

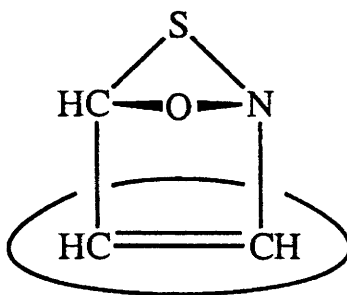
THE NEW SOUTH WALES

# SOUTHERN HIGHLANDS CONFERENCE

.....ON HETEROCYCLIC CHEMISTRY

Milton Park ..... Bowral

3 — 5 September 1995



A two day fully residential conference in the style of the Bürgenstock, Gordon and Grasmere conferences on the general theme of heterocyclic chemistry. Topics to include natural products and cover synthetic, organometallic, pharmacological, stereochemical and commercial aspects.

- Six invited lectures
- Continuous poster session
- Discussion in a relaxed atmosphere

Further details from: *Professor David StC Black*  
*School of Chemistry, The University of New South Wales*  
*Sydney NSW 2052 Australia*  
*Telephone: +(612) 385 4657 Fax: +(612) 662 2835*  
*E-mail: D.Black@unsw.edu.au*

DEPARTMENT OF ORGANIC CHEMISTRY — THE UNIVERSITY OF NEW SOUTH WALES

## EUCHEM Conference

# Cycloadditions and Related Reactions: Theory and Practice

**Vulcano Island, Italy, 21–24 June 1995**

The scientific programme will consist of lectures, and oral and poster presentations. Keynote lectures (60 min) and invited oral presentations (30 min) will be given by experts in the field. Additional papers will be selected for oral presentations (15 min) from submitted abstracts.

### International Scientific Committee

D. Bellus	(Basel, Switzerland)	R. Huisgen	(München, Germany)
A. Dondoni	(Ferrara, Italy)	P. Potier	(Gif-sur-Yvette, France)
J. Elguero	(Madrid, Spain)	C. W. Rees	(London, UK)
P. Grünanger	(Pavia, Italy)	G. Stagno d'Alcontres, President	(Messina, Italy)

### Plenary and Invited Lecturers

S. Blechert	(Berlin, Germany)	Y. Langlois	(Orsay, France)
A. Brandi	(Firenze, Italy)	J. Mattay	(Münster, Germany)
F. Cozzi	(Milano, Italy)	W. Oppolzer	(Geneva, Switzerland)
G. Desimoni	(Pavia, Italy)	C. Palomo	(San Sebastian, Spain)
L. Fiserá	(Bratislava, Slovak Republic)	J. Plumet	(Madrid, Spain)
T. Gallagher	(Bristol, UK)	J. Ripoll	(Caen, France)
D. S. Grierson	(Gif-sur-Yvette, France)	J. Sauer	(Regensburg, Germany)
R. Herges	(Erlangen, Germany)	J. F. Stoddart	(Birmingham, UK)
P. R. Jenkins	(Leicester, UK)	L. F. Tietze	(Göttingen, Germany)
J. Jurczak	(Warsaw, Poland)		

For a copy of the Second Circular and Application Form, contact Professor Mario Gattuso, EUCHEM Conference, Dipartimento di Chimica organica e biologica dell'Università, Salita Speronc 31, S. Agata, 98166 Messina, Italy; Tel. +39 90 392038; Fax +39 90 392840; E-mail [gattuso@imeuniv.unime.it](mailto:gattuso@imeuniv.unime.it)

**TOPICS  
IN PHYSICS,  
CHEMISTRY AND  
ENGINEERING**

# JOURNAL OF MATERIALS CHEMISTRY

**Journal of Materials Chemistry** is interdisciplinary and international. It covers the synthesis, structures, properties and applications of materials, particularly those associated with advanced technology. It provides a vital platform from which researchers announce important new work. It spans inorganic, organic and physical chemistry.

