cell Cultures. Summary. Suggestions for Further Reading. Problems.
13. Bioprocess Considerations in Using Plant Cell Cultures.
Why Plant Cell Cultures? Plant Cells in Culture Compared to Microbes. Bioreactor Considerations. Economics of Plant Cell Tissue Cultures. Summary. Suggestions for Further Reading. Problems.

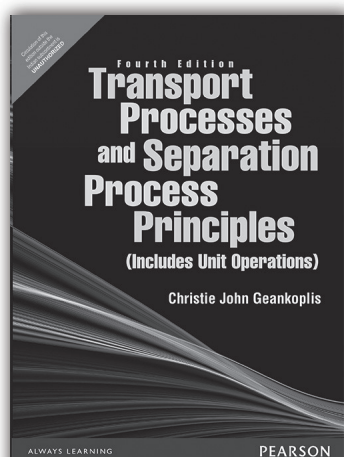


- 
14. Utilizing Genetically Engineered Organisms. Introduction. How the Product Influences Process Decisions. Guidelines for Choosing Host-Vector Systems. Process Constraints: Genetic Instability. Considerations in Plasmid Design to Avoid Process Problems. Predicting Host-Vector Interactions and Genetic Instability. Regulatory Constraints on Genetic Processes. Metabolic Engineering. Protein Engineering. Summary. Suggestions for Further Reading. Problems.
 15. Medical Applications of Bioprocess Engineering. Introduction. Tissue Engineering. Gene Therapy Using Viral Vectors. Bioreactors. Summary. Suggestions for Further Reading. Problems.
 16. Mixed Cultures. Introduction. Major Classes of Interactions in Mixed Cultures. Simple Models Describing Mixed-culture Interactions. Mixed Cultures in Nature. Industrial Utilization of Mixed Cultures. Biological Waste Treatment: An Example of the Industrial Utilization of Mixed Cultures. Summary. Suggestions for Further Reading. Problems.
 17. Epilogue.
- Appendix: Traditional Industrial Bioprocesses.
Anaerobic Bioprocesses. Aerobic Processes.
Suggestions for Further Reading.
Index.

ABOUT THE AUTHOR (S)

DR. MICHAEL L. SHULER is Professor in the School of Chemical Engineering, Cornell University. His areas of research include structured models, heterologous protein expression systems, cell culture analogs for pharmacokinetic models, in-vitro toxicology, plant-cell tissue culture, microbial functional genomics, and bioremediation.

DR. FIKRET KARGI is Professor of Environmental Engineering at Dokuz Eylul University in Ismir, Turkey. His current research includes bioprocessing of wastes for production of commercial products, development of novel technologies for biological treatment of problematic wastewaters, nutrient removal, and novel biofilm reactor development.



ISBN: 9789332549432

Transport Processes and Separation Process Principles (Includes Unit Operations)

 **Christie John Geankoplis**

 **984** | © **2015**

ABOUT THE BOOK

Appropriate for one-year transport phenomena (also called transport processes) and separation processes course. First semester covers fluid mechanics, heat and mass transfer second semester covers separation process principles (includes unit operations).

The title of this Fourth Edition has been changed from Transport Processes and Unit Operations to Transport Processes and Separation Process Principles (Includes Unit Operations). This was done because the term Unit Operations has been largely

superseded by the term Separation Processes which better reflects the present modern nomenclature being used. The main objectives and the format of the Fourth Edition remain the same. The sections on momentum transfer have been greatly expanded, especially in the sections on fluidized beds, flow meters, mixing, and non-Newtonian fluids. Material has been added to the chapter on mass transfer. The chapters on absorption, distillation, and liquid-liquid extraction have also been enlarged. More new material has been added to the sections on ion exchange and crystallization. The chapter on membrane separation processes has been greatly expanded especially for gas-membrane theory.

FEATURES

- The comprehensive, unified, up-to-date guide to transport and separation processes.
- A more thorough coverage of momentum, heat, and mass transport processes and new coverage of separation process applications.
- Greatly expanded coverage of momentum transfer, including fluidized beds and non-Newtonian fluids.
- More detailed discussions of mass transfer, absorption, distillation, liquid-liquid extraction, and crystallization.

CONTENTS

Preface.

I. TRANSPORT PROCESSES: MOMENTUM, HEAT, AND MASS.

1. Introduction to Engineering Principles and Units.
2. Principles of Momentum Transfer and Overall Balances.
3. Principles of Momentum Transfer and Applications.
4. Principles of Steady-State Heat Transfer.
5. Principles of Unsteady-State Heat Transfer.
6. Principles of Mass Transfer.
7. Principles of Unsteady-State and Convective Mass Transfer.

II. SEPARATION PROCESS PRINCIPLES (INCLUDES UNIT OPERATIONS).

8. Evaporation.
9. Drying of Process Materials.

10. Stage and Continuous Gas-Liquid Separation Processes.

11. Vapor-Liquid Separation Processes.

12. Liquid-Liquid and Fluid-Solid Separation Processes.

13. Membrane Separation Processes.

14. Mechanical-Physical Separation Processes.

Appendices.

Appendix A.1. Fundamental Constants and Conversion Factors.

Appendix A.2. Physical Properties of Water.

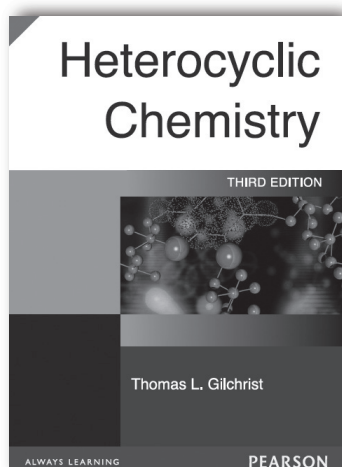
Appendix A.3. Physical Properties of Inorganic and Organic Compounds.

Appendix A.4. Physical Properties of Foods and Biological Materials.

Appendix A.5. Properties of Pipes, Tubes, and Screens.

ABOUT THE AUTHOR

CHRISTIE JOHN GEANKOPLIS is a Professor of Chemical Engineering and Materials Science at the University of Minnesota. His current research interests involve transport processes, biochemical reactor engineering, mass transfer in liquid solutions, and diffusion and/or reaction in porous solids. He holds a Ph.D. in Chemical Engineering from the University of Pennsylvania.



ISBN: 9788131707937

Heterocyclic Chemistry, 3/e

 Thomas L. Gilchrist

 432 | © 2006

ABOUT THE BOOK

This popular text has been completely revised to reflect recent advances in the subject. Deals with the properties of ring systems and general methods of synthesis, providing a unique overview of the subject area. Includes a guide to the naming of the ring systems, invaluable to those unfamiliar with the area.

FEATURES

- Includes recent examples of organometallic reagents which are increasingly used in the synthesis and reactions of heterocyclic compounds.
- New reaction schemes illustrating the use of heterocycles as synthetic intermediates.

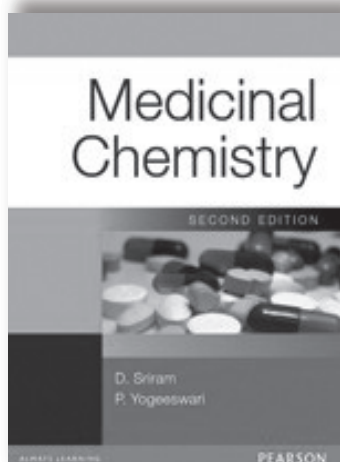
CONTENTS

1. Introduction
2. Aromatic Heterocycles
3. Nonaromatic Heterocycles
4. Methods of Ring Synthesis
5. Six-membered Rings
6. Five-membered Rings with One Heteroatom
7. Six-membered Rings with Two or More Heteroatoms
8. Five-membered Rings with Two or More Heteroatoms
9. Three and Four Membered Rings
10. Seven and Larger Membered Ring Compounds
11. Nomenclature

ABOUT THE AUTHOR (S)

Gary L. Miessler, St. Olaf College

Donald A. Tarr, St. Olaf College



ISBN: 9788131731444

Medicinal Chemistry 2/e

 **Sriram | Yogeeswari**

 **712** | © **2010**

Web Supplements



ABOUT THE BOOK

The second edition of Medicinal Chemistry is based on the core module of Pharmacy syllabi of various technical universities, and targets undergraduate B.Pharm students across India.

The current edition has been designed by authors based on the opinion of the experts to include the latest developments in the field of medicinal chemistry, detailed synthesis mechanism of the drugs and their mode of action inside the

FEATURES

- Complex reactions broken down into intermediary steps
- A variety of exercises to test the cognitive level of students
- New pedagogical features:
 - Learning objectives
 - Further Reading guidelines
 - Coloured illustrations
 - Data tables
- New chapters on drug design and development, principles of drug action, CADD and a chapter on miscellaneous drugs

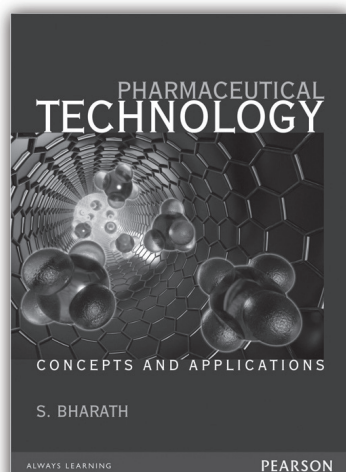
CONTENTS

- | | | |
|--|---|---|
| 1. Drug Discovery and Development | 13. Miscellaneous CNS Agents | 25. Inhibitors |
| 2. Principles of Drug Action | 14. Antihistamines and Anti-Ulcer Agents | 26. Quinolone Antibacterials |
| 3. Drug Metabolism and Prodrugs | 15. Diuretics | 27. Antibiotics |
| 4. Computer-aided Drug Design | 16. Antihypertensive Agents | 28. Antitubercular Agents |
| 5. General Anaesthetics | 17. Antiarrhythmic Drugs | 29. Antifungal Agents |
| 6. Local Anaesthetics | 18. Antihyperlipidemic Agents | 30. Antiviral Agents |
| 7. Sedatives, Hypnotics, and Anxiolytic Agents | 19. Antianginal Drugs | 31. Antiprotozoal Agents |
| 8. Anti-Epileptic Drugs | 20. Insulin and Oral Hypoglycaemic Agents | 32. Anticancer Agents |
| 9. Antipsychotic Agents | 21. Oral Anticoagulants | 33. Prostaglandins |
| 10. Antidepressants | 22. Adrenergic Drugs | 34. Steroids |
| 11. Narcotic Analgesics | 23. Cholinergic Drugs | 35. Miscellaneous Agents |
| 12. Antipyretics and Non-Steroidal Anti-Inflammatory Drugs | 24. Sulphonamides, Sulphones, and Dihydrofolate | 36. Nomenclature of Medicinal Compounds |

ABOUT THE AUTHOR (S)

D. Sriram is presently Assistant Professor at Pharmacy Group, Birla Institute of Technology and Science-Pilani, Hyderabad Campus. He received his Ph.D. in 2000 from Banaras Hindu University, Varanasi. He has been involved in teaching for last eight years and in research for nine years. Dr. Sriram has 108 peer-reviewed research publications to his credit.

P. Yogeeswari is presently Assistant Professor at Pharmacy Group, Birla Institute of Technology and Science-Pilani, Hyderabad Campus. She received her Ph.D. degree in 2001 from Banaras Hindu University, Varanasi. She has been involved in research for the last nine years and in teaching for eight years



ISBN: 9788131795460

Pharmaceutical Technology : Concepts and applications

 **S. Bharath**

 **956** |  **2013**

Web Supplements



ABOUT THE BOOK

Pharmaceutical Technology - Concepts and Applications articulates on the various pharmaco-technological concepts associated with industrial pharmacy. The book is as much focused on providing comprehensive information on formulation development and affiliated areas, as it is to emphasize on their industrial applications. With a plethora of examples that dwell upon pertinent topics, the book equips students of pharmacy to rise to the requirements of the industry.

