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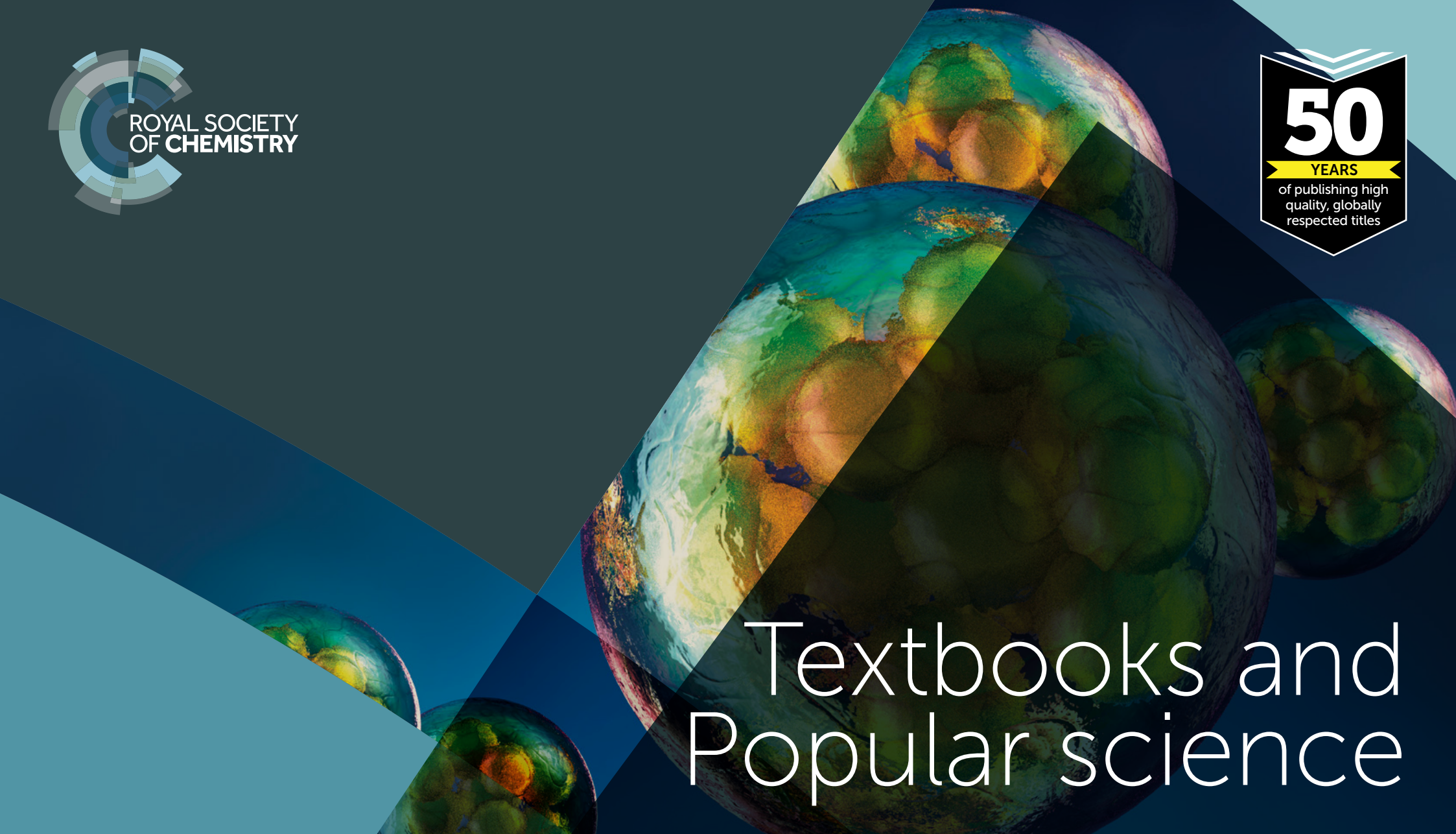

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Five minutes with...

Name Ryan C Fortenberry

Affiliation University of Mississippi

Author of *Complete Science Communication*

Book publication date October 2018

ISBN 9781788011105

Tell us about your book:
I am advocating a new way to write scientific papers and offer practical tips on how to give scientific presentations. The basic gist is: 'write like a journalist and talk like a caveman'. Journalistic writing has the most important information first with more detail and less broad appeal growing as the text continues. Scientific papers should be written this way in order for them to be easier to digest by a larger audience. Conversely, scientific talks should be like campfire stories where the flickering light of the screen is the faux campfire. The presenter is the most important thing in the room; nothing should ever go on screen that can be said; the slides exist to give only the information that cannot be easily spoken. Finally, in my book I also urge scientists to engage in public relations at various levels and provide some background and instruction in how to go about doing this.

