

KEY BOOKS FROM THE ROYAL SOCIETY OF CHEMISTRY

Monographs in Supramolecular Chemistry

Series Editor: J. Fraser Stoddart, FRS, University of Birmingham, UK

Ref No 1130

Membranes and Molecular Assemblies: The Synkinetic Approach

By Jürgen-Hinrich Fuhrhop, *Freie Universität Berlin, Germany*

Jürgen Köning, *Freie Universität Berlin, Germany*

Membranes and Molecular Assemblies: The Synkinetic Approach is an inspiring, illustrated text in glorious full colour. It contains 118 colour illustrations and a further 70 in black and white. Great care has been taken to choose graphics that illustrate difficult concepts. The book describes the wealth of membrane structures realized by chemists mainly within the last two decades - micelles, vesicles, fibres, and surface monolayers - from the point of view of supramolecular chemistry. It puts new emphasis on "synkinetic" procedures for the preparation of non-covalent assemblies as well as their structural characterization by electron microscopy, solid state NMR spectroscopy, and comparison to X-ray crystal structures. The supramolecular structure of well-defined molecular assemblies and their use as complex reaction systems is also emphasized. Stereoselective surface recognition, asymmetric membranes, vectorial photoreactions, solid molecular bilayers in the form of tubules or helical rods, and sealable nanopores in membranes or on electrode surfaces are a few outstanding examples. In addition, the importance of well-defined gaps on surfaces and within membranes and crystals is discussed in context for the first time.

Hardcover	xiv + 228 pages	ISBN 0 85186 732 4	1994	Price £69.50
-----------	-----------------	--------------------	------	--------------

Ref No 1098

Container Molecules and Their Guests

By Donald J. Cram, *University of California, Los Angeles, USA*

Jane M. Cram, *University of California, Los Angeles, USA*

This volume covers the evolution of host-guest complexation chemistry in the minds and hands of Nobel Prize winner Donald Cram and his co-workers at UCLA, over the 25-year period from 1970-1994. It deals with the fundamental principles and objectives that govern this rapidly developing subject and illustrates the emergence of a new field of biomimetic chemistry.

Hardcover	xiv + 224 pages	ISBN 0 85186 972 6	1994	Price £49.50
-----------	-----------------	--------------------	------	--------------

Ref No 246

Cyclophanes

NOW IN PAPERBACK

By François N. Diederich, *University of California, Los Angeles, USA*

Hardcover	xvi + 314 pages	ISBN 0 85186 966 1	1991	Price £57.50
Softcover	xvi + 314 pages	ISBN 0 85186 405 8	1994	Price £25.00

Ref No 247

Crown Ethers and Cryptands

NOW IN PAPERBACK

By George W. Gokel, *University of Miami, Florida, USA*

Hardcover	xiv + 190 pages	ISBN 0 85186 996 3	1991	Price £52.50
Softcover	xiv + 190 pages	ISBN 0 85186 704 9	1994	Price £22.50

Ref No 242

Calixarenes

By C. David Gutsche, *Washington University, St. Louis, USA*

Hardcover	xii + 224 pages	ISBN 0 85186 916 5	1989	Price £39.50
Softcover	xii + 224 pages	ISBN 0 85186 385 X	1992	Price £17.50

Prices subject to change without notice.

To order please contact:

Turpin Distribution Services Ltd., Blackhorse Road, Letchworth, Herts SG6 1HN, UK.
Tel: +44 (0) 1462 672555. Fax: +44 (0) 1462 480947. Telex: 825372 TURPIN G.

RSC Members should order from Membership Administration at our Cambridge address.

For further information please contact:

Sales and Promotion Department, Royal Society of Chemistry,
Thomas Graham House, Science Park, Milton Road, Cambridge CB4 4WF, UK.
Tel: +44 (0) 1223 420066. Fax: +44 (0) 1223 423623.
E-mail (Internet): RSC1@RSC.ORG.