FEATURES

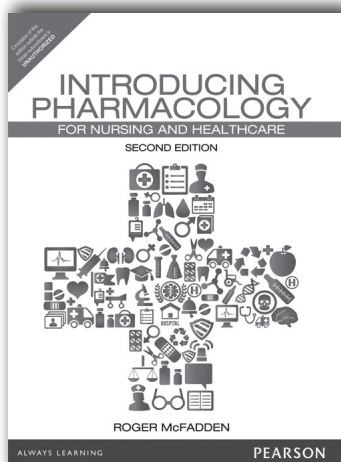
- Unravels pilot plant scale-up techniques to bridge the gap that exists among the laboratory, the pilot plant and the manufacturing unit.
- Elaborates on novel drug delivery systems with emphasis on rate-controlled administration of therapeutic agents.
- Includes a chapter on stability studies that spells out the diverse aspects and test methods conforming to ICH guidelines.
- Probes intellectual property rights and regulatory affairs with accent on international regulations, new drug approval processes, quality system compliance and related documentation requirements.
- Devotes an exclusive chapter to nutraceuticals and cosmeceuticals to highlight the importance of alternative medicine and its fast-growing value in the treatment of today's ailments.

CONTENTS

- | | |
|------------------------------------|---|
| 1. Preformulation | 7. Stability Testing of Active Substances and Pharmaceutical Products |
| 2. Polymer Science | 8. Intellectual Property Rights in Pharmaceuticals |
| 3. Packaging Technology | 9. Regulatory Affairs |
| 4. Production Management | 10. Validation |
| 5. Pilot Plant Scale-up Techniques | 11. Nutraceuticals and Cosmeceuticals |
| 6. Novel Drug Delivery Systems | |

ABOUT THE AUTHOR

S. Bharath is Professor of pharmaceuticals at M. S. Ramaiah College of Pharmacy, Bengaluru. An established academician with 16 years of teaching and research experience enhanced by a strong industrial background, he has guided numerous postgraduate students in their project work. He is currently guiding doctoral students in research leading to their PhD degrees. He has to his credit more than 60 research articles and over 70 papers presented in national and international journals and conferences.



ISBN: 9789332517295

Introducing Pharmacology: For Nursing and Healthcare, 2/e



Roger McFadden



368 | © 2014

ABOUT THE BOOK

This new edition of Introducing Pharmacology remains an accessible and relevant introduction for nursing and healthcare students who are new to pharmacology, as well anyone looking to refresh their knowledge of the subject.

Focused and engaging, the text balances accessibility with depth. Coverage of anatomy and physiology as well as pathophysiology helps to relate the subject to practical realities and makes this text stand out.

FEATURES

- Extend coverage of the pharmacopoeia with a completely new chapter on anti-cancer drugs.
- New sections, including general anaesthetics, hay-fever and prescribing for special groups such as children, pregnant women and the elderly.
- Fully updated with the Recommended International Non-proprietary Names (rINN) for drugs as used in the British National Formulary.
- Inclusion of a new glossary of key terms and definitions.

CONTENTS

Part 1 Principles of pharmacology

1. Let's start at basics: cells and how they work
2. Protein targets for drugs
3. Side-effects, interactions and pharmacokinetics

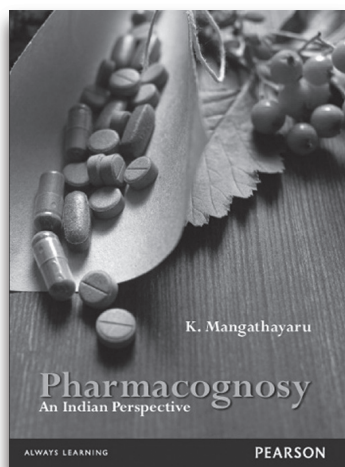
Part 2 The major drug groups

4. The cardiovascular system I: drugs used in the management of coronary artery disease
5. The cardiovascular system II: hypertension and antihypertensive drugs

6. Inflammation and the management of pain
7. Disorders and drugs of the digestive system
8. Infection and anti-microbial drugs
9. Disorders and drugs of the respiratory system
10. Disorders and drugs of the endocrine system
11. Drugs used in the treatment of mental health and neurological disorders
12. Drugs used in the treatment of Cancers and Chemotherapy

ABOUT THE AUTHOR

Roger McFadden is Senior Lecturer in Applied Physiology at Birmingham City University



ISBN: 9788131797266

Pharmacognosy : An Indian Perspective

 **K. Mangathayaru**

 **956** | © **2013**

Web Supplements



ABOUT THE BOOK

Designed to cover the core subject of pharmacognosy offered to undergraduate students of pharmacy, this book presents the theoretical concepts in a lucid style. Its in-depth coverage of topics quintessential to the Indian plant drug sector makes the book unique, as does its exposition on herbal cosmetics and quality control of herbal drugs. Conforming to the latest syllabus prescribed by the AICTE, the book abounds with a rich pedagogy that enables effortless recapitulation of the subject.

FEATURES

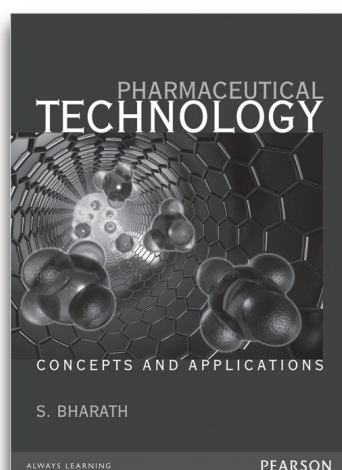
- Current scenario in the Indian herbal drug industry effectively juxtaposed against the worldwide demand for our herbal dosage forms
- Exhaustive coverage of herbal drug regulatory affairs
- Delineation of ayurvedic therapeutics in a scientifically comprehensible way
- Useful compilation of the facts and figures on modern Indian herbal drug industry
- Exclusive chapters on patents and zoo pharmacognosy

CONTENTS

- | | |
|--|---|
| 1. Pharmacognosy–An Introduction | 7. Phytochemical Analysis–An Introduction |
| 2. Age-Old Indian Medical Wisdom–Ayurveda | 8. Plant-Derived Pure Drugs |
| 3. Worldwide Trade in Herbal Products | 9. Traditional Herbal Drugs |
| 4. Herbal Drug Regulatory Affairs | 10. Herbal Cosmetics |
| 5. Herbal Institutes and Industries Working on Medicinal Plants in India | 11. Plant Biotechnology |
| 6. Quality Control and Standardization of Herbal Drugs | 12. Intellectual Property Rights, Traditional Knowledge and Plant Drugs |
| | 13. Zoo Pharmacognosy |

ABOUT THE AUTHOR

K. Mangathayaru is Professor, Faculty of Pharmacy, Sri Ramachandra University, Chennai, from where she received her PhD in 2010. An accomplished teacher for 19 years, she is an alumnus of University College of Pharmaceutical Sciences, Kakatiya University. She has a number of peer-reviewed research publications in national and international journals to her credit.



ISBN: 9788131795460

Pharmaceutical Technology : Concepts and applications



S. Bharath



956 | © 2013

Web Supplements



ABOUT THE BOOK

Pharmaceutical Technology - Concepts and Applications articulates on the various pharmaco-technological concepts associated with industrial pharmacy. The book is as much focused on providing comprehensive information on formulation development and affiliated areas, as it is to emphasize on their industrial applications. With a plethora of examples that dwell upon pertinent topics, the book equips students of pharmacy to rise to the requirements of the industry.

FEATURES

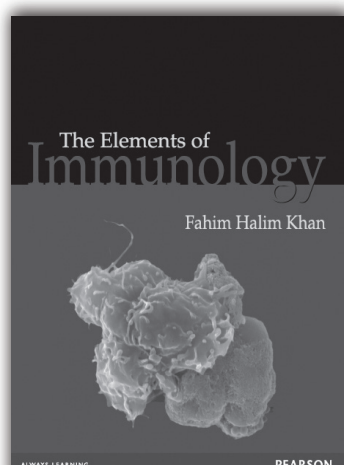
- Unravels pilot plant scale-up techniques to bridge the gap that exists among the laboratory, the pilot plant and the manufacturing unit.
- Elaborates on novel drug delivery systems with emphasis on rate-controlled administration of therapeutic agents.
- Includes a chapter on stability studies that spells out the diverse aspects and test methods conforming to ICH guidelines.
- Probes intellectual property rights and regulatory affairs with accent on international regulations, new drug approval processes, quality system compliance and related documentation requirements.
- Devotes an exclusive chapter to nutraceuticals and cosmeceuticals to highlight the importance of alternative medicine and its fast-growing value in the treatment of today's ailments.

CONTENTS

1. Preformulation
2. Polymer Science
3. Packaging Technology
4. Production Management
5. Pilot Plant Scale-up Techniques
6. Novel Drug Delivery Systems
7. Stability Testing of Active Substances and Pharmaceutical Products
8. Intellectual Property Rights in Pharmaceuticals
9. Regulatory Affairs
10. Validation
11. Nutraceuticals and Cosmeceuticals

ABOUT THE AUTHOR

S. Bharath is Professor of pharmaceutics at M. S. Ramaiah College of Pharmacy, Bengaluru. An established academician with 16 years of teaching and research experience enhanced by a strong industrial background, he has guided numerous postgraduate students in their project work. He is currently guiding doctoral students in research leading to their PhD degrees. He has to his credit more than 60 research articles and over 70 papers presented in national and international journals and conferences.



ISBN: 9788131711583

The Elements of Immunology

 **Fahim Halim Khan**

 **508** | © **2009**

Web Supplements



ABOUT THE BOOK

The Elements of Immunology is designed to introduce readers to the exciting world of immunology, the people who populate it and foster a curiosity to question and know more. The book is supported by a consistent, colourful art programme. The detailed explanation of concepts and terms, and the deconstruction of complex molecular mechanisms into simple, easy-to-remember steps help students focus on the fundamentals without any distractions. Packed with extensive Web-based supplements, the book enables students to visualize concepts, thereby enriching the learning process. The book, comprising twenty chapters, has numerous pedagogical elements built into it. Margin snippets present interesting and relevant information without breaking the flow of the text. Margin definitions highlight the key terms for easy identification and recollection. Each chapter talks about a relevant molecular biology technique, thus providing an insight into the practical aspect of immunology as well. A glossary at the end of the book lists out the important terms used.

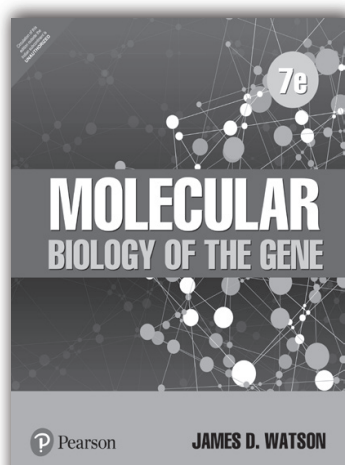
gological elements built into it. Margin snippets present interesting and relevant information without breaking the flow of the text. Margin definitions highlight the key terms for easy identification and recollection. Each chapter talks about a relevant molecular biology technique, thus providing an insight into the practical aspect of immunology as well. A glossary at the end of the book lists out the important terms used.

FEATURES

- Simple and lucid language explaining core concepts
- Rich pedagogy that facilitates learning
- Colourful and consistent art programme comprising over 300 four-colour illustrations that helps to visualize and comprehend concepts better
- 400 end-of-chapter questions help revise the key concepts
- Discussion of the latest developments in the area of immunology such as MHC haplotype matching for cell transplantation, latest antiretroviral drugs developed against HIV, etc.
- Description of key contributors, researchers and their landmark experiments
- Packed with supplements and media resources
 - Over 30 animations that depict key concepts in three dimensions
 - A question bank containing over 400 questions and clinical case studies along with lecture slides including artwork from the book, as supplements to the text, specifically for the instructors

CONTENTS

- | | |
|--|--|
| 1. Introduction to the Immune System | 11. Antigen Processing and Presentation |
| 2. Cells and Organs of the Immune System | 12. Cell-mediated Immunity |
| 3. Antigens | 13. Hypersensitivity |
| 4. Antibodies | 14. Cell Migration and Inflammatory Response |
| 5. Generation of Antibody Diversity | 15. Immune Response to Infectious Agents |
| 6. Major Histocompatibility Complex | 16. Vaccines |
| 7. T-cell Receptor | 17. Transplantation Immunology |
| 8. T-cell Development and Activation | 18. Cancer and the Immune System |
| 9. B-cell Development and Activation | 19. Primary and Secondary Immunodeficiencies |
| 10. Complement System | 20. Autoimmunity and Autoimmune Diseases |



ISBN: 9789332585478

Molecular Biology of the Gene, 7/e

 James D. Watson

 912 | © 2017

ABOUT THE BOOK

Now completely up-to-date with the latest research advances, the Seventh Edition of James D. Watson's classic book, *Molecular Biology of the Gene* retains the distinctive character of earlier editions that has made it the most widely used book in molecular biology. Twenty-two concise chapters, co-authored by six highly distinguished biologists, provide current, authoritative coverage of an exciting, fast-changing discipline.