It contains original primary papers, short, urgent communications, review articles, and conference news. It is peer reviewed to the highest standard and publishes papers within three to four months of acceptance and communications within 12 weeks of receipt.

- ★ It is more than 50% per million words less expensive than some of its commercial counterparts.
- ★ Its European price per million words has **DECREASED** by over 30% from 1994 to 1995.
- ★ There are almost 70% **MORE** editorial pages now than in 1991 pages containing information **VITAL** to materials scientists
- ★ It has an impact factor that ranks with the world's top materials journals.

**THIS QUALITY  
AND VALUE  
CANNOT BE BETTERED.  
TAKE OUT A SUBSCRIPTION  
TODAY!**

**1995 Price (12 issues)**

ISSN 0959-9428

EEA £438.00

USA \$805.00

Canada (plus GST) £460.00

Rest of World £460.00

Back issues available on request.

**To order, please contact:**

The Royal Society of Chemistry, Turpin Distribution Services Limited, Blackhorse Road, Letchworth, Herts SG6 1HN, United Kingdom.  
Tel: +44(0)1462 672555. Fax: +44 (0)1462 480947.

**RSC members ordering for personal use are entitled to a discount on most RSC products, and should contact:**

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

**For further information on RSC products, please contact the Sales and Promotion Department at our Cambridge address.**

THE ROYAL  
SOCIETY OF  
CHEMISTRY



Information  
Services

# Contemporary Organic Synthesis



NEW  
REVIEW  
JOURNAL

*... a milestone in organic chemistry publishing ...*

**Contemporary Organic Synthesis**, is a NEW bi-monthly critical review journal, bringing you:

- Regular, up-to-date coverage of all major functional group interconversions
- Chemo-, regio- and stereo-selectivity in modern synthesis
- Design and development of chiral auxiliaries, catalytic asymmetric processes and biological methods
- Scope for organometallic reagents in rational, efficient design
- Timely reviews of the place of synthesis in all areas of natural product chemistry, medicine, agriculture and materials science
- Developments at the cutting edge of molecular recognition phenomena, supramolecular chemistry and self-assembly processes
- The needs of modern industry and the industrial chemist, taking into account economic and environmental factors

A subscription to **Contemporary Organic Synthesis** gives you:

- new approaches and new directions in synthesis design
- coverage of major areas each year, and more specialised areas every two or three years
- international outlook and coverage
- an attractive, highly readable publication with clear diagrams and figures

**SEND FOR FURTHER DETAILS OR SUBSCRIBE TODAY!**

**1995 Price (six issues)**

ISSN 1350-4894 EEA £165.00 USA \$303.00  
ROW £173.00 Canada £173.00 (+GST)

**To order, please contact:**

The Royal Society of Chemistry, Turpin Distribution Services Limited, Blackhorse Road, Letchworth, Herts SG6 1HN, United Kingdom. Tel: +44(0)1462 672555. Fax: +44 (0)1462 480947.

**RSC members ordering for personal use are entitled to a discount on most RSC products, and should contact:**

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

**For further information on RSC products, please contact the Sales and Promotion Department at our Cambridge address.**

THE ROYAL  
SOCIETY OF  
CHEMISTRY



Information  
Services

# Separations for Biotechnology 3

# SCI

***Published for SCI by The Royal Society of Chemistry***

Edited by D. L. Pyle, *The University of Reading*

Focused, up to date and carefully refereed, **Separations for Biotechnology 3** covers recent developments, current research, and new and emerging technologies in the fundamental biological, chemical and engineering aspects related to the separation and purification of biological products such as therapeutic proteins, antibiotics and amino acids.

The book contains original contributions on the use of molecular biology and protein engineering to facilitate recovery, new techniques for affinity separations, mathematical modelling of individual processes and separation systems, and the validation of processes for safe use.

The scope of the coverage is wide, and encompasses both academic and industrial angles on the subjects covered. It provides a stimulating account of an intriguing area of science, with subject and author indexes enabling the reader to use the book for quick, easy research and reference.