What do you think will be the next big breakthrough in your subject area?
Writing papers in a more digestible fashion, like that done in journalism, will revolutionise the readability of scientific papers. More so, however, once science fully embraces the art of the presentation (we are well on our way), scientists are likely to become the preeminent communicators of our species.

What are your top tips for making science accessible to everyone?
First, in writing, put the most important thing at the very beginning – give it all away. Second, in speaking, tell a story full of characters, rising action, climax, and resolution. Third, read poetry, fiction, or news articles – reading anything makes you a better writer and speaker. Finally, have fun. When presenting, you are the most important thing – enjoy the spotlight. When writing, be clear, concise, and correct, but also be yourself – allow your personality to come through in the text.

What was the biggest challenge you faced when writing your book?
One challenge was writing the text in the same journalistic style discussed, another was simply writing the thing. It's one thing to write an article and a completely different animal to write scores of pages. I had to remind myself that having a style to follow actually helps to get the bones. Then, just putting words on the page is the hardest step. They can always be edited later.

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A Practical Guide to Quasi-Elastic Neutron Scattering

Mark T F Telling Rutherford Appleton Laboratory, UK | **Victoria Garcia** Sakai Science and Technologies Facility Council, UK

Quasi-Elastic Neutron Scattering (QENS) is an extremely powerful experimental technique for extracting temporal, spatial and energy information about soft and condensed matter systems on the nanoscale. This title provides an accessible introduction to the technique, which clearly and succinctly highlights all key conceptual, theoretical and data interpretation aspects of the method. Real research examples and worked analysis are used to illustrate the concepts addressed. The book will be of interest to students and researchers in academia and industry across chemistry, biology, physics, materials science and nanoscience.

Paperback | 200 pages | 9781788012621 | 2020 | £45.00 | $63.00

An Introduction to Ionic Liquids

2nd Edition

Jason Hallett Imperial College London, UK

Written in a clear, concise and consistent way, this textbook is a valuable introduction to ionic liquids for advanced undergraduate and graduate courses. It explores their nomenclature, history, properties and their wide ranging applications, from catalysis to electrochemistry and clean technology. This second edition covers major developments in ionic liquids science and its applications over recent years, such as the use of ionic liquids for carbon dioxide capture; biomass processing; making biofuels such as ethanol; biomedical applications including drug delivery; and surface science studies and applications including lubrication.

Hardback | 360 pages | 9781782623366 | 2019 | £49.95 | $69.99

Atmospheric Chemistry

2nd Edition

Richard Wayne University of Oxford, UK | **Ann M Holloway** | **John Burrows** Universität Bremen, Germany

Ideal for undergraduates in chemistry and environmental science, this book provides students with a basic knowledge of the chemistry of Earth's atmosphere, and an understanding of the role that chemical transformations play in this vital part of our environment. Restructured and updated, this second edition now includes tutorial sections providing scientific background to key concepts. Students are guided through the atmosphere, beginning at high altitudes and working down, to help them better understand how the atmosphere works.

Hardback | 320 pages | 9781782625148 | 2019 | £31.99 | $45.00

Biomolecular Analysis

Introductory Practical Techniques in Context

Sharon Williams Coventry University, UK

This textbook presents the main chemical techniques used to analyse biological macromolecules in a clear and accessible fashion. To help students put their learning in context whilst enhancing their awareness of possible careers and future employability, it highlights links between techniques learnt at university and those used in industry. The text is accompanied by a full set of resources to help lecturers prepare courses in biomolecular analysis or biochemistry for chemists.

Hardback | 300 pages | 9781782628125 | 2019 | £35.99 | $49.99

Characterization of Nanostructured Materials

Chemical, Physical and Biological Analysis

Ashok Ganguli IIT Delhi, India | **Jiban Jyoti** Panda Institute of Nano Science and Technology, India | **Menaka Jha** Institute of Nano Science and Technology, India | **Neha Sardana** IIT Jodphur, India

Pitched at an interdisciplinary audience with various scientific backgrounds, this textbook provides a broad overview of characterisation techniques applied to nanomaterials. Taking a survey style approach, microscopic, spectroscopic, diffraction, chromatographic and other tools are described, with their theoretical underpinnings explained alongside experimental details. Hints, tips and tricks, common mistakes and artefacts are covered in each chapter wherever relevant. With homework problems and solutions, this book is a complete package for instructors and students, as well as self-study.