FEATURES

- Balanced coverage of prokaryotic and eukaryotic systems is included.
- To support the concise narrative, additional material can be found in essay boxes that are labeled in four categories:
- Key or Classic Experiments highlight influential experimental strategies that show students how we know what we know.
- Techniques include recent methods from the fields of bioinformatics and genomics.
- Advanced Concepts provide further discussions of key theories and principles.
- Medical Connections highlight how understanding basic mechanisms sheds light on—and may lead to treatment of—medical conditions and human diseases.

CONTENTS

I. History

1. Mendelian View of the World
2. Nucleic Acids Convey Genetic Information

II. Structure and Study of Macromolecules

3. Weak and strong chemical bonds
4. The Structure of DNA
5. The Structure of RNA
6. The Structure of Proteins and Protein: Nucleic Acid Interactions
7. Techniques of Molecular Biology

III. Maintenance of the Genome

8. Genome Structure, Chromatin and the Nucleosome
9. The Replication of DNA
10. The Mutability and Repair of DNA

11. Homologous Recombination at the Molecular Level
12. Site Specific Recombination and Transposition of DNA

IV. Expression of the Genome

13. Mechanisms of Transcription
14. RNA Splicing
15. Translation
16. The Genetic Code
17. Origins and early evolution of life

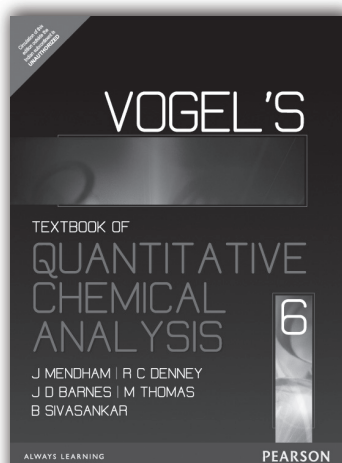
V. Regulation

18. Transcriptional Regulation in Prokaryotes
19. Transcriptional Regulation in Eukaryotes
20. Regulatory RNAs
21. Gene Regulation in Development and Evolution
22. Systems Biology

ABOUT THE AUTHOR

James **D. Watson** is Chancellor Emeritus at Cold Spring Harbor Laboratory, where he was previously its Director from 1968 to 1993, President from 1994 to 2003, and Chancellor from 2003 to 2007.

INSTRUMENTAL METHODS OF ANALYSIS



ISBN: 9788131723258

Vogel's Quantitative Chemical Analysis, 6/e

 J. Mendham | David J. Barnes | R.C. Denney | M. J. K. Thomas

 836 | © 2009

ABOUT THE BOOK

Dr. Vogel's classic introduction to analytical methods has provided generations of chemists worldwide with a basis for teaching, learning and applying analytical chemistry. This 60th anniversary edition - the first for a decade - reflects major changes in the subject. Analysts need to understand the concepts behind methods and **Vogel's Quantitative Chemical Analysis** provides clear introductions to all the key analytical methods including those involving advanced computerised equipment available in many analytical laboratories. The editors have built further on the work of Dr Vogel, modernising the approach while retaining the analytical concepts and ideas which

were built into the original work. This new edition has been extensively revised to take into account developments in instrumental procedures and coupled techniques whilst maintaining the book's focus on quantitative chemical and problem-specific analyses. With excellent cross-referencing this book provides a wealth of examples and tables of data.

FEATURES

- Comprehensive coverage of methods with detailed easy-to-follow practical experiments.
- Basic analytical theory which is essential for understanding the subject.
- Greatly expanded sections on instrumental analysis including aspects of miniaturisation.
- Increased emphasis on minor/trace component analysis and revised statistical handling of data.
- New chapters on sampling, mass spectrometry and nuclear magnetic resonance.

CONTENTS

- | | | |
|---|--|--|
| 1. Preface to First Edition. | 8. Statistics, Introduction to Chemometrics. | 17. Direct Electroanalytical Methods. |
| 2. Preface to Sixth Edition. | 9. Sampling. | 18. Nuclear Magnetic Resonance Spectroscopy. |
| 3. Safety; Units. | 10. The Basis of Separative Methods. | 19. Atomic Absorption Spectroscopy. |
| 4. Reagent Purity. | 11. Thin Layer Chromatography. | 20. Atomic Emission Spectroscopy. |
| 5. Introduction. | 12. Liquid Chromatography. | 21. Molecular Electronic Spectroscopy. |
| 6. Fundamental Theoretical Principles of Reactions in Solution. | 13. Gas Chromatography. | 22. Vibrational Spectroscopy. |
| 7. Common Apparatus & Basic Techniques. | 14. Titrimetric Analysis. | 23. Mass Spectrometry |
| | 15. Gravimetric Analysis. | |
| | 16. Thermal Analysis. | |

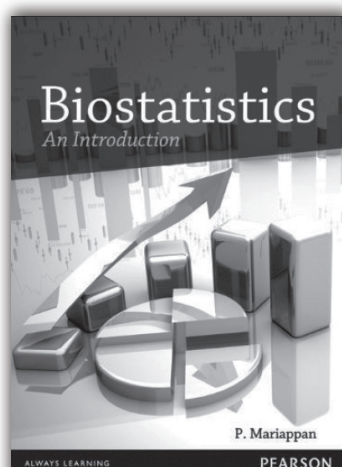
ABOUT THE AUTHOR

J. Mendham, Consultant Analytical Chemist

R.C. Denney, Consultant Forensic Scientist

J. D. Barnes, University of Greenwich

M.J.K. Thomas, University of Greenwich



ISBN: 9788131775141

Biostatistics: An Introduction

 P. Mariappan

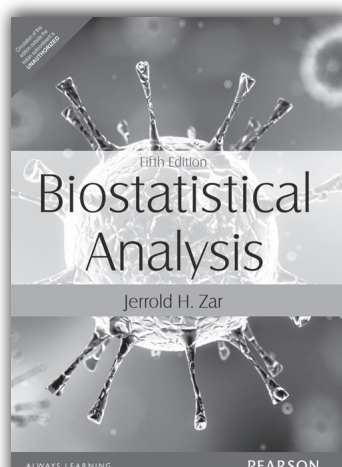
 480 | © 2013

Web Supplements



ABOUT THE BOOK

This textbook is exclusively designed for the undergraduate students of Botany, Biotechnology and Zoology for gaining fundamental knowledge on biostatistics and its applications. Adequate coverage has been provided to the concepts of biostatistics making this book useful in biological data management.



ISBN: 9789332536678

Biostatistical Analysis, 5/e

 Jerrold H. Zar

 760 | © 2014

ABOUT THE BOOK

Zar's *Biostatistical Analysis, Fifth Edition*, is the ideal textbook for graduate and undergraduate students seeking practical coverage of statistical analysis methods used by researchers to collect, summarize, analyze and draw conclusions from biological research. The latest edition of this best-selling textbook is both comprehensive and easy to read. It is suitable as an introduction for beginning students and as a comprehensive reference book for biological researchers and for advanced students.

This book is appropriate for a one- or two-semester, junior or graduate-level course in biostatistics, biometry, quantitative biology, or statistics, and assumes a prerequisite of algebra.

FEATURES

- A broad collection of data-analysis procedures and techniques are presented, covering a wide variety of biological research, such as physiology, genetics, ecology, behavior, morphology.
- The most comprehensive treatment available includes coverage of the basics of statistical analysis, and also the following topics rarely or never found in statistics books for biologists:
 - Diversity
 - Polynomial regression
 - Multidimensional contingency tables
 - Stepwise regression
 - Nonparametric multiple comparisons
 - Higher order factorial analyses of variance
 - Circular distributions
 - Power and sample size determinations.
- An orderly organization and presentation of topics, with cross-referencing as appropriate.
- The readable and accessible approach allows students with no previous statistical background or mathematical expertise beyond simple algebra to understand the material presented.
- The thoughtful presentation encourages students to think about the value of each statistical technique, as opposed to merely plugging numbers into formulae.
- The exposition considers complex procedures such as factorial analysis of variance and multiple regression in terms of the interpretation of typical computer output.
- A wealth of graphs and other figures are integrated to visually support concepts under discussion.
- A uniquely comprehensive set of statistical tables—more than 40 in all—facilitates statistical analyses without having to consult a separate book. This includes tables that are unique to this book.



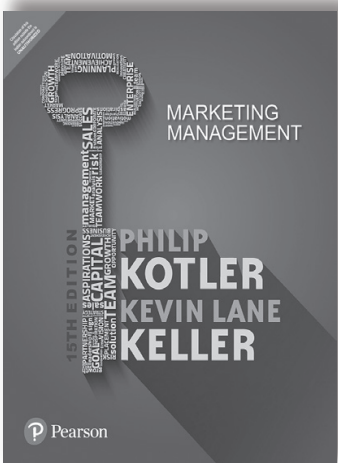
- Worked examples for all major procedures guide readers step-by-step through the techniques, demonstrating each of the important concepts.
- An extensive bibliography directs readers to further relevant literature.

CONTENTS

| | | |
|---|--|--|
| 1. Data: Types and Presentations | 13. Data Transformations | 22. Testing for Goodness of Fit |
| 2. Populations and Samples | 14. Multiway Factorial Analysis of Variance | 23. Contingency Tables |
| 3. Measures of Central Tendency | 15. Nested (Hierarchical) Analysis of Variance | 24. Dichotomous Variables |
| 4. Measures of Variability and Dispersion | 16. Multivariate Analysis of Variance | 25. Testing for Randomness |
| 5. Probabilities | 17. Simple Linear Regression | 26. Circular Distributions: Descriptive Statistics |
| 6. The Normal Distribution | 18. Comparing Simple Linear Regression Equations | 27. Circular Distributions: Hypothesis Testing |
| 7. One-Sample Hypotheses | 19. Simple Linear Correlation | 28. Answers to Exercises |
| 8. Two-Sample Hypotheses | 20. Multiple Regression and Correlation | 29. Literature Cited |
| 9. Paired-Sample Hypotheses | 21. Polynomial Regression | |
| 10. Multisample Hypotheses and the Analysis of Variance | | |
| 11. Multiple Comparisons | | |
| 12. Two-Factor Analysis of Variance | | |

ABOUT THE AUTHOR

Jerrold H. Zar received his undergraduate degree in Biological Sciences from Northern Illinois University in 1962. He later earned his M.S. and Ph.D. degrees in biology and zoology from the University of Illinois at Urbana-Champaign. Zar then returned to Northern Illinois University for 34 years to serve in a variety of capacities. He joined the faculty at NIU as an Assistant Professor in 1968 and quickly rose through the ranks of associate and full professor to become Chair of the Department of Biological Sciences in 1978. He served two terms as Chair of the Department and then, became the Vice Provost for Graduate Studies and Research and Dean of the Graduate School. He was a founder of the Illinois Minority Graduate Incentive Program and the Illinois Consortium for Educational Opportunities Program, where he helped create and protect fellowship opportunities for minority graduate students at universities across the state. Zar is a member of 17 professional scientific societies, including being an elected fellow of the American Association for the Advancement of Science. His many research publications cover a range of topics, from statistical analysis to physiological adaptations of animals to their environment



ISBN: 9789332587403

Marketing Management, 15/e

Philip Kotler | Kevin Lane Keller

760 | © 2016



ABOUT THE BOOK

The world of marketing is changing everyday-and in order for students to have a competitive edge, they need a textbook that reflects the best of today's marketing theory and practices. Marketing Management, 15/e, is the gold standard marketing text because its content and organization consistently reflect the latest changes in today's marketing theory and practice.

The fifteenth edition is updated wherever appropriate to provide the most comprehensive, current, and engaging marketing management text as possible.

