



Medicinal & biomolecular chemistry

New books

from the Royal Society of Chemistry

Our books publishing programme supports scientists, researchers, students and teachers with high quality, internationally respected chemical science titles spanning the breadth of our subject.

The books we're publishing in 2018 cover the core disciplines, related fields and emerging topics such as chemical biology and functional food. Contributions come from all over the world, from leading researchers including Emma Raven, Mark Vrakking, Jintao Zhang and Bill Price.

More books for established series...

It's been 10 years since the first book in our Catalysis series – *Carbons and Carbon Supported Catalysts in Hydroprocessing* – hit the shelves. Since then, the series has grown to include over 30 titles, and there are five more joining the series this year. Head to page 54 to read more.

The successful Soft Matter and New Developments in NMR series celebrate their fifth birthday in 2018. We're adding new books to these series providing first rate resources for researchers.

...and the start of something new

Joining the collection in 2018:

 Biomaterials Science

 Inorganic Materials

 Advances in Chemistry Education

And finally...

Discover the science behind your favourite chocolate, and read about the horse who came to dinner in the latest books to join our popular science collection.

There's much more to discover inside, including the chance to find out more about some of our authors. Look out for Q&As as you read.

 If you have any queries, contact books@rsc.org to talk to the team.

For a list of books published prior to 2018, visit rsc.li/backlist

Happy reading



Roheena Anand Publisher, Books



Sara Bowler Senior Sales Executive, Books

Royal Society of Chemistry | Thomas Graham House
Science Park | Milton Road | Cambridge | CB4 0WF | UK

Tel +44 (0)1223 420066 | Fax +44 (0)1223 426017



A guide to our book types



Book series

Ongoing, in-depth coverage of hot topics and developments in key fields of research.



Professional reference

Accessible overviews of advances in contributing authors' respective fields. Provide global coverage.



Conference proceedings

Snapshots of the latest developments in a given field from international symposia.



Textbooks

Supplementary course material for undergraduate and postgraduate study in the chemical sciences.



Popular science

Lighter reads offering informative summaries of a wide range of chemical science subjects.



Specialist periodical reports (SPRs)

The latest research in a particular field, expertly reviewed and curated for a balanced perspective.



Part of our eBook collection



Available as an eBook from selected online booksellers

Ways to buy

Digital options

The complete eBook collection is over 1,350 titles, and can be broken down as follows:

By year

Build on your existing collection by adding the eBooks published in a specific year.

By subject

These smaller sets focus on eight primary topic areas within the chemical sciences.

Pick and Choose

Select only the titles you need from the complete collection – minimum spend £1,000. Find out more

Print options



Build up your collection by specially curated book series.



Smaller collections sorted by subject area or by theme.



Purchase any book from the collection on its own.



Placing your order

Librarians and organisations

To place an order for print books please contact your preferred library supplier or find our regional representatives and distributors on page

To find out more about our eBook options visit our website or to request prices contact our sales team sales@rsc.org

Individuals

Visit our online bookshop
Or call +44 (0) 1223 432496



This year's portfolio sees new editions to our chemical biology, drug discovery, metallobiology, toxicology and photoscience series. They join a portfolio already full of high quality research from some of the leading minds in the field.

Five minutes with...



Name Emma Raven

Affiliation University of Leicester

Co-editor of *Dioxygen-dependent Heme Enzymes* (alongside Masao Saito, Tohoku University, Japan)

Book publication date June 2018

ISBN 9781782629917

What do you think the future looks like for your field?

I think that we are only just beginning to learn about the important role that heme and heme proteins play in biology.

How do you relax?

By voluntarily subjecting myself to intense physical pain three times a week with my running club.

What are you really excited about at the moment?

My running club is not meeting this week.



Tell me about yourself

I am Professor of Chemical Biology at the University of Leicester and I work on heme proteins and their role in biology.

What were you trying to achieve in Dioxygen-dependent Heme Enzymes?

Aerobic organisms have evolved to utilise the intrinsic oxidizing power of oxygen from the atmosphere. This so-called 'activation' of oxygen is catalysed by a metal centre (usually iron or copper) buried within a protein. Professor Masao Saito (my co-editor) and I wanted to highlight the many and varied catalytic activities of O₂-dependent heme-iron enzymes.



