Green Chemistry for Surface Coatings, Inks and Adhesives
Sustainable Applications
Rainer Höfer Editorial Ecosiris, Germany Avtar Singh Matharu University of York, UK Zhanrong Zhang Chinese Academy of Sciences, China
Highlighting sustainable technologies and applications of renewable raw materials within the framework of green and sustainable chemistry, circular economy and resource efficiency, provides a cradle-to-cradle perspective. From potential feedstocks to recycling/reuse opportunities and the de-manufacture of adhesives and solvents, the book applies green chemistry principles to all aspects of adhesive and sealant manufacture. The book is ideal for researchers and industrialists working in green chemistry, industrial coatings, adhesives and inks and printing technologies.

Hardback | 440 pages | ISBN 9781782629948 | £179.00 | $250.00 | 25/06/2019

Amino Acids, Peptides and Proteins
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 | 153 pages | ISBN 9781788013673 | £314.95 | $441.00 | 03/06/2019

Hot-electron Science and Microscopic Processes in Plasmonics and Catalysis
Faraday Discussion 214
Over the last 10 years, the field of plasmonic research has emerged as an extremely promising technology with several main fields of application including information technologies, energy, high-density data storage, photovoltaics, chemistry, biology, medicine and security. This volume discusses the most recent breakthroughs in the multidisciplinary and emerging field of hot-electron plasmonics, covering the field from the different perspectives of physicists, chemists and ab-initio theoreticians. It is a useful resource for established scientists as well as post-graduate students and industrial researchers interested in the applications of plasmonics.

Hardback | 522 pages | ISBN 9781788016704 | £170.00 | $235.00 | 13/06/2019
Indoor Air Pollution
R M Harrison University of Birmingham, UK
R E Hester University of York, UK

Time–activity diaries kept by members of the general public indicate that on average people spend around 90% of their time indoors, this is associated with considerable exposure to air pollutants. Given its importance as a source of air pollution exposure, increasing attention is being given to pollution of the indoor environment. This volume will consider both chemical and biological pollutants in the indoor atmosphere from their sources to chemical and physical transformations, human exposure and potential effects on human health.

Hardback | 16 pages | ISBN 9781788015141 | £70.00 | $95.00 | 06/06/2019

Nanoparticle Design and Characterization for Catalytic Applications in Sustainable Chemistry
Rafael Luque University of Córdoba, Spain
Pepijn Prinsen University of Córdoba, Spain

Nanoparticles exhibit a range of different properties when compared to bulk materials. Their high surface-area to volume ratio makes them particularly attractive for use as catalysts and recent years have seen an explosion of research in this area. This book presents an introduction to the preparation and characterisation of nanomaterials and their design for specific catalytic applications. It is a valuable resource for researchers working on catalytic reactions, industrial processes and nanomaterial applications.

Hardback | 346 pages | ISBN 9781788014908 | £149.00 | $205.00 | 11/06/2019

Emerging Drugs and Targets for Multiple Sclerosis
Ana Martinez Centro de Investigaciones Biologicas-CSIC, Spain

Multiple sclerosis (MS) is a complex disease with a presumed autoimmune aetiology and few current effective treatments. Disease modifying therapies focus on the altering the natural course of relapsing and remitting MS, targeting the inflammatory response. Other targets involve tackling the cause of the disease – demyelination of axons through remyelination therapies. Due to several recent breakthroughs in the understanding of the pathophysiology of MS new targets for remyelination and immunomodulation are rapidly emerging. This book provides a comprehensive overview of drug discovery and development for the molecular basis of the disease, from new targets to drugs currently in clinical development, cellular and animal disease models to biomarkers for diagnosis and assessment in clinical trials. It is an ideal reference for any student or researcher interested in drug development for neurodegenerative diseases, autoimmune diseases and MS in particular.

Hardback | 326 pages | ISBN 9781788014502 | £159.00 | $220.00 | 28/06/2019

All information is subject to change without notice
Rapid Antibody-based Technologies in Food Analysis
Richard O’Kennedy Hamid Bin Khalifa University, Qatar

There is a worldwide problem with food contamination, with an increasing number of outbreaks, and food safety. Consequently, there is a need for rapid tracing of foods as well as requirements for food authentication. This book provides a description of antibody-based technologies used in food analysis. It focuses on key applications outlining the approaches used, their advantages and limitations, and future areas for development. An expert in the field has written each chapter and a number of case studies demonstrating the utility of each of the methods described is included. It is for researchers and scientists in the field who have to acquire, verify and use technologies for food analysis, food producers and processors, food safety and testing laboratories, and government agencies.

Hardback | 336 pages | ISBN 9781788013901 | £159.00 | $225.00 | 19/06/2019