FEATURES

- In-text boxes like Marketing Insights and Marketing Memo boxes provide vivid illustrations of chapter concepts using actual companies and situations
- Address today's economic, environmental, and technological changes in marketing
- Four key dimensions of holistic marketing "internal marketing, integrated marketing, relationship marketing, and performance marketing" are woven throughout the text.

CONTENTS

Part 1 Understanding Marketing Management

1. Defining Marketing for the New Realities
2. Developing Marketing Strategies and Plans
3. Creating Long-Term Loyalty Relationships

Part 2 Capturing Marketing Insights

4. Collecting Information and Forecasting Demand
5. Conducting Marketing Research

Part 3 Connecting with Customers

6. Analyzing Consumer Markets
7. Analyzing Business Markets
8. Tapping into Global Markets

Part 4 Building Strong Brands

9. Identifying Market Segments and Targets
10. Crafting the Brand Positioning
11. Creating Brand Equity
12. Addressing Competition and Driving Growth

Part 5 Creating Value

13. Setting Product Strategy
14. Designing and Managing Services
15. Introducing New Market Offerings
16. Developing Pricing Strategies and Programs

Part 6 Communicating Value

17. Designing and Managing Integrated Marketing Communications
18. Managing Mass Communications: Advertising, Sales Promotions, Events and Experiences, and Public Relations
19. Managing Digital Communications: Online, Social Media, and Mobile
20. Managing Personal Communications: Direct and Database Marketing and Personal Selling

Part 7 Delivering Value

21. Designing and Managing Integrated Marketing Channels
22. Managing Retailing, Wholesaling, and Logistics

Part 8 Conducting Marketing Responsibly for LongTerm Success

23. Managing a Holistic Marketing Organization for the Long Run

Appendix: Sonic Marketing Plan and Exercises

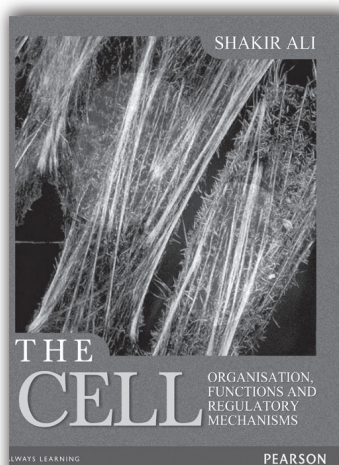
Endnotes
Glossary

ABOUT THE AUTHOR (S)

Philip Kotler is S. C. Johnson & Son Distinguished Professor of International Marketing at the Kellogg School of Management, Northwestern University. Dr. Kotler is author of Marketing Management (Pearson), now in its fifteenth edition and the most widely used marketing text book worldwide. He has authored dozens of other successful books and has written more than 100 articles in leading journals. He is the only three-time winner of the coveted Alpha Kappa Psi award for the best annual article in the Journal of Marketing.

Kevin Lane Keller is the E. B. Osborn Professor of Marketing at the Tuck School of Business at Dartmouth College. Professor Keller has degrees from Cornell, Carnegie-Mellon, and Duke universities. His research has been published in three of the major marketing journals: the Journal of Marketing, the Journal of Marketing Research, and the Journal of Consumer Research. He also has served on the Editorial Review Boards of those journals. With more than 90 published papers, his research has been widely cited and has received numerous awards.

CELL AND MOLECULAR BIOLOGY



ISBN: 9788131773284

The Cell: Organization, Functions and Regulatory Mechanisms

 **Shakir Ali**

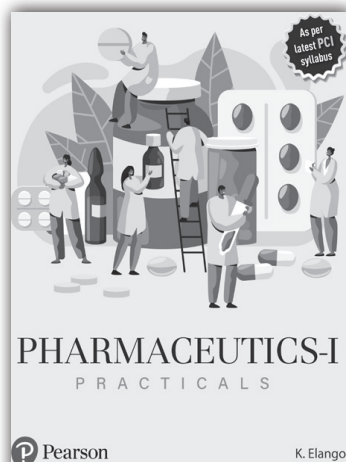
 **376** | © **2014**



ABOUT THE BOOK

The Cell: Organisation, Functions and Regulatory Mechanisms provides a precise blend of basic and applied knowledge of cell science that reinforces the conceptual understanding of the subject with leading edge examples and experiments. Catering to the prescribed curricula for a wide range of programmes in different universities and colleges, this book is ideal for undergraduate and postgraduate students who pursue a detailed study of the subject. The book will also serve as a standard resource material for teachers and scholars who may like to enrich their knowledge about the cell in areas pertaining to their specific fields of interest.

PHARMACEUTICS-I



ISBN: 9789353439606

Pharmaceutics-I

 **K. Elango**

 **204** | © **2020**

ABOUT THE BOOK

This text is intended for the undergraduate students of B.Pharmacy for the practical course on Pharmaceutics-I as per the latest PCI syllabus. The book includes solid dosage forms, semisolid dosage forms and liquid dosage forms, including fundamental unit operations required for manufacturing of pharmaceutical products. Written in a simple and lucid fashion, the experiments are sequenced in a logical order. It also features basic theoretical notes correlating to the different formulations dealt, which gives a clear understanding of the subject to the reader.

FEATURES

- Unambiguous classification of the various dosage forms
Contains relevant prescriptions, formulae,
- procedures and labels for the individual preparations
- Stepwise approach to calculations for easy comprehension

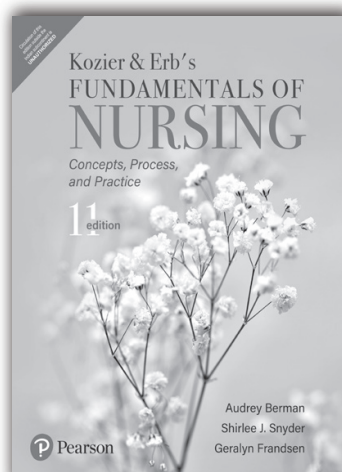
ABOUT THE AUTHOR

K. Elango is presently the Professor and Head, Department of Pharmaceutics, College of Pharmacy, Madras Medical College, Chennai. With a teaching experience spanning over 33 years, and an industrial experience of 3 years, he is an accomplished teacher at both undergraduate and postgraduate levels



Nursing

NEW EDITION TITLES 2021



ISBN: 9789353949273

Kozier and Erb's –Fundamentals of Nursing, 11e

 **Audrey Berman | Shirlee J. Snyder | Gernalyn Frandsen**

 **1,346 | © 2021**

ABOUT THE BOOK

"Pearson introduces the 11th edition of one of its most revered texts for nursing foundations—Kozier&Erb's Fundamentals of Nursing—a gold standard that helps students embark on their careers in nursing. For years, this impeccable text set the foundation for nursing excellence with its clear and approachable writing style. The book prepares readers to become effective nurses with its balanced coverage of the key concepts of contemporary nursing, as well as the latest nursing evidence, standards, and competencies. The book also includes legal aspects of nursing in India INC standards of care and code of ethics and code of professional conduct for nurses in India. Health care delivery, community nursing care and home care in the Indian scenario have also been discussed in detail."

FEATURES

- What's New—A dedicated chapter on hospital admission and discharge. A detailed coverage on hygiene, loss, grieving and death
- Updated! Over 445-chapter review questions based on frequently asked questions in university examinations QSEN Linkages— QSEN competencies addresses the gap between nursing education and practice
- Evidence-Based Practice—focuses evidence-informed practice to highlight relevant research and its implications for nursing care
- Home Care Assessment—focuses on educating the client, family, and community to recognize what is needed for care at home
- Home Care Considerations—focuses on teaching the client and caregiver the proper care at home
- Safety Alerts—correlates to the Patient Safety Goals and identify other crucial safety issues.
- Clinical reasoning—cognitive processes a nurse utilizes to gather and analyze client data, evaluate the relevance of the information, and implement nursing interventions to improve the client's well-being
- Interprofessional practice—identifies and reinforces to the student that other members of the health care team may also be performing the specified skill
- Men in nursing—this edition has increased information about men in nursing from a historical and current perspective in Chapter 1"

CONTENTS

UNIT 1 The Nature of Nursing

- Chapter 1. Historical and Contemporary Nursing Practice
- Chapter 2. Evidence-Based Practice and Research in Nursing
- Chapter 3. Nursing Theories and Conceptual Frameworks
- Chapter 4. Legal Aspects of Nursing
- Chapter 5. Values, Ethics, and Advocacy

UNIT 2 Contemporary Health Care

- Chapter 6. Health Care Delivery Systems
- Chapter 7. Community Nursing and Care Continuity
- Chapter 8. Home Care
- Chapter 9. Electronic Health Records and Information Technology

UNIT 3 The Nursing Process

- Chapter 10. Critical Thinking and Clinical Reasoning
- Chapter 11. Assessing

Chapter 12. Diagnosing

Chapter 13. Planning

Chapter 14. Implementing and Evaluating

Chapter 15. Documenting and Reporting

UNIT 4 Health Beliefs and Practices

Chapter 16. Health Promotion

Chapter 17. Health, Wellness, and Illness

Chapter 18. Culturally Responsive Nursing Care

Chapter 19. Complementary and Alternative Healing Modalities

UNIT 5 Life Span Development

Chapter 20. Concepts of Growth and Development

Chapter 21. Promoting Health from Conception Through Adolescence

Chapter 22. Promoting Health in Young and Middle-Aged Adults

Chapter 23. Promoting Health in Older Adults

Chapter 24. Promoting Family Health

UNIT 6 Integral Aspects of Nursing

- Chapter 25. Caring
- Chapter 26. Communicating
- Chapter 27. Teaching
- Chapter 28. Leading, Managing, and Delegating

UNIT 7 Assessing Health

- Chapter 29. Vital Signs
- Chapter 30. Health Assessment

UNIT 8 Integral Components of Client Care

- Chapter 31. Asepsis
- Chapter 32. Safety and First Aid
- Chapter 33. Hygiene
- Chapter 33. A Hospital Admission and Discharge
- Chapter 34. Diagnostic Testing
- Chapter 35. Medications
- Chapter 36. Skin Integrity and Wound Care
- Chapter 37. Perioperative Nursing

UNIT 9 Promoting Psychosocial Health

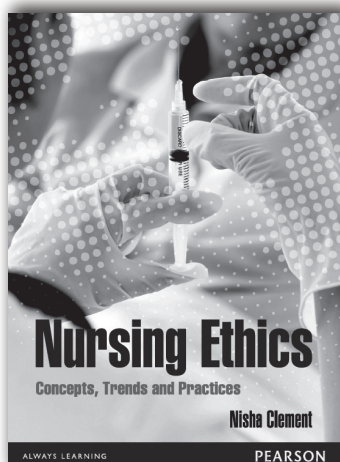
- Chapter 38. Sensory Perception
- Chapter 39. Self-Concept
- Chapter 40. Sexuality
- Chapter 41. Spirituality
- Chapter 42. Stress and Coping
- Chapter 43. Loss, Grieving, and Death

UNIT 10 Promoting Physiological Health

- Chapter 44. Activity and Exercise
- Chapter 45. Sleep
- Chapter 46. Pain Management
- Chapter 47. Nutrition
- Chapter 48. Urinary Elimination
- Chapter 49. Fecal Elimination
- Chapter 50. Oxygenation
- Chapter 51. Circulation
- Chapter 52. Fluid, Electrolyte, and Acid–Base Balance

ABOUT THE AUTHOR (S)

"**Audrey Berman**, PhD, RN - A San Francisco Bay Area native, Audrey Berman received her BSN from the University of California–San Francisco and later returned to that campus to obtain her MS in physiological nursing and her PhD in nursing. **Shirlee J. Snyder**, EdD, RN - Shirlee J. Snyder graduated from Columbia Hospital School of Nursing in Milwaukee, Wisconsin, and subsequently received a Bachelor of Science in nursing from the University of Wisconsin–Milwaukee. **GeralynFrandsen**, EdD, RN - **GeralynFrandsen** graduated in the last class from DePaul Hospital School of Nursing in St. Louis, Missouri. She earned a Bachelor of Science in nursing from Maryville College"



ISBN: 9788131773345

Nursing Ethics: Concepts, Trends and Practices

 **Nisha Clement**

 **424** | © **2012**

ABOUT THE BOOK

Basic Approach

This book on Nursing Ethics is meant for the entire nursing community and provides the ethical guidelines for students, teachers, practicing nurses in clinics, managing nurses and those doing researches. The book helps them to understand the concepts in a very simple and lucid manner irrespective of their specialized areas like emergency department, intensive care unit, operation theater, etc.