Part of our eBook collection



Available as an eBook from selected online booksellers



Book series



Professional reference



Specialist periodical reports (SPRs)



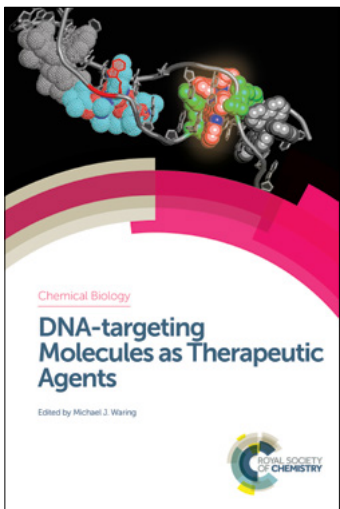
Conference proceedings



Textbooks



Popular science



About the series

ISSN: 2055-1975

Editor-in-chief

Tom Brown University of Oxford, UK

Series editors

Sabine Flitsch University of Manchester, UK |
Kira J Weissman Université de Lorraine, France |
Nick J Westwood University of St Andrews, UK

The Chemical Biology Series is a new venture that aims to provide a comprehensive suite of reference books on developing areas at the interface of chemistry and biology. Chapters written and edited by experts worldwide will introduce practical aspects and best methods, will explain the fundamental chemistry knowledge, and will provide forward-looking perspectives. Ultimately, the series aims to aid postgraduate students and researchers apply chemical tools and understand current challenges in the field. The books will provide a valuable reference for scientists working outside their own area of current expertise or looking to engage in chemical biology research. Coverage will include topics such as analytical and computational tools, chemical probes, imaging, glycosciences, genomics and transcriptomics, chemical genetics and gene editing tools, and aspects of synthetic biology.

Chemical and Biological Synthesis



Enabling Approaches for Understanding Biology

Nick J Westwood University of St Andrews, UK | **Adam Nelson** University of Leeds, UK

Through a series of recent case studies, this book summarises and showcases the ways in which the preparation of new chemical tools by synthesis has had a major impact in chemical biology. The book provides synthetic chemists with the broader context to which their work contributes and the biological questions that can be addressed through it. It also introduces synthetic techniques and methods to those who wish to incorporate synthesis for the first time into their biology-focused research programmes. It will be a useful guide to postgraduate students and researchers in synthetic organic chemistry and chemical biology.

Hardback | 350 pages | 9781782629481 | 2019 | £169.00 | \$237.00



Cyclic Peptides



From Bioorganic Synthesis to Applications

Wilfred A van der Donk University of Illinois, USA | **Jesko Koehnke** Helmholtz Centre for Infection Research, Germany | **James Naismith** University of St Andrews, UK

Cyclic peptides are increasingly being employed as a chemical tool in biology and drug discovery.

This book provides the reader with a comprehensive overview of the synthesis and applications of these useful molecules. Following an introduction to cyclic peptides, biosynthetic and traditional chemical routes to cyclic peptides are reviewed, analysis of cyclic peptides is discussed and, finally, a number of chapters are dedicated to their applications. A timely collection of chapters by leading researchers in the field, this book will be an essential resource for students, researchers and industrialists in medicinal, bioorganic, natural product and analytical chemistry.

Hardback | 300 pages | 9781782625285 | 2018 | £159.00 | \$237.00





DNA-targeting Molecules as Therapeutic Agents

Michael J Waring University of Cambridge, UK

This book explains key aspects of the remarkable progress that has been made towards understanding how drugs can bind specifically to nucleic acids, and thus underpin the endeavour to make gene targeting a reality. The binding of drugs to DNA is a fast developing area of research with important applications in medicine, particularly the treatment of cancer. This book will be a valuable resource for postgraduate students and researchers in chemical biology, biochemistry, structural biology and medicinal fields. It will also be of interest to supramolecular chemists and biophysicists.

Hardback | 300 pages | 9781782629924 | 2018 | £159.00 | \$223.00



Mechanisms of Primary Energy Transduction in Biology

Marten Wikström University of Helsinki, Finland

Written and edited by leading experts in the field, this book describes the events of primary energy transduction in life processes. It focusses in particular on recent structural results and new biophysical insights that have been made possible by recent advances in high-resolution protein structures, in physical techniques to study reactions in real time, and in computational methods to study and refine both structures and their dynamics. Biochemists, biophysicists and chemical biologists will find this book an essential resource for a complete understanding of the molecular machines of bioenergetics.

Hardback | 400 pages | 9781782628651 | 2018 | £169.00 | \$237.00



Mass Spectrometry in Chemical Biology

Evolving Applications

Norberto Peporine Lopes University of Sao Paulo, Brazil | Ricardo Roberto da Silva University of Sao Paulo, Brazil

Mass spectrometry is one of the most widespread technologies in chemistry and has been increasingly used in biology with the rise of omics sciences. This book summarizes important mass spectrometry related methodological approaches and applications in the field of chemical biology. It provides an important compendium of theoretical and experimental techniques that can be applied to study a wide range of problems in biological systems and would therefore be of great interest to students and researchers in the fields of analytical chemistry, biochemistry and chemical biology.