Hardback | 375 pages | 9781788011853 | 2019 | £60.00 | $85.00

ISBN 978-1-78801-185-3

Chemistry for Sustainable Technologies

A Foundation 2nd Edition

Neil Winterton University of Liverpool, UK

Following the success of the first edition, this revised and rationalised book continues to provide an interdisciplinary introduction to sustainability issues in the context of chemistry and chemical technology. Remaining true to its prime objective, it will equip young chemists (and others) to better appreciate, defend and promote the role that chemistry and its practitioners play in moving towards a society better able to control, manage and ameliorate its impact on the ecosphere. Updated to reflect recent progress, with new citations and additional points, it puts Green Chemistry in a much wider context and addresses complexities and challenges associated with attitudes to science and technology. While the book stresses the central importance of rigour in the collection and treatment of evidence and reason in decision-making, to ensure that it meets the needs of a wide community of students, it is broad in scope, rather than deep. It is, therefore, appropriate to a wide audience including practising scientists and technologists.

Hardback | 550 pages | 9781788012058 | 2019 | £86.99 | $122.00

ISBN 978-1-78801-205-8

Complete Science Communication

A Guide to Connecting with Scientists, Journalists and the Public

Ryan C Fortenberry University of Mississippi, USA

Written as a textbook to support advanced level undergraduate and postgraduate courses, the book brings together all aspects of science communication. Focus is on the four key areas of writing for non-technical audiences and science journalism; writing for technical audiences and peer-reviewed journals; public speaking of science; and public relations. This text will provide science students with an appreciative understanding of accepted human communication theories and practices. Potential assignments are also provided at the end of each chapter as additional resources.

Paperback | 183 pages | 9781788011105 | 2019 | £29.99 | $41.99

ISBN 978-1-78801-110-5

Conservation Science

Heritage Materials

2nd Edition

Paul Garside British Library, UK | **Emma Richardson** University College London, UK

With contributions by scientists working in the museum and heritage sector, this textbook provides an overview of the analytical techniques and data processing methods used in modern conservation science. Each chapter deals with one of the common types of conservation materials in turn and provides case study examples of the techniques employed. It will interest students, scientists involved in conservation, and conservators who want to develop their understanding of their collections at a material level.

Hardback | 400 pages | 9781788010931 | 2019 | £44.99 | $63.00

Design of Experiments for Chemists

Introductory Statistical Methods

Matthew Linsley Newcastle University, UK

Design of Experiments (DoE) is recognised as an essential skill by many organisations. Its application ensures robust processes with quality output and is beneficial for improving the efficiency of lab-based academic research. In response to concerns over the lack of chemists with statistical and DoE skills, this book provides a very accessible and practical introduction to the topic written by a statistician with vast experience training chemists and relating to the needs of the chemical science community. It explores real life case studies and experiences to bring the theory to life and readers are given practical advice on applying the techniques presented within their own environments throughout.

Hardback | 300 pages | 9781782626572 | 2019 | £42.99 | $60.00

Fundamentals of Smart Materials

Mohsen Shahinpoor University of Maine, USA

A new textbook consisting of a workbook and solutions manual covering the fundamentals of different functional material systems aimed at advanced undergraduate and postgraduate students. Each chapter includes an introduction to the material, its applications and uses with example problems, fabrication and manufacturing techniques, conclusions, homework problems and a bibliography. Edited by a leading researcher in smart materials, topics include piezoelectric materials, magnetostrictive materials, shape memory alloys, mechanochromic materials, thermochromic materials, chemomechanical polymers and self-healing materials.

Hardback | 480 pages | 9781782626459 | 2019 | £76.99 | $108.00

Gas Chromatography-Mass Spectrometry

How Do I Get the Best Results?

Jason Creasey GlaxoSmithKline, UK | **Anthony Gachanja** Jomo Kenyatta University of Agriculture and Technology, Kenya | **Imran Janmohamed** Anthias Consulting Ltd, UK | **Steven Lancaster** Domino Printing Sciences, UK | **Mathias Schäfer** University of Cologne, Germany | **Diane Turner** Anthias Consulting Ltd, UK

Gas chromatography–mass spectrometry (GC-MS) can be used in everything from environmental monitoring and food safety to forensic science and medicine. This textbook introduces students and scientists who are new to GCMS to all of the steps involved in using this technique as part of a research process. Throughout the book, case studies illustrate the process, the techniques used and any common challenges. Newcomers can easily search for answers to the "how do I...?" question they may have and find basic and clear advice on how to get started. The book draws on extensive experience teaching GCMS courses in the developing world as part of the Royal Society of Chemistry's Pan Africa Network supported by GSK.