FEATURES

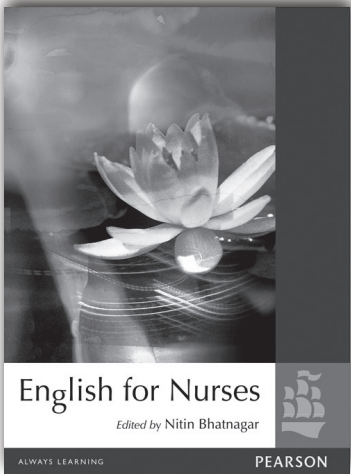
- Complete and exclusive coverage of ethical practices in nursing
- Exhaustive coverage of nursing ethics in super specialty areas
- Separate chapters on ethics in clinical specialties areas
- Important definitions are listed at the beginning of every chapter.
- Glossary to guide the students with the difficult terms

CONTENTS

1. Introduction to Ethics
2. Principles of Nursing Ethics
3. Professional Regulations in Ethics
4. Ethics Issues in Nursing
5. Special Ethical Issues in Nursing

ABOUT THE AUTHOR

Nisha Clement is Vice Principal, VSS College of Nursing, Bangalore.



ISBN: 9788131769621

English for Nurses

 Nitin Bhatnagar

 128 | © 2012

ABOUT THE BOOK

Basic Approach
This book addresses the need for nurses to communicate effectively in English. Combining the essentials of communication with language learning, it provides all the necessary skills for professionals in healthcare. English for Nurses puts equal emphasis on all the four aspects of learning the language—listening, speaking, reading and writing through a variety of exercises and assessment modules. It provides plenty of practice in functional grammar and also for pronunciation and fluency in speaking.

FEATURES

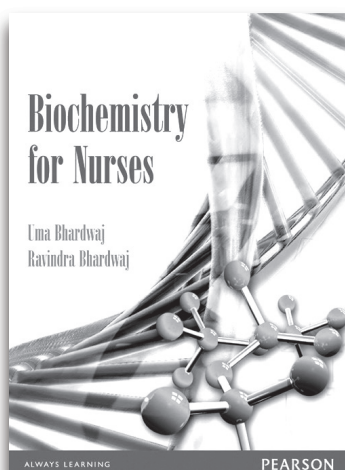
- Reading Comprehension: Objective and Subjective Questions
- Vocabulary and glossary
- Grammar exercises that are graded
- Functional grammar based on practical situations that a nurse faces.
- Common problems of pronunciation and speaking skills have been addressed
- Writing skills based on the needs of the nurses have been addressed

CONTENTS

1. Edith Cavell: And Bravely Fought the Nurse
 2. The Story of a British Nurse in India (Margaret Ledger)
 3. A doctor for all seasons: The story of Noshir H Antia
(Kavita Nambsian)
 4. Aarohi: Ascent in Healthcare
 5. Communication in healthcare: The perspective of a Nurse
 6. Private and Public Partnership in Healthcare (Bharathi Ghanshyam)
 7. Managing Pain
 8. The story of a British Nurse (Stress in Nursing, Pratibha P. Kane; from a journal)
 9. The Quiet Soldiers of Compassion: Prakash and Mandakini Amte
 10. The Story of a Caribbean Nurse
- Appendix: Report Writing

ABOUT THE AUTHOR

Nitin Bhatnagar is Professor and Head, Institute of Applied Sciences and Humanities, GLA University, Mathura.



ISBN: 9788131768563

Biochemistry for Nurses

 **Uma Bhardwaj | R Bhardwaj**

 **296 | © 2012**

ABOUT THE BOOK

Biochemistry for Nurses has been designed considering the syllabi requirements laid down by The Indian Nursing Council and other premier institutes/universities. Book covers the most up-to-date developments in the area of Biochemistry and presents all the essential course information required for all UG course in an easy-to-follow and step-by-step format.

FEATURES

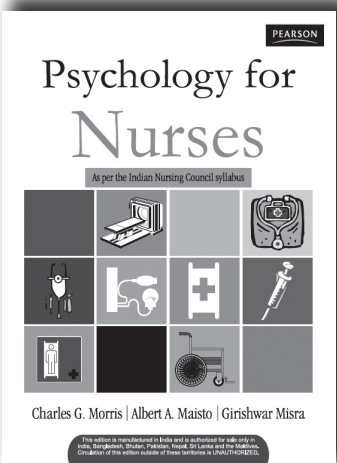
- Detailed Interpretation and Investigation of metabolic disorders of biomolecules
- Simple and self-explanatory diagrams
- Multiple choice and review questions to test one's skills

CONTENTS

1. Introduction
2. Structure and functions of Cell membrane
3. Composition and metabolism of Carbohydrates
4. Composition and metabolism of Lipids
5. Composition and metabolism of Amino acids and Proteins
6. Composition of Vitamins and Minerals
7. Immunochemistry
8. Composition and Metabolism of Nucleic Acids

ABOUT THE AUTHOR

Uma Bhardwaj is an experienced Prof. of Biochemistry. Presently she is working as Sr. Director with Arni University. She is M.Sc gold medalist in Biochemistry, M.Tech and Ph.D. The author has published a number of research papers in national and international journals also published books. She is the chief editor of Arni University International journals of Science, Technology and Management. She has developed many formulations for commercial products. **R Bhardwaj** is currently Vice-chancellor and has been professor of Biochemistry from the young age of 34 years, teaching M Sc and Ph. D students. Prof R Bhardwaj is a world renowned distinguished scientist and a professor of biochemistry have published research papers in world's top scientific journals like Nature and BBRC. He had developed biological solar cells with greater power conversion efficiency. Prof Bhardwaj has guided 11 PhD's and has a large number of research publications.



ISBN: 9788131732168

Psychology for Nurses

Charles G. Morris | Albert A. Maisto | Girishwar Misra

260 | © 2010

ABOUT THE BOOK

Basic Approach

Designed to facilitate and complement the training of a nurse by creating awareness of and interest in psychology, this textbook provides an introduction to key topics such as the biological basis of behavior, perception, learning, memory, communication, intelligence, and aptitude. This book is written in an easy-to-understand and a lucid style, and deals with concepts of motivation, conflicts and their resolution, personality, and life-span development. Separate chapters on attitude, group psychology, psychological assessment, and the role of a nurse have also been included. Several illustrations, figures, tables, and key terms have been provided in the chapters to aid understanding and recapitulation.

FEATURES

- The characteristics nurses need to develop to better care for their patients
- The need to form some sort of relationship with patients while remaining objective
- The future of the nursing profession in India
- Based on the latest syllabus by the Indian Nursing Council
- Review questions and multiple-choice questions are included at the end of each chapter

CONTENTS

- | | |
|---|--|
| 1. Introduction | 9. Stress and Coping |
| 2. The Genetic and Biological Bases of Behavior | 10. Personality |
| 3. Sensory and Perceptual Processes | 11. Life-span Development |
| 4. Learning | 12. Mental Hygiene, Mental Health, and Positive Psychology |
| 5. Memory | 13. Psychological Disorders and Therapies |
| 6. Thinking, Language, and Communication | 14. Attitudes |
| 7. Intelligence and Aptitude | 15. Group Psychology |
| 8. Motivation and Emotion | |

ABOUT THE AUTHOR (S)

Charles G. Morris, a Ph.D. in psychology from the University of Illinois, is Professor Emeritus at the University of Michigan. He served as Associate Dean in the College of Literature, Science and the Arts and as Associate Chair of the Department of Psychology. He is a Fellow of the American Psychological Association and the American Psychological Society. Dr Morris is also the author of more than two dozen books, more than a dozen articles, and more than thirty papers and presentations.

Albert A. Maisto earned a Ph.D. in psychology from the University of Alabama. Throughout his career, Dr Maisto distinguished himself as an exemplary instructor of general psychology winning the prestigious Bank of America Award for Teaching Excellence. His portfolio includes dozens of published articles in refereed journals, professional papers, and a successful series of Introductory Psychology textbooks by Pearson Education.

Girishwar Misra, currently professor of psychology at the University of Delhi, has served as President of the National Academy of Psychology (NAOP) India, Chairman of the department of psychology, and as Dean of the faculty of arts at Delhi University. Dr Misra has undertaken major research projects and written extensively in the areas such as poverty, stress, environment, creativity, and well-being. During the course of his career, he has won some prestigious awards and has supervised research work of many doctoral students.

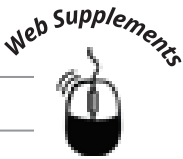


ISBN: 9789332525276

Microbiology for Nurses

 V. Deepa Parvathi | R. Sumitha | Smitha. S

 408 | © 2014



ABOUT THE BOOK

Microbiology for Nurses approaches, in a systematic way, the pathogenic activities of a wide range of microorganisms and their indications on the human body. Designed to fully address the needs of nursing students taking up a curriculum on microbiology, the book conforms to the syllabus prescribed by the Indian Nursing Council. With ample review questions and multiple choice questions to enable easy recapitulation and vibrant color illustrations to appeal to the visual learner, this book presents the theoretical concepts of the subject from a professional nursing perspective.

FEATURES

- Exhaustive coverage of asepsis, sterilization and disinfection
- Focus on hospital safety measures and biomedical waste management
- In-depth analysis of the scope of chemotherapy and the action of antibiotics
- Concise and easy-to-follow presentation of techniques for collection and handling of specimens, immunization and vaccination
- Ready-to-use online resources featuring laboratory experiments and true-or- false questions

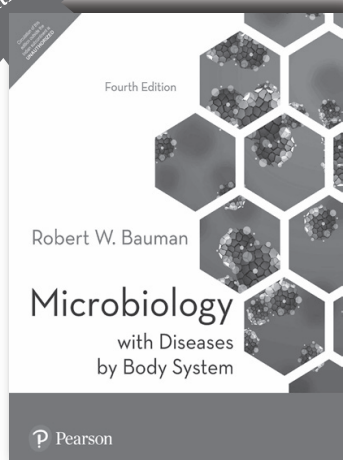
CONTENTS

1. Introduction
2. General characteristics of microbes
3. Infection Control
4. Pathogenic organisms
5. Immunology

ABOUT THE AUTHOR (S)

Mrs. V. Deepa Parvathi is faculty, Department of Human Genetics, Sri Ramachandra University, Tamilnadu
Mrs. R. Sumitha is faculty, Department of Biomedical Sciences, Sri Ramachandra University, Tamilnadu
Mrs. Smitha. S is visiting Faculty, C. M. Managuli Arts &Science College Karnataka

4 Colour
Edition



ISBN: 9789332587441

Microbiology with Diseases by Body System, 4/e



Robert W. Bauman



944 | © 2017

ABOUT THE BOOK

Designed for pre-nursing and allied health students (and also mixed-majors courses), *Microbiology with Diseases by Body System*, Third Edition retains the hallmark art program and clear writing style that have made Robert Bauman's book a success. This Third Edition features compelling clinical content related to students' future healthcare careers and abundant opportunities for applied student practice. Chapter-opening Clinical Cases, Emerging Diseases boxes, and Clinical Applications boxes introduce students to real-world clinical situations. Student comprehension is ensured with end-of-chapter practice that encompasses applied, visual, and conceptual understanding.

FEATURES

- NEW! Numbered Learning Outcomes, found throughout the book, are used to tag Test Bank questions and all Mastering assets.
- NEW! Tell Me Why critical-thinking questions end each section in the text and strengthen the pedagogy and organization of each chapter, consistently providing stop-and-think opportunities for students as they read.
- Micro in the Clinic features hook students at the beginning of the chapter and keep them curious and engaged throughout the chapter-closing "Micro in the Clinic Follow-up."
- Clinical and Emerging Disease Case Studies ask students to apply what they have learned to clinical scenarios. Emerging Disease Case studies now include Critical Thinking questions to spark discussion.
- State-of-the-Science currency, found in Chapter 3 (Cell Structure and Function) and the immunology chapters (Chapters 15—18) de-emphasize outdated terms, and focus on the three domains of living organisms. This reflects the most current understanding of the rapidly evolving field of microbiology.
- Student Support includes Figure Legend and "Tell Me Why" Questions, TEM/SEM Designations, and Pronunciations and Etymology Guides that appear throughout the chapters. These resources strengthen the pedagogy and organization of each chapter by consistently providing stop and think opportunities for students as they read.
- Concept Mapping exercises appear in the end-of-chapter material, guiding students to create their own concept maps from a list of key terms focused around an important chapter topic. They may also complete concept maps in the Mastering Microbiology Study Area.
- Updates in every chapter reflect the latest in microbiology research and technology.