Hardback | 275 pages | 9781782625278 | 2018 | £159.00 | \$223.00



Oxidative Folding of Proteins and Peptides

Basic Principles, Cellular Regulation and Engineering

Matthias Feige TU Munchen, Germany

Disulphide bonds are important post-translational modifications of proteins that can covalently link cysteine residues far apart in the primary sequence of a protein. This can convey the needed stability to protein structures, but when incorrectly formed, these bonds interfere with folding or even cause aggregation, leading to disease. This book will begin with basic principles of disulphide bond formation. It then connects these to recent cell biological developments and ultimately the engineering of biomolecules and cells. This book will be an essential reference for advanced students and researchers in chemical biology and related fields who wish to gain the latest overview of this field.

Hardback | 500 pages | 9781782629900 | 2018 | £179.00 | \$251.00





Protein Crystallography

Challenges and Practical Solutions

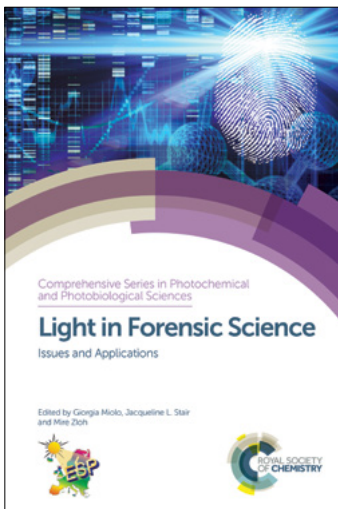
Konstantinos Beis Imperial College London, UK | **Gwyndaf Evans** Diamond Light Source, UK

Protein crystallography has become vital to further understanding the structure and function of many complex biological systems. With contributions from leading researchers whose software are used worldwide, this book provides a coherent approach on how to handle difficult crystallographic data and assess its quality. Chapters will cover all key aspects of protein crystallography from instrumentation and data processing through to model building. This book is ideal for both academics and researchers in industry looking for a comprehensive guide to protein crystallography.

Hardback | 275 pages | 9781782627289 | 2018 | £159.00 | \$223.00



Also in the series



About the series

ISSN: 2041-9716

Series editors

Evelyne Sage, Institut Curie, France | **Lesley Rhodes**, University of Manchester, UK | **Massimo Trotta**, Istituto per i Processi Chimico Fisici-CNR, Italy

Initiated by the European Society for Photobiology this series provides comprehensive overviews on specific areas of photoscience, giving in-depth coverage of the very different fields related to light effects. It embraces both well-established and emerging fields and allows investigators, physicians, industrialists and postgraduate students to obtain an updated account in specific areas and a ready access to the recent literature. Importantly, books in this series provide a critical evaluation of the directions that the field is taking.

Light in Forensic Science



Issues and Applications

Giorgia Miolo University of Padova, Italy | **Jacqueline L Stair** University of Hertfordshire, UK | **Mire Zloh** University of Hertfordshire, UK

The identification and quantification of material present and collected at a crime scene are critical requirements in investigative analyses. In this book, the use of light and lab technicians' tools based on light to provide proof of evidence are presented, with various examples of light-based techniques. Equally covered are the negative effects of light in the degradation of forensic evidence. Edited by active forensic scientists, this book will be of interest to students and researchers in the fields of photochemistry, photobiology, toxicology and forensic science.

Hardback | 350 pages | 9781782627685 | 2018 | £179.00 | \$251.00



Optogenetics



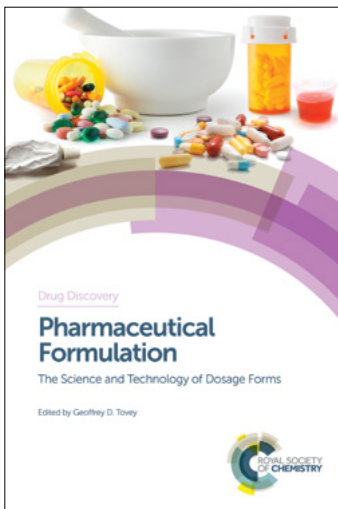
Light-driven Actuators and Light-emitting Sensors in Cell Biology

Sophie Vriza Paris Diderot University, France | **Takeaki Ozawa** The University of Tokyo, Japan

Optogenetic tools have allowed significant advances in understanding biological problems particularly in the neurosciences field so far. Biological tools as well as optical set-ups have evolved and a wide range of probes is now available. This book provides a comprehensive overview of optogenetic tools and their more recently growing application in areas of cell biology outside of the neurosciences. With detailed information on different illumination and data analysis methods, this will be a valuable manual for photobiologists, cell biologists, biophysicists and those involved in biological imaging.