**Separations for Biotechnology 3** is a must for researchers working on fundamental and applied aspects of biorecovery, and for practising engineers and technologists involved in industrial production.

**Special Publication No. 158**  
**ISBN 0 85186 724 3**

**Hardcover**  
**September 1994**

**xiv + 604 pages**  
**Price £92.50**

**To order please contact:**

The Royal Society of Chemistry, Turpin Distribution Services Limited, Blackhorse Road, Letchworth, Herts SG6 1HN, United Kingdom.  
Telephone: +44 (0) 1462 672555. Fax: +44 (0) 1462 480947.  
Please quote your credit card details. We accept Access/Visa/Mastercard/EuroCard.

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

**For information on other RSC 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) 1223 420066. Fax: +44 (0) 1223 423429  
E-mail: (Internet) RSC1@RSC.ORG.

**RSC Members are entitled to a discount on most RSC publications. Details available from: Membership Administration Department at the Cambridge address above.**

THE ROYAL  
SOCIETY OF  
CHEMISTRY



Information  
Services

K:\AD\5158\PRIM\K.COR3

# NEW & RECENT BOOKS FROM THE ROYAL SOCIETY OF CHEMISTRY

Ref No 971

## Molecular Biology and Biotechnology - 3rd Edition

Edited by J.M. Walker, *University of Hertfordshire* and E.B. Gingold, *South Bank University*

The 3rd Edition of this immensely popular textbook brings readers up to date with the latest advances in this rapidly developing field. It has been thoroughly revised and expanded, combining entirely new chapters on current hot topics with existing chapters that have been rewritten and extended. **Molecular Biology and Biotechnology** 3rd Edition provides real breadth of coverage, taking account of both molecular biology and industrial applications. It also gives in depth coverage of key areas, resulting in a uniquely comprehensive publication. Highlights of this 3rd Edition include increased coverage of the cloning of yeast and animal cells and plant genetic engineering, and new coverage of polymerase chain reactions, DNA fingerprinting, transgenesis and vaccine development, reflecting the rapid growth of interest in these areas.

Softcover xviii + 428 pages ISBN 0 85186 794 4 1993 Price £39.00

Ref No 1067

## Experimental Toxicology: The Basic Issues - 2nd Edition

Edited by Diana Anderson, *The British Industrial Biological Research Association* and D.M. Conning, *The British Nutrition Foundation*

**Experimental Toxicology: The Basic Issues** 2nd Edition is an important text for undergraduates, post-graduates and professionals involved with, studying or teaching this often controversial subject. It addresses the basic issues concerned with the practice of experimental toxicology and discusses in detail the following topics: experimental design; biochemical issues; animal husbandry; species differences; immunological issues; carcinogenesis; reproductive approaches; statistics; genetics; in vitro and molecular approaches; risk assessment; information resources; aspects of legislation; good laboratory practice; and laboratory design. The book has been updated and revised to reflect the many changes that have taken place since the first edition was published five years ago and this 2nd Edition gives special attention to the extensive changes that have taken place in the areas of molecular, genetic and reproductive toxicology and in the knowledge regarding the multiplicity of enzymes involved in foreign compound metabolism.

Hardcover xiv + 566 pages ISBN 0 85186 451 1 1993 Price £85.00  
Softcover ISBN 0 85186 461 9 1993 Price £25.00

Ref No 987

## Chemistry and Light

By Paul Suppan, *University of Fribourg, Switzerland*

This new text book provides a concise introduction to all aspects of light-induced processes in chemistry, physics and biology, as well as in medicine and industry. It is up to date with the latest advances in the field, in particular the probing of the fastest light-induced reactions on picosecond and femtosecond time-scales, and is based on the photochemistry and photophysics degree course devised by the author. **Chemistry and Light** is a must for final year undergraduates, as well as for post-graduate students.