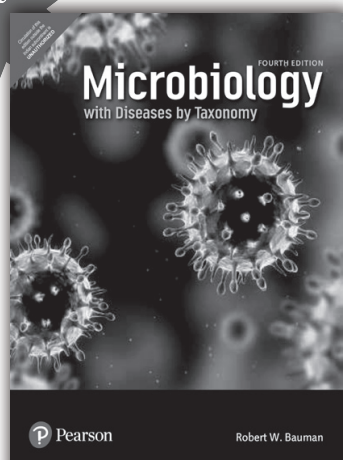
CONTENTS

1. A Brief History of Microbiology
2. Cell Structure and Function
3. Microscopy, Staining, and Classification
4. Microbial Metabolism
5. Microbial Nutrition and Growth
6. Microbial Genetics
7. Recombinant DNA Technology
8. Controlling Microbial Growth in the Environment
9. Controlling Microbial Growth in the Body: Antimicrobial Drugs
10. Characterizing and Classifying Prokaryotes
11. Characterizing and Classifying Eukaryotes
12. Characterizing and Classifying Viruses, Viroids, and Prions
13. Infection, Infectious Diseases, and Epidemiology
14. Innate Immunity
15. Adaptive Immunity
16. Immunization and Immune Testing
17. AIDS and Other Immune Disorders
18. Microbial Diseases of the Skin and Wounds
19. Microbial Diseases of the Nervous System and Eyes
20. Microbial Cardiovascular and Systemic Diseases
21. Microbial Diseases of the Respiratory System
22. Microbial Diseases of the Digestive System
23. Microbial Diseases of the Urinary and Reproductive Systems
24. Applied and Environmental Microbiology

ABOUT THE AUTHOR

ROBERT W. BAUMAN is a professor of biology and past chairman of the Department of Biological Sciences at Amarillo College in Amarillo, Texas. He has taught microbiology, human anatomy and physiology, and botany for over thirty years.

4 Colour
Edition



ISBN: 9789332587274

Microbiology with Diseases by Taxonomy, 4/e



Robert W. Bauman



900



2017

ABOUT THE BOOK

The Fourth Edition of *Microbiology with Diseases by Taxonomy*, 4e is the most cutting-edge microbiology book available, offering unparalleled currency, accuracy, and assessment. The state-of-the-art approach includes 18 new Video Tutors written and developed by the author to walk students through key microbiology concepts, bringing the textbook to life. QR codes in the textbook enable students to use their smartphone or tablet to instantly interact with these step-by-step tutorials and visualize important concepts and processes. Compelling clinical case studies

and emerging disease case studies give students opportunities to apply new knowledge and explore real-world microbiology. Student comprehension is ensured with end-of-chapter practice that encompasses both visual and conceptual understanding. This edition retains the hallmark art program and clear writing style that have made Robert W. Bauman's book an engaging and successful introductory text.

FEATURES

- Organization and Currency
 - The taxonomic organization of the disease chapters (Chapters 19—25) presents microbial diseases by type of pathogenic microbe, helping students recognize shared characteristics among categories of microbes.
 - Chapter 3 (Cell Structure and Function) de-emphasizes the term "prokaryote" (a term that is based on an outdated perception of taxonomy and is thus misleading to students) and instead emphasizes the three domains of living organisms, matching the latest taxonomic research. This state-of-the-science organization sets this book apart from all other allied health microbiology books.
 - The immunology chapters (Chapters 15—18), which have been and continue to be reviewed in-depth by immunology specialists, reflect the most current understanding of this rapidly-evolving field of any microbiology book available.
- Student Interest Features
 - Microbe-at-a-Glance boxes showcase representative microbes in each of the disease chapters. They feature an illustration of a microbe accompanied by very brief summaries of taxonomy, morphology, virulence factors, diseases caused, and treatment/prevention. These "snapshots" also appear as flashcards on the book's website, giving students extra "on-the-go" practice and review opportunities.
 - Beneficial Microbe boxes emphasize the practical or benevolent nature and uses of microbes and help students overcome the common misconception that all microbes cause disease.
 - Clinical Case Study and Emerging Disease Case Study boxes are written in an engaging narrative voice and feature a patient's experience with microbial diseases and follow-up critical thinking questions for students.
 - Highlight boxes appear throughout the text and focus on interesting topics in microbiology; e.g., what causes that "fishy" smell in fish markets, what allows some organisms to glow in the dark, how gold-mining microbes are used, and which cutting-edge molecular techniques are used in microbiology.
- Visually Superior Art Program
 - Half-illustration/half-micrograph 3D cellular art sets a new standard for teaching cellular structure.
 - Superior text-art integration breaks complex processes into smaller, more manageable pieces for students.
 - Colors and icons are used consistently throughout the text to make it easier for students to recognize structures and processes from chapter to chapter.
- Student Text Resources
 - Figure Legend Questions encourage critical thinking.
 - Critical Thinking Questions appear throughout the chapters and in the EOC section.
 - Answers to all end-of-chapter review questions (except Short Answers) are at the back of the book; answers to Short Answer questions are in the Instructor's Manual. The answer section and appendices in this edition are tabbed for easy reference.



- TEM/SEM Designations, a feature regularly requested by instructors, appear in all micrographs and many illustrations.
- Pronunciations and Etymology Guides help students with pronouncing and remembering vocabulary.
- Concept Mapping exercises appear in the end-of-chapter material, guiding students to create their own concept maps from a list of key terms focused around an important chapter topic.

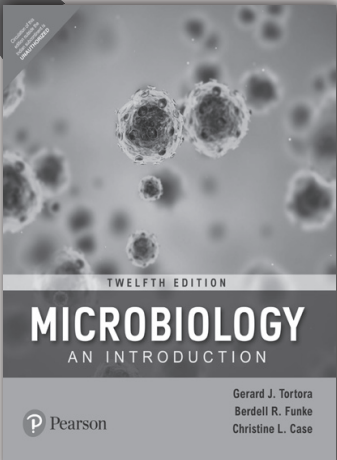
CONTENTS

- | | |
|--|---|
| 1. A Brief History of Microbiology | Prions |
| 2. The Chemistry of Microbiology | 14. Infection, Infectious Disease, and Epidemiology |
| 3. Cell Structure and Function | 15. Innate Immunity |
| 4. Microscopy, Staining, and Classification | 16. Adaptive Immunity |
| 5. Microbial Metabolism | 17. Immunization and Immune Testing |
| 6. Microbial Nutrition and Growth | 18. Immune Disorders |
| 7. Microbial Genetics | 19. Pathogenic Gram-Positive Bacteria |
| 8. Recombinant DNA Technology | 20. Pathogenic Gram-Negative Cocci and Bacilli |
| 9. Controlling Microbial Growth in the Environment | 21. Rickettsias, Chlamydias, Spirochetes, and Vibrios |
| 10. Controlling Microbial Growth in the Body: Antimicrobial Drugs | 22. Pathogenic Fungi |
| 11. Characterizing and Classifying Prokaryotes | 23. Parasitic Protozoa, Helminths, and Arthropod Vectors |
| 12. Characterizing and Classifying Eukaryotes | 24. Pathogenic DNA Viruses |
| 13. Characterizing and Classifying Viruses, Viroids, and | 25. Pathogenic RNA Viruses |
| | 26. Applied and Environmental Microbiology |

ABOUT THE AUTHOR

ROBERT W. BAUMAN is a professor of biology and past chairman of the Department of Biological Sciences at Amarillo College in Amarillo, Texas. He has taught microbiology, human anatomy and physiology, and botany for over thirty years.

4 Colour
Edition



ISBN: 9789353437855

Microbiology: An Introduction, 12/e

Gerard J. Tortora | Berdell R. Funke | Christine L. Case

Web Supplements

960 | © 2019

ABOUT THE BOOK

Praised for its exceptionally clear presentation of complex topics, this #1-selling text for microbiology non-majors provides a careful balance of concepts and applications, and proven art that teaches. The **Twelfth Edition** of Tortora, Funke, and Case’s **Microbiology: An Introduction** focuses on big picture concepts and themes in microbiology, encouraging students to visualize and synthesize tough topics such as microbial metabolism, immunology, and microbial genetics. The text and accompanying resources also help students make connections between microbiology theory and disease diagnosis, treatment, and prevention.

FEATURES

- **An appropriate balance between microbiological fundamentals and applications, and between medical applications and other applied areas of microbiology**—Basic microbiological principles are given greater emphasis, and health-related applications are featured.
- **Straightforward presentation of complex topics**—Each section of the text is written with the student in mind.
- **Clear, accurate, and pedagogically effective illustrations and photos**—Step-by-step diagrams that closely coordinate with narrative descriptions aid student comprehension of concepts.



CONTENTS

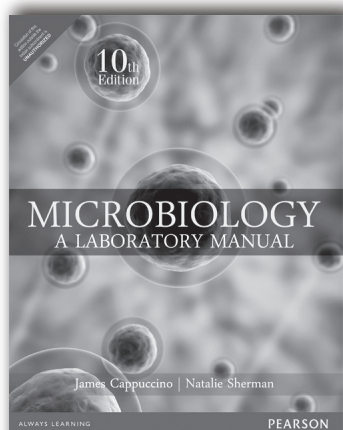
Part One: Fundamentals of Microbiology

- 1. The Microbial World and You
- 2. Chemical Principles
- 3. Observing Microorganisms through a Microscope
- 4. Functional Anatomy of Prokaryotic and Eukaryotic Cells
- 5. Microbial Metabolism
- 6. Microbial Growth
- 7. The Control of Microbial Growth

ABOUT THE AUTHOR (S)

Gerard J. Tortora, Bergen Community College
Berdell R. Funke, North Dakota State University
Christine L. Case, Skyline College

- 8. Microbial Genetics
- 9. Biotechnology and DNA Technology
- Part Two: A Survey of the Microbial World**
- 10. Classification of Microorganisms
- 11. The Prokaryotes: Domains Bacteria and Archaea
- 12. The Eukaryotes: Fungi, Algae, Protozoa, and Helminths
- 13. Viruses, Viroids, and Prions



ISBN: 9789332535190

Microbiology: A Laboratory Manual, 10/e

 James G. Cappuccino | Natalie Sherman

 576 | © 2014

ABOUT THE BOOK

Versatile, comprehensive, and clearly written, this competitively priced laboratory manual can be used with any undergraduate microbiology text-and now features brief clinical applications for each experiment, MasteringMicrobiology® quizzes that correspond to each experiment, and a new experiment on hand washing. Microbiology: A Laboratory Manual is known for its thorough coverage, descriptive and straightforward procedures, and minimal equipment requirements. A broad range of experiments helps to convey basic principles and techniques. Each experiment includes an overview, an in-depth discussion of the principle involved, easy-to-follow procedures, and lab reports with review and critical thinking questions. Ample introductory material and laboratory safety instructions are provided.

FEATURES

- Comprehensive coverage of the core microbiology topics includes experiments in the areas of genetics, immunology, and biotechnology.
- A wide range of experiments progressing from simple to complex enable instructors to tailor their laboratory classes to the topics they wish to cover.
- Experiments use the most common and affordable laboratory materials, designed to accommodate any lab.
- Over 90 photographs in full color and numerous illustrations appear directly alongside the experiments, helping students visualize techniques and expected results.
- Spiral binding makes student-use easier and minimizes space on a lab bench.
- A detailed introductory section on basic lab techniques and safety thoroughly prepares students for lab work during the semester.
- “Caution” icons alert users to experiments that pose a potential risk.
- Six appendices cover the topics of Scientific Notification, Methods for Preparation of Dilutions, Microbiological Media, Biochemical Test Reagents, Staining Reagents, and Experimental Microorganisms.
- A Guide to Serial Dilutions is printed on the inside back cover for students’ quick reference in completing exercises.
- Art demonstrating lab procedures appears consistently in a special box design that distinguishes it from other art, and catches the student’s eye.
- A bold and modern four-color design adds distinction to each individual element, and allows for easier navigation within each experiment.