Hardback | 300 pages | 9781788012379 | 2019 | £159.00 | \$223.00





About the series

ISSN: 2041-3203

Editor-in-chief

David Thurston King's College London, UK

Series editors

David Fox Vulpine Science and Learning, UK
| **Ana Martinez** Centro de Investigaciones Biológicas-CSIC, Spain | **David Rotella** Montclair State University, USA | **Sarah Skerratt** Vertex Pharmaceuticals, UK

The Drug Discovery Series covers all aspects of drug discovery and medicinal chemistry and contains over fifty books published since 2010. Providing comprehensive coverage of this important and far-reaching area, the books encourage learning in a range of different topics and provide valuable reference for scientists working outside their own areas of expertise. Books feature case studies to bring different aspects of the drug discovery process alive and they detail the fundamental science necessary for understanding through to the most up-to-date discoveries and cutting-edge technology. Chapters are written and edited by experienced researchers from both industry and academia. This series will be of particular interest to postgraduate students and medicinal chemists and biochemists working in academia or industry.

Acute Brain Impairment



Scientific Discoveries and Translational Research

Philip Peplow University of Otago, New Zealand | **Svetlana Dambinova** Kennesaw State University | **Thomas A Gennarelli** George Washington University, USA | **Bridget Martinez** University of California, Merced, USA

A rise in the number of young and old patients with stroke has led to the need for better drug development and treatment, as well as diagnosis and prevention for ischemic stroke and mild traumatic brain injury. This book provides a comprehensive overview of advancements in the development of neuroprotective drugs, chemical biomarkers for detection, imaging and preventative strategies. This book will be useful to postgraduate students and researchers in medicinal chemistry and pharmacology as well as specialists in the acute brain injury field.

Hardback | 300 pages | 9781782629504 | 2018 | £149.00 | \$209.00



Cytotoxic Payloads for Antibody-Drug Conjugates



Paul J M Jackson FemtoGenix Ltd, UK | **David Thurston** King's College London, UK

The Antibody-Drug Conjugates (ADCs) field is one of the fastest growing areas of drug discovery and represents a large body of research. ADCs deliver a cytotoxic payload, a key component of the overall ADC design, specifically to a tumour by attaching it to an antibody targeted to antigens on the surface of tumour cells. This book discusses the range of payloads used to date along with their advantages and disadvantages, and describes novel payloads at the research stage that may be used clinically in the near future.

Hardback | 500 pages | 9781788010771 | 2019 | £179.00 | \$251.00





Kinase Drug Discovery

Modern Approaches

Richard A Ward AstraZenaca, UK | **Frederick Goldberg** AstraZenaca, UK

Kinase targets and drugs remain an area of significant interest across academia and in the pharmaceutical industry. There are now many marketed drugs which target kinases and a growing number of compounds are currently in various stages of clinical development. This book covers the key areas for kinase inhibition that will be important over the coming years. This will be an important reference for scientists involved in drug discovery in academia or industry, particularly in oncology research.

Hardback | 300 pages | 9781788010832 | 2018 | £159.00 | \$223.00



Precision Medicine

James W A Ritchie Cancer Research UK | **Wendy Alderton** Precision Medicine Catapult, UK

Also referred to as personalised or stratified medicine, precision medicine has the potential to revolutionise medicine and healthcare through improved diagnoses, rational disease prevention and more effective, efficient treatment based on an understanding of genetic, environmental, and lifestyle factors. This book gives an overview of the importance, challenges and successes of personalised medicine from a drug discovery perspective. This is timely due to recent technological developments that have led to demonstrable successes, bringing the vision for personalised medicine closer to reality.

Hardback | 350 pages | 9781788011402 | 2019 | £169.00 | \$237.00



Pharmaceutical Formulation

The Science and Technology of Dosage Forms

Geoffrey D Tovey Visiting Professor King's College London and Chief Executive Geoff Tovey Associates, UK

This book will provide the reader with the latest information on the principles and practice of pharmaceutical formulation. Covering a wide range of dosage forms intended for human administration of pharmaceuticals, this text also takes into account modern processing methods and recent changes in the regulatory and quality demands of the industry. *Pharmaceutical Formulation* will be an essential book for students and researchers working both in academia and in the pharmaceutical industry.

Hardback | 350 pages | 9781849739412 | 2018 | £169.00 | \$237.00



Small-molecule Transcription Factor Inhibitors in Oncology

Khondaker Miraz Rahman King's College London, UK | **David Thurston** King's College London, UK

This title highlights recent progress in the development of small-molecule inhibitors of oncogenic transcription factors. It also presents the evidence that this important protein class can be modulated in a number of ways to develop novel classes of therapeutic agents for anticancer treatments. This book is a unique reference book for postgraduates, academic researchers and practitioners working in the fields of biochemistry, biotechnology, cell and molecular biology and bio-inorganic chemistry.