Paperback | 400 pages | 9781782629283 | 2019 | £37.99 | $53.00

Genomics and Clinical Diagnostics

David Whitehouse University of Hertfordshire, UK | **Ralph Rapley** University of Hertfordshire, UK

With large genome initiatives being announced around the world, this book provides a timely graduate level introduction to molecular diagnostics technologies and applications to enable readers to embrace the subject and original literature. The first of four sections delivers readily accessible introductory information on the purposes, properties and drawbacks of diagnostic tests followed by chapters on the principal molecular technologies that underpin the information in the later sections. The following two sections provide more specialised examples of currently used diagnostic technologies and insights into selected key diagnostic challenges including specific examples, automation and point of care testing. The book concludes with a section on future prospects focusing on mutation detection for personalised medicine, for example in cancer.

Hardback | 470 pages | 9781782628217 | 2019 | £90.00 | $125.00

ISBN 978-1-78262-821-7

Global Energy

An Introduction

Peter Hall University of Sheffield, UK

Global Energy provides an approachable introduction to the often-complex global energy industry. Throughout the book, thumbnail sketches are given of energy systems in certain countries that illustrate different approaches to energy provision. It will give the reader a broad vision of how different energy generation and distribution systems function together to provide global energy. Written by an authority in the field, this title will be of interest to students on advanced courses in energy, engineering, environment and materials, as well as academic professionals and policy makers.

Paperback | 300 pages | 9781788015172 | 2019 | £65.00 | $90.00

ISBN 978-1-78801-517-2

Green Analytical Chemistry

2nd Edition

Mihkel Koel Tallinn University of Technology, Estonia | **Mihkel Kaljurand** Tallinn University of Technology, Estonia

The main goal of green analytical chemistry is to avoid or reduce the undesirable environmental side effects of chemical analysis, while preserving the classic analytical parameters of accuracy, sensitivity, selectivity and precision. This book portrays the current and changing situation concerning adoption of the principles of green chemistry as applied to analysis. Aimed at graduates and novices just entering the field also managers of analytical research laboratories, teachers of analytical chemistry and green public policy makers.

Hardback | 340 pages | 9781788014861 | 2019 | £60.00 | $85.00

ISBN 978-1-78801-486-1

Hands on NMR

A Practical Guide

James Hook University of New South Wales, Australia | **Allan Torres** Western Sydney University, Australia | **William S Price** Western Sydney University, Australia

Presenting important practical aspects of NMR spectroscopy, this book will be useful for explaining and facilitating the successful set up of a wide variety of NMR experiments. It will enlighten readers with the relevant information on the basic concepts in NMR, how it works, and how to trouble-shoot artefacts that may be encountered. Bringing books that present practical NMR up to date, this book fills the gap in the literature and provides a new comprehensive practical NMR book for teaching and research at all levels – graduates, postgraduates, industry and research.

Hardback | 500 pages | 9781788010887 | 2020 | £86.99 | $122.00

ISBN 978-1-78801-088-7

Macromolecules at the Interface

Concepts to Applications

Gil Garnier Monash University, Australia | **Vikram Singh** Raghuwanshi Monash University, Australia

This book portrays, clearly and simply, how and why macromolecules adsorb at the interface, the basic mechanisms and forces involved, what systems of macromolecules there are at the interface, how polymer conformations vary with environment and how control of macromolecules at the interface is used in traditional and emerging fields. Written for advanced level students and researchers in academia and industry, the effect of macromolecules at the interface is presented and linked to applications. Following a descriptive approach the authors bring the literature up-to-date and make it accessible.

Paperback | 250 pages | 9781788012256 | 2020 | £40.00 | $56.00

ISBN 978-1-78801-225-6

Pharmaceutical Crystallography

A Guide to Structure and Analysis

Andrew Bond University of Cambridge, UK

Written with pharmaceutical scientists in mind, this book explains crystallographic techniques in a language accessible to those without a traditional chemistry background. Explaining theory in a descriptive, rather than mathematical manner, with case studies and examples relevant to those working in the pharmaceutical arena, this book offers an unintimidating and intuitive guide.

Paperback | 250 pages | 9781782629665 | 2019 | £35.99 | $50.00

ISBN 978-1-78262-966-5

Principles and Applications of Artificial Photosynthesis

Shunichi Fukuzumi Osaka University, Japan

Harnessing light energy from the sun is already possible and widely used to produce electricity via photovoltaic cells, however there is a fundamental issue in finding a suitable way of storing electricity. Photosynthesis in green plants locks energy from the sun within the chemical bonds of glucose molecules, not only producing energy but storing it. Molecular mimicry of the fundamental processes occurring in photosynthesis has thus attracted much attention. This book will comprehensively review the molecular-based artificial photosynthesis systems and provide a unified view and future perspective of real artificial photosynthesis by a single author covering the different approaches.