CONTENTS

Part 1: Basic Laboratory Techniques for Isolation, Cultivation, and Cultural Characterization of Microorganisms

1. Effectiveness of Hand Washing
2. Culture Transfer Techniques
3. Techniques for Isolation of Pure Cultures
4. Cultural Characteristics of Microorganisms

Part 2: Microscopy

5. Microscopic Examination of Stained Cell Preparations
6. Microscopic Examination of Living Microorganisms Using a Hanging-Drop Preparation or a Wet Mount
7. The Microscopic Measurement of Microorganisms

Part 3: Bacterial Staining

8. Preparation of Bacterial Smears
9. Simple Staining
10. Negative Staining
11. Gram Stain
12. Acid-Fast Stain

13. Differential Staining for Visualization of Bacterial Cell Structures

Part 4: Cultivation of Microorganisms: Nutritional and Physical Requirements, and Enumeration of Microbial Poulations

14. Nutritional Requirements: Media for the Routine Cultivation of Bacteria
15. Use of Differential, Selective, and Enriched Media
16. Physical Factors: Temperature
17. Physical Factors: pH of the Extracellular Environment
18. Physical Factors: Atmospheric Oxygen Requirements
19. Techniques for the Cultivation of Anaerobic Microorganisms
20. Serial Dilution - Agar Plate Procedure to Quantitate Viable Cells
21. The Bacterial Growth Curve



Part 5: Biochemical Activities of Microorganisms

- 22. Extracellular Enzymatic Activities of Microorganisms
- 23. Carbohydrate Fermentation
- 24. Triple Sugar-Iron Agar Test
- 25. IMViC Test
- 26. Hydrogen Sulfide Test
- 27. Urease Test
- 28. Litmus Milk Reactions
- 29. Nitrate Reduction Test
- 30. Catalase Test
- 31. Oxidase Test
- 32. Utilization of Amino Acids
- 33. Genus Identification of Unknown Bacterial Cultures

Part 6: The Protozoa

- 34. Free-Living Protozoa
- 35. Parasitic Protozoa

Part 7: The Fungi

- 36. Cultivation and Morphology of Molds
- 37. Yeast Morphology, Cultural Characteristics, and Reproduction
- 38. Identification of Unknown Fungi

Part 8: The Viruses

- 39. Cultivation and Enumeration of Bacteriophages
- 40. Isolation of Coliphages from Raw Sewage

Part 9: Physical and Chemical Agents for the Control of Microbial Growth

- 41. Physical Agents of Control: Moist Heat
- 42. Physical Agents of Control: Environmental Osmotic Pressure
- 43. Physical Agents of Control: Electromagnetic Radiations
- 44. Chemical Agents of Control: Chemotherapeutic Agents
- 45. Determination of Penicillin Activity in the Presence and Absence of Penicillinase
- 46. Chemical Agents of Control: Disinfectants and Antiseptics

Part 10: Microbiology of Food

- 47. Microbiological Analysis of Food Products: Bacterial Count
- 48. Wine Production

Part 11: Microbiology of Water

- 49. Standard Qualitative Analysis of Water
- 50. Quantitative Analysis of Water: Membrane Filter Method

Part 12: Microbiology of Soil

- 51. Microbial Populations in Soil: Enumeration
- 52. Isolation of Antibiotic-Producing Microorganisms and Determination of Antimicrobial Spectrum of Isolates
- 53. Isolation of *Pseudomonas* Species by Means of the Enrichment Culture Technique

Part 13: Bacterial Genetics

- 54. Enzyme Induction
- 55. Bacterial Conjugation
- 56. Isolation of a Streptomycin-Resistant Mutant
- 57. The Ames Test: A Bacterial Test System for Chemical Carcinogenicity

Part 14: Biotechnology

- 58. Bacterial Transformation
- 59. Isolation of Bacterial Plasmids
- 60. Restriction Analysis and Electrophoretic Separation of Bacteriophage Lambda DNA

Part 15: Medical Microbiology

- 61. Microbial Flora of the Mouth: Determination of Susceptibility to Dental Caries
- 62. Normal Microbial Flora of the Throat and Skin
- 63. Identification of Human Staphylococcal Pathogens
- 64. Identification of Human Streptococcal Pathogens
- 65. Identification of *Streptococcus pneumoniae*
- 66. Identification of Enteric Microorganisms Using Computer-Assisted Multitest Microsystems
- 67. Isolation and Presumptive Identification of *Campylobacter*
- 68. Microbiological Analysis of Urine Specimens
- 69. Microbiological Analysis of Blood Specimens
- 70. Species Identification of Unknown Bacterial Cultures

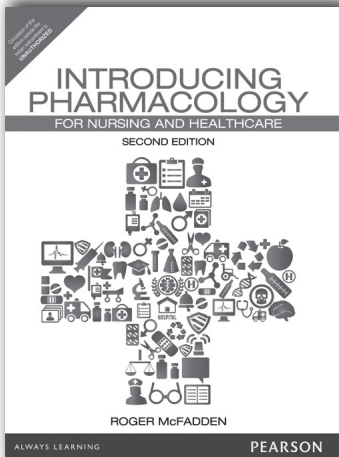
Part 16: Immunology

- 71. Precipitin Reaction: The Ring Test
- 72. Agglutination Reaction: The Febrile Antibody
- 73. Immunofluorescence
- 74. Enzyme-Linked Immunoabsorbent Assay
- 75. Agglutination Reaction: Mono-Test for Infectious Mononucleosis
- 76. Sexually Transmitted Diseases: Rapid Immunodiagnostic Procedures

ABOUT THE AUTHOR (S)

James Cappuccino is a Professor Emeritus at the State University of New York (SUNY) system at Rockland Community College.

Natalie Sherman is at the State University of New York (SUNY) system at Rockland Community College.



ISBN: 9789332517295

Introducing Pharmacology: For Nursing and Healthcare, 2/e

 Roger McFadden

 368 | © 2014

ABOUT THE BOOK

This new edition of Introducing Pharmacology remains an accessible and relevant introduction for nursing and healthcare students who are new to pharmacology, as well anyone looking to refresh their knowledge of the subject.

Focused and engaging, the text balances accessibility with depth. Coverage of anatomy and physiology as well as pathophysiology helps to relate the subject to practical realities and makes this text stand out.

FEATURES

- Extend coverage of the pharmacopoeia with a completely new chapter on anti-cancer drugs.
- New sections, including general anaesthetics, hay-fever and prescribing for special groups such as children, pregnant women and the elderly.
- Fully updated with the Recommended International Non-proprietary Names (rINN) for drugs as used in the British National Formulary.
- Inclusion of a new glossary of key terms and definitions.

CONTENTS

Part 1 Principles of pharmacology

1. Let's start at basics: cells and how they work
2. Protein targets for drugs
3. Side-effects, interactions and pharmacokinetics

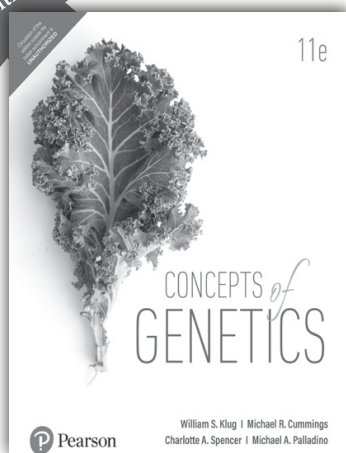
Part 2 The major drug groups

4. The cardiovascular system I: drugs used in the management of coronary artery disease
5. The cardiovascular system II: hypertension and antihypertensive drugs

6. Inflammation and the management of pain
7. Disorders and drugs of the digestive system
8. Infection and anti-microbial drugs
9. Disorders and drugs of the respiratory system
10. Disorders and drugs of the endocrine system
11. Drugs used in the treatment of mental health and neurological disorders
12. Drugs used in the treatment of Cancers and Chemotherapy

ABOUT THE AUTHOR

Roger McFadden is Senior Lecturer in Applied Physiology at Birmingham City University



ISBN: 9789353940409

Concepts of Genetics, 11/e

**William S. Klug | Michael R. Cummings | Charlotte A. Spencer |
Michael A. Palladino | Darrell Killian**

816 | © 2020

ABOUT THE BOOK

Pearson presents the Eleventh Edition of *Concepts of Genetics*—a text now entering its fourth decade of providing support for students studying in this field, has occasioned still another fresh look. In addition to the normal updating that is inevitably required, this new edition focusses on the need to increase the opportunities for instructors and students to engage in **active and cooperative learning approaches** and the need to provide more **comprehensive, cutting-edge coverage of important and emerging topics** in genetics. This edition emphasizes the fundamental ideas of genetics and a strong problem-solving approach, while exploring modern techniques and applications of genetic analysis.

FEATURES

- **Modern Approaches to Understanding Gene Function** feature challenges students to understand how modern gene targeting approaches have dramatically advanced our understanding of gene function.
- **Evolving Concept of the Gene** is a short feature, integrated in appropriate chapters, that highlights how scientists' understanding of what a gene is has changed over time.
- **Three new Special Topics in Modern Genetics** mini-chapters explore cutting-edge topics, including updated content on Emerging Roles of RNA, Genetically Modified Foods, and Gene Therapy.
- **Neurogenetics** has been completely reworked and redefined to reflect the wealth of information regarding the impact of genetics on the field of neurobiology, linking genetic analysis to brain function and brain disorders.

CONTENTS

Part One: Genes, Chromosomes, and Heredity

1. Introduction to Genetics
2. Mitosis and Meiosis
3. Mendelian Genetics
4. Extensions of Mendelian Genetics
5. Chromosome Mapping in Eukaryotes
6. Genetic Analysis and Mapping in Bacteria and Bacteriophages
7. Sex Determination and Sex Chromosomes
8. Chromosome Mutations: Variation in Number and Arrangement
9. Extranuclear Inheritance

Part Two: DNA: Structure, Replication, and Variation

10. DNA Structure and Analysis
11. DNA Replication and Recombination
12. DNA Organization in Chromosomes

Part Three: Gene Expression, Regulation, and Development

13. The Genetic Code and Transcription
14. Translation and Proteins
15. Gene Mutation, DNA Repair, and Transposition
16. Regulation of Gene Expression in Prokaryotes
17. Regulation of Gene Expression in Eukaryotes
18. Developmental Genetics
19. Cancer and Regulation of the Cell Cycle

Part Four: Genomics

20. Recombinant DNA Technology
21. Genomics, Bioinformatics, and Proteomics
22. Applications and Ethics of Genetic Engineering and Biotechnology

Part Five: Genetics of Organisms and Populations

23. Quantitative Genetics and Multifactorial Traits
24. Neurogenetics
25. Population and Evolutionary Genetics

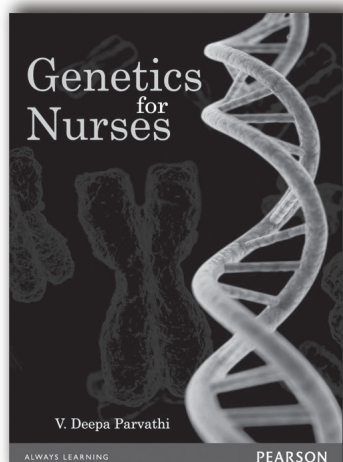
ABOUT THE AUTHOR (S)

William S. Klug is an Emeritus Professor of Biology at The College of New Jersey (formerly Trenton State College) in Ewing, New Jersey, where he served as Chair of the Biology Department for 17 years.

Michael R. Cummings is Research Professor in the Department of Biological, Chemical, and Physical Sciences at Illinois Institute of Technology, Chicago, Illinois.

Charlotte A. Spencer is a retired Associate Professor from the Department of Oncology at the University of Alberta in Edmonton, Alberta, Canada.

Michael A. Palladino is Dean of the School of Science and Professor of Biology at Monmouth University in West Long Branch, New Jersey.