Hardback | 250 pages | 9781782621454 | 2018 | £149.00 | \$209.00





Theranostics and Image Guided Drug Delivery **ee**

Maya Thanou King's College London, UK

Understanding drug bio-distribution is a crucial step in developing new methods and mechanisms for targeted drug delivery. Molecular imaging of drugs and drug carriers is a valuable tool that can provide important information on their spatiotemporal distribution, allowing improved drug distribution at the target sites. This book introduces the topic of image guided drug delivery and covers the latest imaging techniques and developments in theranostics, highlighting the interdisciplinary nature of this field.

Hardback | 400 pages | 9781782624660 | 2018 | £179.00 | \$251.00



Therapies for Retinal Degeneration **ee**

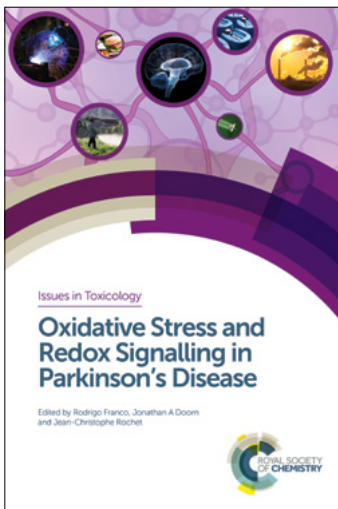
Targeting Common Processes

Enrique J de la Rosa Centro de Investigaciones Biológicas CSIC, Spain

Sight loss and blindness affects many worldwide and the search for adequate drugs remains a challenge and an important area of interest in the drug discovery field. This book addresses approaches to the treatment of ocular diseases, a common component of which is neurodegeneration. The book discusses common cellular processes across disease pathways and common targets for drugs that target ocular disease as well as the newest approaches, such as cell and gene therapies.

Hardback | 250 pages | 9781782629498 | 2018 | £159.00 | \$223.00





About the series

ISSN: 1757-7179

Editor-in-chief

Diana Anderson, University of Bradford, UK

Series editors

Tim Marrs Edentox Associates, UK | **Michael D. Waters** Consultant, Integrated Laboratory Systems (ILS) Inc., USA

The field of toxicological research is continually expanding and diversifying, driven by the need to understand the human and ecological risks of exposure to chemicals and other toxicants. This series is devoted to coverage of modern toxicology and assessment of risk. Written by expert scientists from academia, government and industry, each book will serve as a guide to investigations in toxicology, biomedicine, biochemistry, forensics and environmental and pollution sciences.

Big Data in Predictive Toxicology



Daniel Neagu University of Bradford, UK | **Andrea-Nicole Richarz** European Commission - Joint Research Centre, Italy

The rate and volume of toxicological data generation is continually growing due to novel techniques and software. The amplified pace and capacity of data generation has repercussions for organising and analysing data output. This book discusses these challenges as well as the nature, storage, analysis and interpretation of toxicological big data. It details how these data are applied in toxicity prediction, modelling and risk assessment. This title is relevant for researchers and postgraduates in the fields of computational methods, applied and physical chemistry, cheminformatics, biological sciences, predictive toxicology, and safety and hazard assessment.

Hardback | 300 pages | 9781782622987 | 2018 | £159.00 | \$223.00



Chemical Health Threats



Assessing and Alerting

Raquel Duarte-Davidson Public Health England, UK | **Tom Gaulton** Public Health England, UK | **Stacey Wyke** Public Health England, UK | **Samuel Collins** Centre for Radiation, Chemical and Environmental Hazards, Public Health England, UK

This book covers recent developments in the implementation of a European collaboration for assessing cross-border toxicological threats. It discusses the European guidelines for the risk assessment and management of serious international public health dangers. It covers REACH (Registration, Evaluation, Authorisation & Restriction of Chemicals) directives and the work of the ASHT (Alerting System for Chemical Health Threats) project. It will be useful for to public health regulators, toxicologists, poisons centres, industrialists and COSHH (Control of Substances Hazardous to Health) specialists.

Hardback | 400 pages | 9781782620716 | 2018 | £179.00 | \$251.00





Drinking Water Safety and Contamination



Methods to Assess Health Risks

Margaret Whittaker ToxServices LLC, USA

This book highlights the ways in which risk assessment methods can be used to mitigate the impacts of emerging contaminants, unplanned chemical releases, and pathogens in drinking water supplies on human health. This book is useful primarily for academics and industrialists working in fields related to safety and hazards, toxicology, environmental science and sustainable industrial methods, but it is also a valuable resource for postgraduates and institutional libraries.

Hardback | 250 pages | 9781782621232 | 2018 | £149.00 | \$209.00



Formaldehyde



Exposure, Toxicity and Health Effects

Luoping Zhang University of California Berkeley, USA

Formaldehyde is virtually ubiquitous in the modern environment due to its cost-effective nature, its use in resin formation, and its preservative properties. Though formaldehyde is necessary for many products and processes important to the world's economy, this economic dependence on formaldehyde comes at a cost to public health. Scientific inquiry into formaldehyde exposure has grown in response to this public health problem. This book consolidates these developments and will be a valuable source of information for postgraduates and researchers in environmental and occupational exposure as well as regulators.