Paperback | 350 pages | 9781788014311 | 2020 | £80.00 | $110.00

ISBN 978-1-78801-431-1

Printed Electronic Technologies

Wei Wu Wuhan University, China

Modern printing technology has paved the way for the fabrication of thin inexpensive electronics, with applications including wearable devices, smart packaging, healthcare, and the automotive industry. This textbook describes the key printing technologies for printed electronics, including explanations of the materials, mechanisms, printing methods and processes along with examples of printed devices and their applications. This title will be essential reading for students on courses across materials science, electronic science, manufacturing and engineering, as well as those with an interest in printed electronics.

Paperback | 360 pages | 9781788014151 | 2020 | £75.00 | $105.00

ISBN 978-1-78801-415-1

Spectroscopy and Electronic Structure of Transition Metal Complexes

Dimitrios A Pantazis Max Planck Institute for Coal Research, Germany | **Serena DeBeer** Max Planck Institute for Chemical Energy Conversion, Germany | **Frank Neese** Max Planck Institute for Coal Research, Germany

The combination of spectroscopy and theory has developed considerably in the last two decades and has become a fundamental component of modern chemical research. The book provides a comprehensive and up-to-date resource on spectroscopic methods used in transition metal chemistry and explains the relationships between experimental techniques and electronic structure. Edited and written by world experts in the field, this title will be of interest to students, as well as those working in physical chemistry, physical inorganic chemistry, (bio) inorganic chemistry and spectroscopy.

Hardback | 500 pages | 9781788014243 | 2019 | £99.99 | $140.00

ISBN 978-1-78801-424-3
9 781788 014243

Tanning Chemistry

The Science of Leather

2nd Edition

Anthony D Covington The University of Northampton, UK | **William R Wise** The University of Northampton, UK

Providing excellent insight into the role of science in leather production, the first edition of this textbook was adopted for students and leather chemists. With a new co-author added, the text has been reviewed and brought up to date with regards to developments in technology and science over the last ten year. The revised text importantly reflects changes in the industry and deals with the need to increase sustainable production. Five new chapters are added, dealing with new science and technologies of reagent delivery, the polymer science of finishing (surface coatings), environmental impact and the future of processing.

Paperback | 550 pages | 9781788012041 | 2019 | £56.99 | $80.00

ISBN 978-1-78801-204-1
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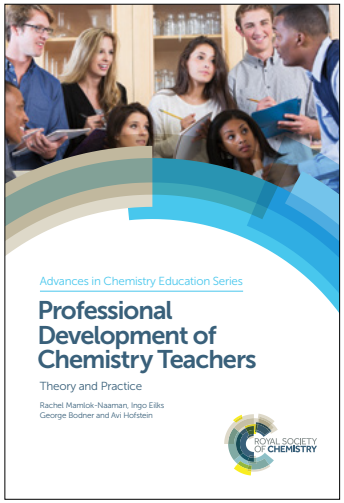

About the series

ISSN: 2056-9335

Books in this series review developments in areas of chemistry education internationally or report on a single educational context where the work has clear international significance; cover formal education, informal education, teacher education/development or public understanding of chemistry; and cover innovations in chemical education practice where suitable evidence of research-based evaluation is included. Topics covered will include approaches to teaching chemistry and chemistry topics; the use of technology in chemistry teaching and learning; assessment of learning in chemistry education; chemistry in the curriculum; chemistry teacher preparation and development; initiatives to improve public understanding of chemistry; and developments in research methodology as applied in chemistry education. The series provides volumes of high quality and significance in the field of chemistry education research for researchers and postgraduates.

Affective Perspectives in Chemistry Education Research

Dual-process Theories, Intuition and Learning Objects

Murat Kahveci Çanakkale Onsekiz Mart University, Turkey

Bringing together the latest research on this field in one volume for the first time, this is an important reference for chemistry education researchers. It gives a holistic approach on affective perspectives, such as dual-process theories, to theorise the effects of affective states on chemistry learning.

Hardback | 250 pages | 9781782629641 | 2019 | £99.99 | $140.00

ISBN 978-1-78262-964-1
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Argumentation in Chemistry Education

Research, Policy and Practice

Sibel Erduran University of Oxford, UK

Many studies have highlighted the importance of discourse in scientific understanding. Argumentation is a form of scientific discourse that plays a central role in the building of explanations, models and theories. Scientists use arguments to relate the evidence that they select from their investigations and to justify the claims that they make about their observations. The implication is that argumentation is a scientific habit of mind that needs to be appropriated by students and explicitly taught through suitable instruction. Edited by Sibel Erduran, an internationally recognised expert in chemistry education, this book brings together leading researchers to draw attention to research, policy and practice around the inclusion of argumentation in chemistry education. Split into three sections: Research on Argumentation in Chemistry Education, Resources and Strategies on Argumentation in Chemistry Education, and Argumentation in Context, this book blends practical resources and strategies with research-based evidence. The book contains state of the art research and offers educators a balanced perspective on the theory and practice of argumentation in chemistry education.