Softcover xiv + 296 pages ISBN 0 85186 814 2 1994 Price £19.50

Ref No 1034

## Further Advances in Chemical Information

Edited by H. Collier, *Infortics Ltd., Calne, Wiltshire*

**Further Advances in Chemical Information** covers a number of interesting themes that reflect the somewhat uncertain times now facing both the information industry and its customers in the chemical and pharmaceutical industries. Topics covered this year include a comparison of different services in the 2-D and 3-D search and modelling areas, rapid developments in in-house systems, and neural network applications in chemistry. The series is now also well known for its technical and research papers.

Special Publication No. 142 Hardcover ISBN 0 85186 545 3 viii + 192 pages 1994 Price £45.00

### 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.

ROYAL  
SOCIETY OF  
CHEMISTRY



Information  
Services

# NEW & RECENT BOOKS FROM THE ROYAL SOCIETY OF CHEMISTRY

Ref No 1098

## Container Molecules and their Guests

By Donald J. Cram and Jane M. Cram, *University of California*

Monographs in Supramolecular Chemistry - Series Editor: J. Fraser Stoddart, FRS, *University of Birmingham, UK*

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. The book demonstrates how a number of techniques, such as molecular modeling, synthesis, crystal structure, NMR solution structure and mass spectral structure determinations can be combined to develop a new branch of organic chemistry. It discusses the chemistry of completely new families of complexes - the carceplexes, hemicarceplexes and velcralexes - and reviews for the first time the uses of the interiors of hemicarceplexes as a new phase for carrying out chemical reactions and for protecting unstable species. Many will be inspired by the wonderful achievements that Cram and his team have made in this exciting branch of supramolecular chemistry.

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

Ref No 1051

## Medicinal Chemistry: Principles and Practice

Edited by Frank D. King, *SmithKline Beecham Pharmaceuticals, Harlow, UK*

This book introduces the principles and practices of modern medicinal chemistry and covers all aspects of drug discovery from the initial lead to final development. It teaches how to convert a lead compound into a potential drug and provides recent case histories as examples of successes.

**Medicinal Chemistry: Principles and Practice** is unique in dealing with the subject in such a practical way and is the only book currently available to bring together all areas of the subject in one volume. This breadth of coverage is supplemented by references to specialist monographs and reviews, where the reader can find more detail on specific topics of interest if required.

Softcover      Approx 340 pages      ISBN 0 85186 494 5      1994      Price £39.50

Ref No 238

## Amino Acids, Peptides and Proteins - Volume 25

Senior Reporter J.S. Davies, *University College of Swansea*

Formerly entitled *Amino Acids and Peptides*, this new volume provides a review of the literature published during 1992. **Contents:** Amino Acids; Peptide Synthesis; Analogue and Conformational Studies on Peptide Hormones and Other Biologically Active Peptides; Cyclic, Modified, and Conjugated Peptides; Current Trends in Protein Research; Metal Complexes of Amino Acids and Peptides.

Specialist Periodical Report      Hardcover      xiv + 410 pages      ISBN 0 85186 234 9      1994      Price £110.00

Ref No 185

## Biotransformations: A Survey of the Biotransformations of Drugs and Chemicals in Animals - Volume 6

Edited by David R. Hawkins, *Huntingdon Research Centre Ltd*

Now in its sixth outstanding volume, **Biotransformations** has become established as a unique and important source for those involved in the discovery and development of new compounds. It now broadly covers the scientific literature for the period 1987 to 1992. The series provides a ready way of accessing information on the known pathways for the biotransformation of structurally-related compounds. Key functional groups provide an index-related procedure for retrieving information on compounds of interest. A further index allows the retrieval of examples of specific biochemical reactions which may have wider application.