Hardback | 250 pages | 9781782629733 | 2017 | £149.00 | \$209.00



Regulatory Toxicology in the European Union



Tim Marrs Edentox Associates, UK | Kevin Woodward TSGE Consulting Limited, UK

Consumer and environmental protection depends on the careful regulation of all classes of chemicals. Toxicology is the key science used to evaluate safety and so underpins regulatory decisions on chemicals. This book is the first to cover regulatory toxicology in Europe and addresses the need for a wider understanding of the principles of regulatory toxicology and their application. It will be an essential reference to regulatory authorities, industry, and toxicologists working across the European Union and for those based in other countries trying to understand and comply with European Union regulations.

Hardback | 500 pages | 9781782620662 | 2018 | £179.00 | \$251.00



The Micronucleus Assay in Toxicology

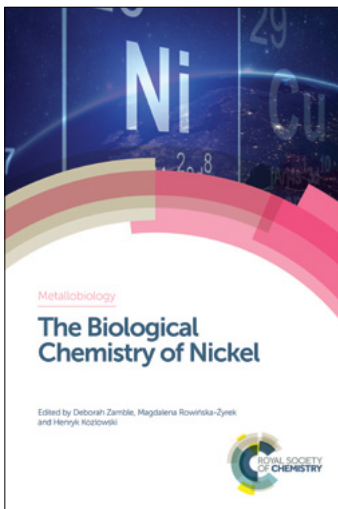


Siegfried Knasmueller Medical University of Vienna, Austria | Michael Fenech CSIRO Food and Nutrition, Australia, HUMN Project Coordinating Group, Australia

The micronucleus assay is one of the most widely used method in genetic toxicology and human biomonitoring. This book covers the detection of selected important genotoxic carcinogens, such as heavy metals, pesticides and radionuclides, using micronucleus assays and details the methods currently used for the analyses of different types of cells in studies. It will explain the molecular mechanisms of micronucleus formation, and provides advice on analysis of data. This will be a useful resource for postgraduate students and researchers in toxicology, oncology, chemical and environmental safety, DNA damage, nutrition, genetics, nutrigenomics, nutrigenetics and mutation research.

Hardback | 400 pages | 9781788011341 | 2019 | £179.00 | \$251.00





About the series

ISSN: 2045-547X

Editor-in-chief

C David Garner University of Nottingham, UK

Series editors

Anthony Wedd University of Melbourne, Australia | **Julie**

Kovacs University of Washington, USA | **Stefano Ciurli**

Università di Bologna, Italy | **Hongzhe Sun** University of Hong Kong, Hong Kong

The Metallobiology Series is a collection of professional reference books covering all aspects of the roles of metals in biological systems. The scope includes metalloenzymes, metalloproteins, storage and transport of metal ions, bio-organometallic chemistry and interaction of metal ions with biomolecules. Books in this series provide authoritative perspectives from international experts and will be of interest to both academics and those working in industry in a wide range of disciplines, including medicinal chemistry, pharmaceutical science, biochemistry, metallomics and inorganic biochemistry.

Also in the series

Dioxygen-dependent Heme Enzymes



Masao Ikeda Saito Tohoku University, Japan | **Emma Raven** University of Leicester, UK

This book covers the varied catalytic activities of dependent heme enzymes. Heme proteins are distributed widely in biological systems and are involved in a wide range of processes that are essential to the cell. Edited and authored by the leading global researchers in this area, this text will be a useful resource for postgraduate students and researchers in biochemistry and metallobiology working in or moving into research areas involving heme proteins.

Hardback | 350 pages | 9781782629917 | 2018 | £169.00 | \$237.00

Gasotransmitters



Rui Wang Laurentian University of Sudbury, Canada

Building on the complementary information presented in *Gas Sensing in Cells*, this will be the first book to address the structurally independent but functionally intertwined molecular and cellular event that is gasotransmitter signalling. This book will be of interest to postgraduates and researchers in biochemistry, molecular biology and metallobiology. It will also be useful to pharmacologists and medicinal chemists investigating drugs that act by altering the production and signalling of gaseous mediators as well as toxicologists studying the toxic mechanisms of gasotransmitters in the environment.

Hardback | 400 pages | 9781782629245 | 2018 | £179.00 | \$251.00





Amino Acids, Peptides and Proteins

e

Volume 43**Maxim Ryadnov** National Physical Laboratory, UK | **Ferenc Hudecz** Eötvös Loránd University, Hungary

Amino Acids, Peptides and Proteins comprises a comprehensive and critical review of significant developments at the biology/chemistry interface. Compiled by leading researchers in their subject, this volume incorporates current trends and emerging areas. Appealing broadly to researchers in academia and industry, it will be of great benefit to any researcher wanting a succinct reference in the field.