Hardback | 350 pages | 9781788012126 | 2019 | £99.99 | $140.00

ISBN 978-1-78801-212-6
9 781788 012126

The Nature of the Chemical Concept

Re-constructing Chemical Knowledge in Teaching and Learning

Keith S Taber University of Cambridge, UK

Chemistry is considered to be a conceptual subject, but studies have shown that students struggle to learn many chemical concepts. This book discusses the difficulties in teaching chemical concepts that are commonly found to be challenging to learners. Ideal for researchers working in student learning or curriculum development, the book is also of interest to teachers wanting to better understand student learning.

Hardback | 250 pages | 9781782624608 | 2019 | £99.99 | $140.00

ISBN 978-1-78262-460-8

New in popular science

Our engaging and ever-growing collection of popular science books put chemistry into the context of daily life. Entertaining and accessible, they offer summaries on a wide range of chemical science subjects. This year look out for titles on the chemistry of money, how polymer scientists influence the modern world and the engaging story of the chemical discoveries and inventions where metal ions have played a major role.

Five minutes with...

Name Ian Godwin

Affiliation University of Queensland, Australia

Author of *Good Enough to Eat*

Book publication date January 2019

ISBN 9781788010856

Tell us about your book

Good Enough to Eat? explores our relationship with food. It outlines the impacts genetic technologies such as GM crops and the newest gene editing techniques have had and may have on food production and sustainability. Each chapter includes interviews with those involved, including geneticists, agricultural scientists, molecular biologists, farmers, food scientists, economists, environmentalists, social scientists and others involved in the food industry.

From the early days of excitement over the first applications of GM crops, to the backlash led by environmental and consumer activists, the book highlights some of the common misconceptions about agriculture and the use of terms such as 'chemical-free' and 'organic'. As every scientist (whether a chemist or not) knows, all food is organic, and no food can possibly be chemical-free.

The book chronicles the dark days of GM crops and plant science research but espouses a confidence in the future. The data are irrefutable. GM crops have been embraced in many parts of the world because they are more productive and sustainable. The latest techniques of gene editing and synthetic biology are now being applied to the future of food production. The book concludes with an aspirational chapter, espousing scenarios in which gene edited plants and animals will be accepted as one means to a healthier, safer and more environmentally-friendly future for food and the planet.

Do you have an unusual or exciting story from your time working in plant science?

In my research group, we have been working on improving the food and feed quality of a cereal known as sorghum. Sorghum is one of the most drought and heat tolerant cereals, and over 500 million people eat it every day. We have developed sorghums with larger grain and more grain per plant (which translates into much higher yield, of course). Even more exciting, many of these sorghums also have higher protein contents, which makes them more desirable for human nutrition and as animal feeds. This has been achieved using genetic engineering and now we are developing ways to replicate these outcomes using CRISPR/Cas9.

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Five minutes with...

Name Lars Öhrström

Affiliation Chalmers University of Technology, Gothenburg, Sweden

Co-author of *The Rhubarb Connection and Other Revelations*

Book publication date December 2018

ISBN 9781788010948

Tell us about your book
It is about some of the hidden chemistry we do not often think about, how metal ions play a crucial role in vitamins, enzymes, forensic science, catalysis and how that relates to history, people, literature and other human endeavours.

What do you think will be the next big breakthrough in your subject area?
I think we will see metal-organic frameworks and new drugs with metal ions being used in important practical applications. Also very important is new photocatalysts than can help convert the plentiful energy we get from the sun into chemical fuels by transforming carbon dioxide or water.

Do you think science has become more popular in mainstream media, what do you think has influenced this?
Yes, I think so. Obviously the so-called CSI-effect, but also perhaps a younger generation of scientists who are more approachable. People like to discuss things like the chemistry and physics of Star Wars and super heroes and there are media people out there who are eager to get things right, like the Breaking Bad people.

Are there any RSC books you'd recommend?
We were happy to browse through Metal Chelation in Medicine which came out just as we began to write in earnest, and I see new titles in the subject are coming out this year, Metals in Biology and Medicine A Chemical Approach. But these are hard-core academic stuff. On the popular science side John Emsley's books are all excellent, More Molecules of Murder that came out last year looks very promising.