THE ROYAL
SOCIETY OF
CHEMISTRY



Information
Services

NEW & RECENT BOOKS FROM THE ROYAL SOCIETY OF CHEMISTRY

Ref No 975

Thin Film Coating

Edited by H. Benkreira, *The University of Bradford*

Thin Film Coating reviews important new work in the fluid mechanics of coating flows (prediction and correlation of film thickness and quality with operating conditions), the rheology of coating suspensions (and its effect on coating performance), drying, and solvent recovery in coating processes. It is written by world experts in the field and gives an update on the many advances made in the subject, both in academic research and in industrial development. The importance of coating technology is well known yet it remains a fragmented field, where a variety of coating methods and approaches have been created to solve operational problems. This book acts as a platform for the exchange of ideas and will encourage the search for a common, fundamental approach to tackling these problems.

Special Publication No. 129 Hardcover vii + 218 pages ISBN 0 85186 695 6 1993 Price £45.00

Ref No 841

Plant Polymeric Carbohydrates

Edited by F. Meuser, *Institute of Food and Fermentation Technology, Berlin, Germany*

D.J. Manners, *Heriot-Watt University, Edinburgh, UK*

W. Seibel, *Federal Research Centre for Cereal Potato, and Lipid Research, Detmold and Münster, Germany*

This book presents an up to date account of current developments in plant polymeric carbohydrates and covers five main areas: their biosynthesis and structure; their rheological properties; their nutritional importance; their industrial applications; and their chemical and enzymic conversion. It is written by experts from around the world, many of whom come from industrial and government laboratories, and provides both exceptionally wide and unusually detailed coverage of the subject. In addition it gives valuable references to the most recent literature and illustrates the latest research findings with a large number of figures.

Special Publication No. 134 Hardcover xii + 296 pages ISBN 0 85186 645 X 1993 Price £52.50

Ref No 982

Chemical Technology in Printing and Imaging Systems

Edited by J.A.G. Drake

Chemical Technology in Printing and Imaging Systems presents up to date information on trends in the printing industry and covers the role of chemicals in the quality of print, its colour, preparation of printing plates, and image-forming processes, as well as the efficient use of materials. The book gives strong emphasis to the environmental impact of the chemicals used and also covers present and future legislation. Topics covered include the removal of volatile organic compounds, the prospect of using more aqueous-based systems for inks, electronic methods of producing images directly onto printing plates, and much more. In addition, general aspects of pigment technology are reviewed. This book has an unusual breadth and depth of coverage and will appeal to both commercial and academic minds.

Special Publication No. 133 Hardcover viii + 188 pages ISBN 0 85186 655 7 1993 Price £39.50

Ref No 775

Organic Materials for Non-linear Optics III

Edited by G.J. Ashwell, *University of Cranfield* and D. Bloor, *University of Durham*

Research has moved on in the quest for organic materials for non-linear optics and the third volume under this title gives an update on progress made since the previous volume was published in 1991. **Organic Materials for Non-linear Optics III** reflects the increased interest in polymer films for both second and third harmonic generation and includes a large number of papers dedicated to this topic. It also reflects the importance of such materials in the fabrication of devices that do not require the time-consuming process of crystal growth or Langmuir-Blodgett film fabrication. The book looks at electro-optic waveguide devices based on polymers that have been demonstrated to have potentially useful properties, and considers the significant impact they could have in the medium-term.

Special Publication No. 137 Hardcover xii + 362 pages ISBN 0 85186 625 5 1993 Price £59.50

To order please contact:

The Royal Society of Chemistry, Turpin Distribution Services Limited, Blackhorse Road, Letchworth, Herts SG6 1HN, United Kingdom.
Telephone: +44 (0) 462 672555. Fax: +44 (0) 462 480947. Telex: 825372.
Please quote your credit card details. We can now accept Access/Visa/Mastercard/EuroCard.

Turpin Distribution Services Limited is wholly owned by The Royal Society of Chemistry.

For information on other books and journals please contact:

Sales and Promotion Department, The Royal Society of Chemistry,
Thomas Graham House, Science Park, Milton Road, Cambridge CB4 4WF, United Kingdom.
Telephone: +44 (0) 223 420066. Fax: +44 (0) 223 423429. E-mail: (Internet) RSC1@RSC.ORG.

RSC Members are entitled to a discount on most RSC publications.

Details available from:

Membership Affairs Department at the Cambridge address above.

THE ROYAL
SOCIETY OF
CHEMISTRY



Information
Services



0022-4936(1995)6:1-D