Hardback | 250 pages | 9781788013673 | 2019 | £314.95 | \$441.00

Carbohydrate Chemistry

e

Chemical and Biological Approaches Volume 44**Amelia Pilar Rauter** Universidade de Lisboa, Portugal | **Thisbe K. Lindhorst** Kiel University, Germany | **Yves Queneau** INSA Lyon, France

This invaluable volume contains analysed, evaluated and distilled information on the latest in carbohydrate research. The discovery and synthesis of novel carbohydrates and mimetics with diverse applications continues to be a major challenge for carbohydrate chemists. The understanding of the structure and function of carbohydrates and glycoconjugates remains vital in medicine and molecular biology. Covering both chemical and biological science related to the particular volume topic, this series demonstrates the interdisciplinary nature of modern carbohydrate research, and benefits any researcher who wishes to learn about the latest developments in the carbohydrate field.

Hardback | 300 pages | 9781788013680 | 2019 | £314.95 | \$441.00

Organophosphorus Chemistry

e

Volume 47**David W Allen** Sheffield Hallam University, UK | **David Loakes** University of Cambridge, UK | **John C Tebby** Sheffield Hallam University, UK

Coverage in this annual review of the literature presents a comprehensive and critical survey of the vast field of study involving organophosphorus compounds, from phosphines and phosphonium salts through to phosphorus acids, mononucleotides, pentacoordinated and hexacoordinated compounds and phosphazenes. The editors have added to the content with a timely chapter on the recent developments in green synthetic approaches in organophosphorus chemistry to reflect current interests in the area.

Hardback | 300 pages | 9781788011679 | 2018 | £314.95 | \$441.00

Synthetic Biology

e

Volume 3**Maxim Ryadnov** National Physical Laboratory, UK | **Luc Brunsveld** Eindhoven University of Technology, Netherlands | **Hiroaki Suga** University of Tokyo, Japan

Synthetic biology enables the design of biological systems in a rational and systematic way. This volume captures the expanding primary literature in the form of critical and comprehensive reviews, providing the reader with an authoritative digest of the latest developments in this emerging field. Leading researchers draw on the recent literature, from both dedicated journals and broader sources, making this an essential reference to any library supporting this research.

Hardback | 300 pages | 9781788010078 | 2018 | £314.95 | \$441.00



Preventing Chemical Weapons



Arms Control and Disarmament as the Sciences Converge

Michael Crowley University of Bradford, UK | **Malcolm Dando** University of Bradford, UK |

Lijun Shang University of Bradford, UK

In this book, international leaders in various aspects of weapons prevention assess likely future trajectories in the chemical and life sciences alongside the risks of their application in the development of chemical or biological weapons. The current capabilities and limitations of existing international control regimes tasked with the prevention and elimination of chemical and toxin weapons are analysed. This book will be of interest to academic and research communities in the fields of pharmacology, toxicology, social science and those with an interest in the legal and ethical aspects of chemical and biological weapons prevention.

Hardback | 400 pages | 9781782626497 | 2018 | £66.99 | \$94.00



Also of interest

Agents and representatives

China, Taiwan & Hong Kong

Wayne Tian | Royal Society of Chemistry

5th Floor, South Block, Tower C,
Raycom InfoTech Park,
2 Kexueyuan South Road,
Haidian District,
Beijing 100190, China
Tel 00 86 1391 091 3625
Email tianw@rsc.org

Eastern Europe

Radek Janousek | Publishers' Representative

Marek Lewinson | Publishers' Representative

Bohaterewicza 3 m. 45 | 03-982 | Warszawa | Poland
Mobile +420 602 294 014 | Fax +48 22 6714819
Email radek@mareklewinson.com
Website www.mareklewinson.com

Middle East, North Africa & South East Europe

Bill Kennedy | Claire de Gruchy | Publishers' Representatives

Avicenna Partnership Ltd
PO Box 501 | Witney | Oxfordshire | OX28 9JL | United Kingdom

Bill Kennedy: Egypt, Lebanon, UAE, Bahrain, Oman, Qatar, Iraq,
Libya, Saudi Arabia, Sudan, Yemen & Kuwait

Tel +44 (0) 7802 244457

Email AvicennaBK@gmail.com

Claire de Gruchy: Greece, Cyprus, Malta, Turkey, Morocco,
Tunisia, Algeria, Jordan, Palestine & Israel

Tel +44 (0) 7771 887843

Email claire_deguchy@yahoo.co.uk

Pakistan

Tahir Lodhi | Publishers' Representative

14-G Canalberg H.S. | Multan Road
Lahore 53700 | Pakistan

Tel +042 35292168

Cell +0300 8419436

Fax +042 35882651

Email tahirlodhi@gmail.com

Singapore, Indonesia, Philippines, Thailand, Vietnam, Cambodia, Laos, Malaysia & Brunei