A History of Distillation

Ian Hornsey Nethergate Brewery, UK

Although early texts tend to be shrouded in mystery, one thing is certain that in the alchemist's quest for the elixir of life, distillation played a central role. There is no modern book that deals with the history of distillation and there is a wealth of new material to report particularly around the early alchemists and into the origins of distillation from other civilisations. With the growth of the craft distillation industry internationally, both producers and the layman with a specialist interest in distilling will find this book of interest. Ian Hornsey has extensively researched the literature and brings his topic to life through his contagious enthusiasm and excellent writing.

Paperback | 300 pages | 9781788011952 | 2019 | £33.99 | $48.00

ISBN 978-1-78801-195-2

Discovering Cosmetic Science

Stephen Barton Skin Thinking Ltd., UK | **Brigitte West** Beauty by the Geeks Ltd, Newcastle University, UK

Cosmetic science and the personal care industry are often misrepresented. This book will educate and inform the public and the wider science community about the sound science they are based on. In the process many positive aspects of cosmetic chemistry can be revealed, from creating colours, fragrances and sensorial formulations to understanding the important interactions of UV light with organic and inorganic absorbers and blending these for effective SPF sunscreens. Providing background material for education and as an accessible scientific title for the interested lay reader, this book shows chemistry in an everyday context based on the real world and dispelling the many myths.

Paperback | 200 pages | 9781782624721 | 2019 | £19.99 | $28.00

ISBN 978-1-78262-472-1

Good Enough to Eat?

Next Generation GM Crops

Ian D Godwin The University of Queensland, Australia

How are genetically modified (GM) crops created and why? How will crops evolve in future with scientists using new gene editing tools? Ian Godwin, a professor in plant molecular genetics, explores these questions in a fun and accessible style in Good Enough to Eat. The book delves into the social, political, and philosophical arguments for and against GM crops as well as the science behind them and puts this knowledge into the context of global food security and sustainability. Godwin interviews biologists and farmers, nutritionists and activists along the way.

Paperback | 235 pages | 9781788010856 | 2019 | £24.00 | $35.00

ISBN 978-1-78801-085-6

The Chemistry of Money

Brian Rohrig

Did you know that some societies once used giant rocks for money? Why do some coins have holes in them? Will plastic soon replace paper currency? The history of money closely parallels the history of chemistry, with advances in material science leading to advances in our physical currency. From the earliest examples of money, through the rise of coins, paper, plastic and beyond, with excursions into corrosion and counterfeiting along the way, this book provides a chemist's eye view into the history of the cash in our pockets. Written in an accessible style that will appeal to the layperson and scientist alike, The Chemistry of Money will be sure to both enlighten and entertain. You will never look at money the same way again!

Paperback | 250 pages | 9781782629832 | 2019 | £19.99 | $28.00

ISBN 978-1-78262-983-2

The Horse Who Came to Dinner

The First Criminal Case of Food Fraud

Glenn Taylor

Science is at the forefront of uncovering some of the century's biggest food scams and this book details food fraud over many years giving unique insights from an enforcement point of view. Following Horse-gate, the substitution of beef with horse, the enforcement world has changed. There is now a team focussing on food fraud and a desire to put the perpetrators behind bars. This book will be timely, bringing the literature right up to date, and aimed at food professionals and lay readers studying food fraud, those with an interest in forensics and food forensics in particular and enforcement officers.

Paperback | 200 pages | 9781788011372 | 2019 | £21.99 | $31.00

The Polymer Revolution

How Polymer Scientists Made the Modern World

Peter Morris Science Museum London, UK

Through the lives of 24 polymer scientists and the fields in which they worked, this book presents an overview of the history of polymer science. It shows how polymer science transformed from the nineteenth century to today, how advances in polymer science were spurred on by developments in industry and at the same time, new polymers became possible. It also presents how certain key individuals from different countries played an important role in the history of polymer science. An important and interesting topic that is not well known or well understood by some chemists or the public, this book informs and entertains at the same time.

Paperback | 200 pages | 9781782628279 | 2019 | £23.99 | $34.00

The Rhubarb Connection and Other Revelations

The Everyday World of Metal Ions

Lars Öhrström Chalmers University of Technology, Sweden | **Jacques Covès** CNRS Universite Joseph Fourier Grenoble, France

Pink warships that vanish at dusk, urinary maladies of an emperor, and a gold test for cocaine – behold the chemistry of metal ions as never before. Expect to encounter a fair share of heroes and villains, real and fictional, scientist and layperson. Such characters include an ex-MI5 employee running a hospital ward in London amid falling German V1 rockets, a notorious racing cyclist, a proud butler and the lady who first proposed nuclear fission (it's not who you think it is). With engaging, humorous and intelligent prose, the reader will discover the fascinating back-stories of chemical discoveries and inventions where metal ions have played a major role.