ISBN: 9788131768877

Genetics for Nurses

 **V. Deepa Parvathi**

 **380** | © **2012**

Web Supplements



ABOUT THE BOOK

Basic Approach

Genetics is a compulsory paper offered to undergraduate students of Nursing. Genetics for Nurses has been designed considering the syllabi requirements laid down by the Indian Nursing Council and the leading nursing colleges. The book has a variety of case studies and review questions to support the theoretical concepts and is an unique offering to the undergraduate students of nursing.

FEATURES

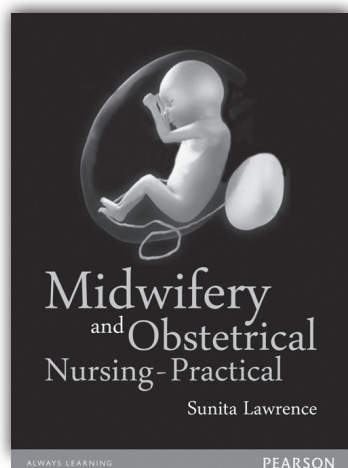
- Exhaustive coverage of maternal and prenatal genetic influences on development of defects/ diseases, and genetic testing in neonates/ children
- Numerous self-explanatory figures
- Case studies pertaining to genetic disorders to help students diagnose the clinical condition

CONTENTS

1. Introduction
2. Maternal, prenatal and genetic influences on development of defects and diseases
3. Genetic testing in the neonates and children
4. Genetic conditions of adolescents and adults
5. Services related to genetics

ABOUT THE AUTHOR

V. Deepa Parvathi is a serial merit scholar in Microbiology and Genetics through her undergraduate and postgraduate career. She majored in Microbiology and was the topper in her university, graduating from the Chennai based SRM Arts and Science College. Her post-graduation major was Human Genetics in which she was at the top of the rolls at Sri Ramachandra University, Chennai securing for herself the gold medal for her discipline in 2006. She has several anthologies, technical and symposia papers to her credit, presented both solo and in collaboration. Presently, she is teaching at Sri Ramachandra University.



ISBN: 9788131773451

Midwifery and Obstetrical Nursing - Practical

 **Sunita Lawrence**

 **224** | © **2012**

ABOUT THE BOOK

Basic Approach

The Midwifery and Obstetric Nursing course is taught in two parts for undergraduate students of nursing: part 1 is exclusively devoted to theory and part 2 deals with the practical. Although many textbooks address the theory portion, the practical part is rarely covered in depth. This book fills with gap. The book has 41 experiments and is enough to cater to the requirements of the syllabi laid down by Indian Nursing Council and the various autonomous colleges; it includes 150 diagrams and covers all the latest procedures and technologies used in midwifery and obstetrics.

FEATURES

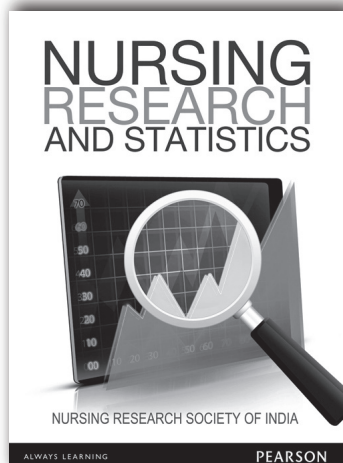
- 40 practicals
- 150 diagrams illustrating each and every procedure

CONTENTS

1. Preconception Counseling
2. Prenatal Assessment and Care
3. Intranatal Assessment and Care
4. Post Partum Assessment
5. Assessment of Newborn
6. Assessment In Operative Procedures

ABOUT THE AUTHOR

Sunita Lawrence is Principal, College of Nursing, Bhopal, and Editor-In-Chief of the Indian Journal of Holistic Nursing and Trends in Nursing Administration and Education. Previously, she was Assistant Director and Head of Department of Nursing and Health Sciences in Madhya Pradesh Bhoj (Open) University, Bhopal.



ISBN: 9788131775707

Nursing Research and Statistics



Nursing Research Society of India



424 | © 2012

Web Supplements



ABOUT THE BOOK

Nursing Research and Statistics provides a clear understanding of the principles and processes of nursing research, which is an essential subject for nursing students. This is a comprehensive text, written by eminent members of the Nursing Research Society of India (NRSI), that also looks into the methods of data collection, its analysis and presentation. Based on the Indian Nursing Council syllabus, this textbook is specially designed to meet the needs of B.Sc. students of nursing

FEATURES

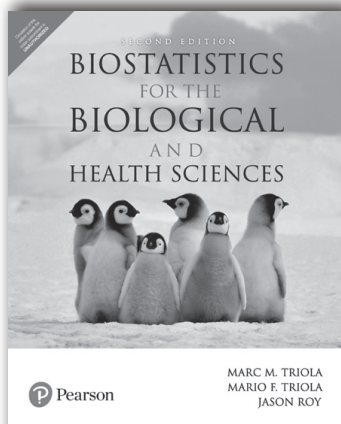
- Student-friendly
- Original content written by experienced members of NRSI
- Covers 'Fundamentals of Statistics' in a separate chapter
- Covers both Qualitative and Quantitative studies in Sampling
- Based on INC syllabus
- Foreword by Prof. Reena Bose (Former President of NRSI and Principal of Sister Florence College of Nursing)

CONTENTS

1. Introduction to Nursing Research
2. Research Process
3. Research Problem
4. Review of literature
5. Theoretical and Conceptual Framework
6. Ethics in Research
7. Quantitative and Qualitative Research Approaches and Designs
8. Population, Sampling and Data Collection Methods in Qualitative Research
9. Population and Sampling in Quantitative Studies
10. Development of Research Tool
11. Data Analysis and Interpretation
12. Critique of Nursing Research Studies
13. Communication of Research Results-Oral and Written
14. Research Utilization and Evidence-based Nursing Practice
15. Fundamentals of Statistics

ABOUT THE AUTHOR

The Nursing Research Society of India (NRSI) was established in May 1986. From its inception, it has been working continuously to promote research within and around the nursing environment. NRSI also supports the development of nursing research activities in universities and provides nursing care standards to nursing health-care institutions.



ISBN: 9789353436537

Biostatistics for the Biological and Health Sciences, 2/e

 Marc M. Triola | Mario F. Triola

 728 | © 2020

Web Supplements



ABOUT THE BOOK

Biostatistics for the Biological and Health Sciences uses a variety of real-world applications to bring statistical theories and methods to life. Through these examples and a friendly writing style, the **2nd Edition** ensures that students understand concepts and develop skills in critical thinking, technology, and communication. The result of collaboration between two biological sciences experts and the author of the #1 statistics book in the US, this text provides an excellent introduction to statistics for students studying the biological, life, medical, and health sciences.

FEATURES

- Latest and best methods used by professional statisticians are incorporated.
- New examples, exercises, and Chapter Problems provide relevant and interesting real-world statistical applications, including biometric security, self-driving cars, smartphone data speeds, and the use of drones for delivery.
- More than 1,600 exercises are included in the text, and nearly 85% are brand new!
- More than 200 examples are scattered throughout the book, and almost 85% are new!
- EXPANDED! Larger data sets give students a more comprehensive look at concepts.
- UPDATED! Real Data Sets: 89% of the exercises in the text use real data, and 87% of the examples feature real statistics.
- Easy-to-assign exercises are graded by difficulty, and exercises that are particularly difficult or involve a new concept appear at the end of exercise sets and are marked by an asterisk, making it easy for instructors to assign homework.
- Statistical Software: SPSS, SAS, STATDISK, MINITAB, Excel, and TI-83/84 Plus output appear throughout the text.

EXCELLENT PEDAGOGY

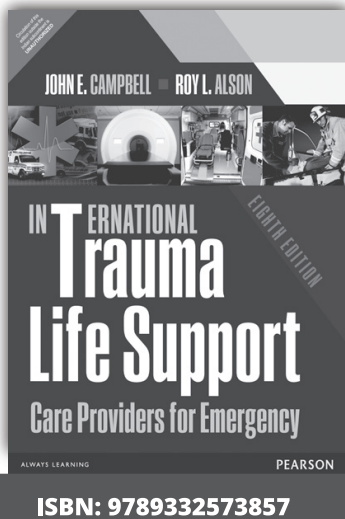
- | | | |
|----------------------------|--------------------------------|---|
| ■ Chapter-Opening Features | ■ Review Exercises | ■ From Data to Decision: Critical Thinking Projects |
| ■ Margin Essays | ■ Cumulative Review Exercises | |
| ■ Flow Charts | ■ Technology Projects | |
| ■ Chapter Quick Quizzes | ■ Cooperative Group Activities | |

CONTENTS

- | | |
|---|--|
| 1. Introduction to Statistics | 8. Hypothesis Testing |
| 2. Exploring Data with Tables and Graphs | 9. Inferences from Two Samples |
| 3. Describing, Exploring, and Comparing Data | 10. Correlation and Regression |
| 4. Probability | 11. Goodness-of-Fit and Contingency Tables |
| 5. Discrete Probability Distributions | 12. Analysis of Variance |
| 6. Normal Probability Distributions | 13. Nonparametric Tests |
| 7. Estimating Parameters and Determining Sample Sizes | 14. Survival Analysis |

ABOUT THE AUTHOR

Dr. Triola is the associate dean for educational informatics and an associate professor of medicine at NYU Langone Health, where he is also the founding director of the Institute for Innovations in Medical Education, known as IIME.



ISBN: 9789332573857

International Trauma Life Support for Emergency Care Providers, 8/e

John E Campbell | Roy L Alson

432 | © 2016

ABOUT THE BOOK

For basic trauma life support courses.

For more than 30 years, International Trauma Life Support has been at the forefront of trauma education at all levels of emergency care worldwide. This complete reference is filled with practical, hands-on training that guides readers through the hows and whys behind all of the skills necessary for rapid assessment, resuscitation, stabilization, and transportation of the trauma patient. Updated with the latest approaches to the care of the trauma patient, this Eighth Edition conforms to the most recent AHA/ILCOR guidelines for artificial ventilation and CPR.

FEATURES

- This proven training book has been at the forefront of trauma education at all levels of pre-hospital emergency care worldwide for more than 30 years.
- **NEW:** In "Additional Skills," the use of the new FastResponder™ sternal IO has been added.
- **UPDATED:** In "Multicasualty Incidents and Triage," the discussion of various triage schemes has been expanded and now includes SALT Triage.
- **UPDATED:** In "Role of the Medical Helicopter," the data has been updated.
- **NEW:** In "Trauma Scoring in the Prehospital Care Setting," the CDC Trauma Triage Scheme is included.
- **UPDATED:** The "Tactical EMS" bibliography reflects current thinking within the Hartford Consensus.
- **UPDATED:** Coverage of the latest and most effective approaches to the care of the trauma patient prepares readers to become effective emergency care providers.

CONTENTS

- Scene Size-up
- Trauma Assessment and Management
- Assessment Skills
- Airway Management
- Airway Skills
- Thoracic Trauma
- Thoracic Trauma Skills
- Shock
- Vascular Access Skills
- Head Trauma and Traumatic Brain Injury
- Spinal Trauma and Patient-Centered Spinal Motion Restriction
- **NEW:** Dr. Roy Alson has joined Dr. John Campbell as co-editor in chief for this edition. Dr. Alson is a board certified EM and EMS physician with extensive experience in EMS care and education and has been a contributor to the ITLS text and course for over 25 years.
- **UPDATED:** Conforms to the latest AHA/ILCOR guidelines for artificial ventilation and CPR.
- Management skills chapters follow the topic chapters to help reinforce learning.
- Each chapter opens with a Chapter Overview and Objectives to focus students' study time.
- Pearls feature quick references and reminders in the side margins, providing learners with reinforcement of difficult chapter concepts.
- Chapter Summaries wrap up each chapter, reviewing important concepts and revisiting the overview that opens up the chapter, forming a bridge between areas of focus and objectives.
- Spine Management Skills
- Abdominal Trauma
- Extremity Trauma
- Extremity Trauma Skills
- Burns
- Pediatric Trauma
- Geriatric Trauma
- Trauma in Pregnancy
- The Impaired Patient
- Trauma Arrest
- Standard Precautions and Transmission-Based Precautions

ABOUT THE AUTHOR

John E. Campbell, MD, FACEP Dr. Campbell received his BS degree in pharmacy from Auburn University in 1966 and his medical degree from the University of Alabama at Birmingham in 1970.