Ian Pringle | Publishers' Representative

APD Singapore Pte Ltd
52 Genting Lane #06-05 | Ruby Land Complex Block 1 Singapore
349560

Tel +65 6749 3551

Fax +65 6749 3552

Email ian@apdsing.com

South Korea

Ms Sunny Cheong

Wise Book Solutions
#1607 Daewoo Freshia
143 Dongil-Ro (Sungsoo-Dong2Ga)
Sungdong-Ku | Seoul | 04799 | Korea
Tel +82 2 499 4301 | Fax +82 2 499 4301
Email sunnycheong88@naver.com

South Africa, Botswana, Lesotho and Namibia

Juta and Company Ltd
1st Floor | Sunclare Building
21 Dreyer Street, Claremont, 7708 | South Africa
PO Box 14373
Lansdowne 7779, Cape Town | South Africa
www.juta.co.za

Tel +27 (21) 659 2300

Fax +27 (21) 659 2360

Email msymington@juta.co.za

Email orders@juta.co.za

USA and Canada

Martin Hill | Publishers' Representative

Martin P. Hill Consulting
122 W 27th St, 10th Fl
New York, NY 10001, USA

Tel +1 (212) 933 1409

Fax +1 (646) 514 7541

Email mhill@mphconsult.com

Mexico, Central & South America and the Caribbean

Cranbury International | Publishers' Representative

7 Clarendon Avenue
Suite 2
Montpelier, Vermont 05602
United States

Tel 001 802 223 6565

Fax 001 802 223 6824

Email eatkin@cranburyinternational.com

Royal Society of Chemistry contacts

Books sales enquiries

For sales enquiries, translation requests and inspection copy information, please contact your regional representative.

Sara Bowler | Senior Books Sales Executive

Tel +44 (0) 1223 432499

Fax +44 (0) 1223 426017

Mobile +44 (0) 7768 669543

Email bowlers@rsc.org

Sales Support

Tel +44 (0) 1223 432496

Fax +44 (0) 1223 426017

Email booksales@rsc.org

Ordering information

Postage

Postage charges are applicable - there is a postage and handling charge of £3.50 per item ordered up to a maximum postage charge of £14.00 for UK purchases. For non-UK residents postage is calculated on weight based on destination.

All trade partners should provide details of a UK based freight forwarder.

Credit cards

Customers may purchase Royal Society of Chemistry publications using credit card facilities for purchases up to £8,000.

Royal Society of Chemistry members

Non-member prices quoted. Royal Society of Chemistry members are entitled to 35% discount on most of our publications. Details are available from our website or contact the Royal Society of Chemistry.

For more information please contact

Royal Society of Chemistry | Thomas Graham House
Science Park | Milton Road | Cambridge
CB4 0WF | UK

Tel +44 (0)1223 420066

Fax +44 (0)1223 420247

Email books@rsc.org

Website www.rsc.org

Ordering enquiries

Customers in USA and Canada should order from our distributor:

Ingram Publisher Services
Customer Service, Box 631 | 14 Ingram Blvd
La Vergne, TN 37086 | USA

ipage.ingramcontent.com

Tel +1 (866) 400 5351

Fax +1 (800) 838 1149

Email ips@ingramcontent.com

The customer service hours of operation are
Monday - Friday, 8.00 am. - 5.00 pm. CST

ACCESS (automated stock check and ordering line)

+1 (800) 961 8031

Royal Society of Chemistry assigned Toll Free number

+1 (888) 790 0428

All other customers should send their orders to:

Marston Book Services Ltd
160 Eastern Avenue | Milton Park | Abingdon
Oxfordshire | OX14 4SB | UK

Trade

Tel +44 (0) 1235 465576

Fax +44 (0) 1235 465555

Email orders trade.orders@marston.co.uk

Email enquiries trade.enquiries@marston.co.uk

Direct/Individual sales

Tel +44 (0) 1235 465577

Fax +44 (0) 1235 465556

Email orders direct.orders@marston.co.uk

Email enquiries direct.enquiries@marston.co.uk

Website www.marston.co.uk



Royal Society of Chemistry
www.rsc.org

Registered charity number: 207890
© Royal Society of Chemistry 2017

Thomas Graham House
Science Park, Milton Road
Cambridge, CB4 0WF, UK

T +44 (0) 1223 420066

Burlington House
Piccadilly, London
W1J 0BA, UK

T +44 (0) 20 7437 8656

International offices

São Paulo, Brazil
Beijing, China
Shanghai, China
Berlin, Germany

Bangalore, India
Tokyo, Japan
Philadelphia, USA
Washington, USA