Paperback | 170 pages | 9781788010948 | 2019 | £19.99 | $28.00

The Science and Commerce of Whisky

2nd Edition

Ian Buxton | **Paul S Hughes** Oregon State University, USA

Since the publication of the first edition in 2014, the whisky industry has changed and this book provides the reader with an overview of the latest academic research and industry best practice in an accessible and authoritative format. An entirely new chapter discussing the management and utilization of co-products and recent developments in areas such as anaerobic digestion is included along with revisions and updates to most chapters. Written by acknowledged and experienced authorities, this book provide an up to date treatment of this fast developing area. Aimed at the popular market, it provides a leading text for students of distilling, industry practitioners, new craft distillers and whisky enthusiasts.

Paperback | 300 pages | 9781788015387 | 2020 | £29.99 | $42.00

Travels with the Atom

Glen E Rodgers Allegheny College, USA

The atomic concept is perhaps one of the most significant and enduring ideas in the history of humankind and to truly appreciate the labour that the great minds of the age expended upon atomic theory one can scarcely do better than trace their footsteps throughout Europe and across the globe. From Parisian museums to the legendary Cavendish laboratory - via Christchurch, Montreal and Pennsylvania - Travels with the Atom sketches the development of the atomic concept through the places and people central to the advances in our understanding of the particles forming our entire physical universe. An ideal travelling companion or fireside read, this book will intrigue and amuse anyone with an interest in the history of science.

Paperback | 450 pages | 9781788015288 | 2020 | £29.99 | $41.99

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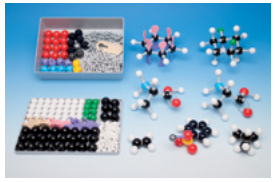

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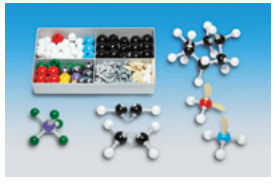

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Elements Top Trumps is an entertaining, fast-paced chemistry card game. With eye-catching imagery and fascinating facts about the elements, it's a great way to have fun and learn about the elements. Recommended for children aged 7-14, the game can be played by two or more players. Each of the 30 cards represents an element. Players compare numerical properties of the elements (melting point, density, price, discovery date and the size of the atom) and choose the category they think will win. Elements Top Trumps is created by the Royal Society of Chemistry in partnership with Winning Moves Ltd, the makers of Top Trumps™.

Single pack | 9781847559005 | 2008 | £6.00 | $9.60
Pack of six | 9781849739214 | 2008 | £60.00 | $96.00

RSC Periodic Table

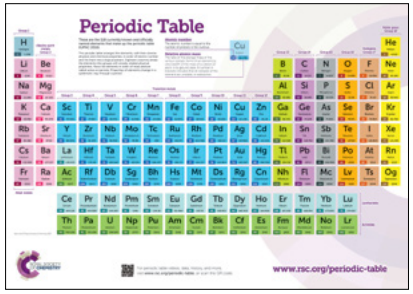
Wallchart, A0 - 2A0

Murray Robertson Visual Elements, UK

Updated for 2017, the Royal Society of Chemistry's bold and clear representation of the periodic table now includes the four new elements, completing the seventh period. The poster is two-sided: on one side, a Visual Elements version, with fascinating element artwork by Murray Robertson based on scientific data provided by the chemist and science writer John Emsley; on the other, a bold colour-coded version, emphasising readability and clarity. Printed in full colour, the wallchart measures A0. Information for each element includes the name, chemical symbol, atomic number, and relative atomic mass. The groups are readily identifiable by colour. We've designed the wallchart to be readable, visually engaging, and an excellent addition to any classroom, laboratory, or office. Price shown does not include VAT in the EU.

A0 Poster | 9781788011938 | 2014 | £10.95 | $16.00
2A0 Poster | 9781788011921 | 2014 | £33.00 | $49.50

A0 (1189 x 841 mm)



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Visual Elements Jigsaw

Murray Robertson Visual Elements, UK

With 550 pieces and a stunning full-colour design, this jigsaw puzzle beautifully illustrates the periodic table in all its glory. The jigsaw would be an attractive gift for any puzzle-loving friends or relatives, and might even spark an interest in chemistry. Price shown does not include VAT in the EU.

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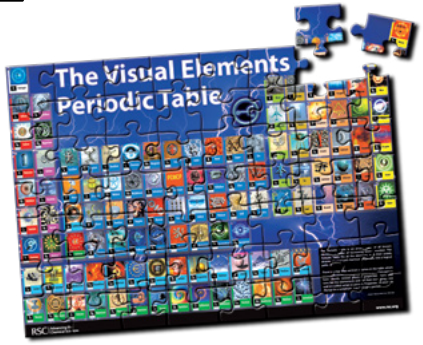

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