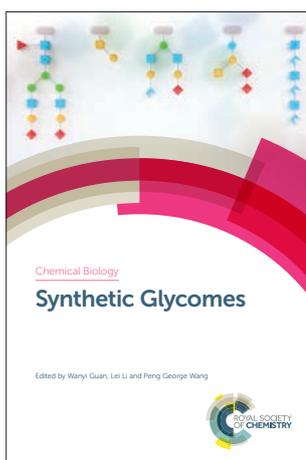


# Just published – April 2019



## Synthetic Glycomes

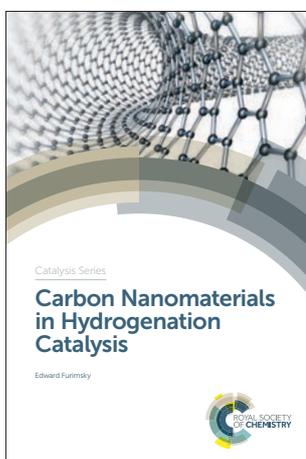
Peng George Wang Georgia State University, USA

Wanyi Guan Hebei Normal University, China

Lei Li Georgia State University, USA

Glycans play essential roles in diverse biological and aetiological processes. Developments of the glycan microarray have meant that our knowledge of the function of glycans has increased, however the accessibility of glycans is a major obstacle to further study. To circumvent this limitation many synthetic strategies including chemical, enzymatic and chemo-enzymatic have been developed to produce libraries of structurally defined complex glycans. The objective of this book is to provide a comprehensive review of the current state of the synthetic glycome and introduce the application of synthetic glycomes in the glycan microarray. Synthetic Glycomes is an ideal reference for students and chemical biologists interested in the development of synthetic glycomes and the study of glycans.

Hardback | 350 pages | ISBN 9781788011648 | £169.00 | \$235.00 | 23/04/2019

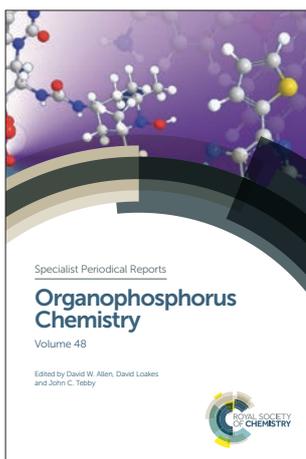


## Carbon Nanomaterials in Hydrogenation Catalysis

Edward Furimsky IMAF Group, Canada

In the past decade numerous studies on the development of catalysts on carbon nano-supports have appeared in scientific literature and these have shown remarkable activity and specificity for hydrogenation reactions. **Carbon Nanomaterial in Hydrogenation Catalysis** is a valuable reference for researchers and chemical engineers working on improving hydrogenation processes or interested in applications for carbon nanomaterials. Covering their production, modification and applications as a catalyst support this book provides an in-depth review of the current state-of-the art in using carbon nanomaterials for hydrogenation.

Hardback | 201 pages | ISBN 9781788017237 | £149.00 | \$205.00 | 09/04/2019



## Organophosphorus Chemistry

Volume 48

David W Allen Sheffield Hallam University, UK

David Loakes University of Cambridge, UK

John C Tebby Sheffield Hallam University, UK

This annual review of the literature presents a comprehensive and critical survey of the vast field of study involving organophosphorus compounds, from phosphines and related P-C bonded compounds to phosphorus acids, phosphine chalcogenides and nucleotides. 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 | 440 pages | ISBN 9781788014991 | £314.95 | \$441.00 | 10/04/2019

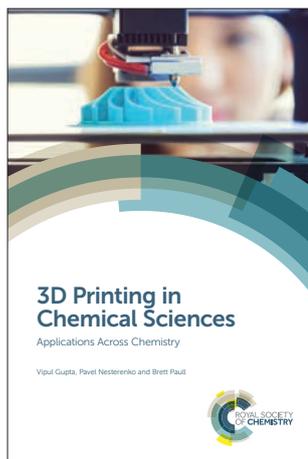
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# Just published – April 2019



## 3D Printing in Chemical Sciences

### Applications Across Chemistry

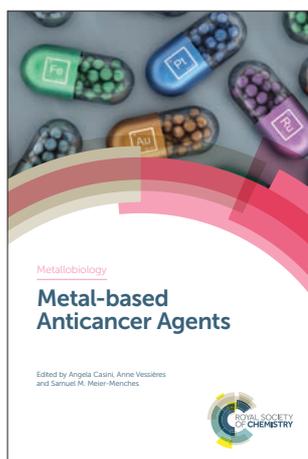
Vipul Gupta University of Tasmania, Australia

Pavel Nesterenko University of Tasmania, Australia

Brett Paull University of Tasmania, Australia

3D printing has rapidly established itself as an essential tool within research and industrial chemistry laboratories. Since the early 2000s, when the first research papers applying this technique began to emerge, the uptake by the chemistry community has been both diverse and extraordinary. This book will provide a timely overview of the capabilities of 3D printing and review the applications in various fields. It will be of interest across the chemical sciences in research and industrial settings for chemists and engineers.

Hardback | 250 pages | ISBN 9781788014403 | £159.00 | \$220.00 | 01/04/2019



## Metal-based Anticancer Agents

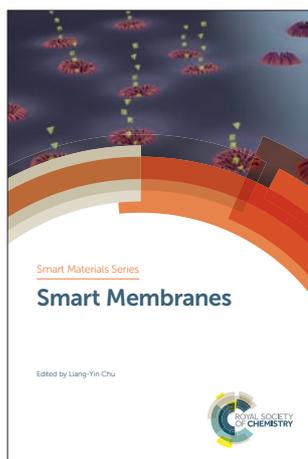
Angela Casini Cardiff University, UK

Anne Vessières Pierre et Marie Curie Univeristy, France

Samuel M Meier-Menches University of Vienna

Metal-based anticancer drugs, notably platinum-based such as cisplatin, have a tremendous clinical impact: it is estimated that at least half of all cancer patients are treated with a platinum-based drug. **Metal-based Anticancer Agents** introduces the main classes of metalodrugs, their possible different biological targets, the major concepts and methods. The book also provides an overview of the most significant experimental and conceptual progresses made during the last years in the areas of inorganic medicinal chemistry and metaldrug discovery and development. This book will be a valuable resource for experts in the field but also for those wishing to extend their expertise to metal-based cancer drugs.

Hardback | 356 pages | ISBN 9781788014069 | £179.00 | \$250.00 | 23/04/2019



## Smart Membranes

Liang-Yin Chu Sichuan University, China

Smart membranes that respond to environmental stimuli are gaining attention because of their potential use in a variety of applications, from drug delivery to water treatment. This book will cover topics such as novel design and fabrication strategies, approaches for controlling structure and performance, and cutting-edge applications of smart membranes. Edited by an internationally renowned expert and with contributions from key researchers, this book will appeal to students and researchers across materials science, chemistry, chemical engineering, pharmaceutical science and biomedical science.

Hardback | 418 pages | ISBN 9781788012430 | £179.00 | \$250.00 | 16/04/2019

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