Hardcover      xxxii + 412 pages      ISBN 0 85186 127 X      1994      Price £130.00

### To order please contact:

The Royal Society of Chemistry, Turpin Distribution Services Limited, Blackhorse Road, Letchworth, Herts SG6 1HN, United Kingdom.  
Telephone: +44 (0) 1462 672555. Fax: +44 (0) 1462 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) 1223 420066. Fax: +44 (0) 1223 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

## Journal of Chemical Research, Issue 2, 1995

Other papers in the subject areas covered by *J. Chem. Soc.* are published in synopsis/microform format in *J. Chem. Research*. For the benefit of readers of *J. Chem. Soc.*, the contents list of *J. Chem. Research (S)*, Issue 2, is reproduced below.

- 43 Synthesis of Steroidal Triazine, Triazole and Oxadiazole Derivatives from a Steroidal  $\alpha$ -Hydroxyimino Ketone **Abdul U. Siddiqui, Y. Satyanarayana, Uma M. Rao and Abdul H. Siddiqui**  
(M 0434)
- 44 Photocycloaddition of 6-Methoxy-2-naphthonitrile with Substituted Ethenes  
**Nader A. Al-Jalal**  
(M 0412)
- 45 Functionalised Bicyclo[2.2.2]octenones: Synthesis and Crystal Structure of *endo*-4,5-Dihydrospiro[furan-2(3*H*),8'-tricyclo[5.2.2.0<sup>2,6</sup>]undeca-3',10'-dien]-9'-one **Vishwakarma Singh, Ashutosh V. Bedekar and Mino R. Caira**  
(M 0452)
- 46 Synthesis of Axially Dissymmetric Chiral Ammonium Salts by Quaternization of Secondary Amines with (*R*)-(+)-2,2'-Bis(bromomethyl)-6,6-dinitrobiphenyl and (*R*)-(+)-2,2'-Bis(bromomethyl)-1,1'-binaphthyl and an Examination of their Abilities as Chiral Phase-transfer Catalysts **Min Shi, Nobuhiro Itoh and Yukio Masaki**  
(M 0401)
- 48 Rearrangement Studies on Cycloalkylidene Ring Systems: Differences Between the Reactions of Cycloalkanone Oximes and Cycloalkylenemalononitriles with Arylmethylidene(cyano)thioacetamides **Galal E. H. Elgemeie, Ibrahim S. Alnaimi and Mona A. Gawad**  
(M 0434)
- 50 Reactions of Trialkyl Phosphites with 5-*p*-Chlorophenyl-4-cyano-1,2-dithiole-3-thione and with 5-Phenyl-1,2,4-dithiazol-3-one and its Thione Derivative **Wafaa M. Abdou, Ibtisam T. Hennawy and Yehia O. ElKhosnieh**  
(M 0442)
- 52 Reaction of Sterols containing the 7,14- or 8,14-Diene System with Ruthenium Tetraoxide: Formation of Epoxysterols  
**Federico Giordano, Vincenzo Piccialli, Donato Sica and Dina Smaldone**  
(M 0501)
- 54 Synthesis of 4-(2,5-Anhydro-D-galacto-pentitol-1-yl)-2-phenyl-2*H*-1,2,3-triazole, a Homo-C-nucleoside Analogue **Mohammed A. E. Sallam, Leroy B. Townsend and William Butler**  
(M 0467)
- 56 Synthesis of an (Imidazo[1,2-*a*]pyrimidin-2-yl) Phenylethanol Derivative as a Sulmazole-Pronethalol Hybrid Model **Paul Barraclough and Steven Smith**  
(M 0526)
- 58 Complete Proton and Carbon-13 Nuclear Magnetic Resonance Assignments for Some 2-Styrylchromones, and the Influence of Alkyl Ring Substituents on their Mass-spectral Fragmentation **Françoise Zammattio, Jean Daniel Brion, Patrice Hildgen and Guillaume Le Baut**  
(M 0542)
- 60 Crystal Structure of the Product from Acid-catalysed Dimerisation of the Intermediate formed during Hydrogenolysis of 2-(Benzo[*b*]thiophen-2-yl)propan-2-ol **Asok Banerjee, Goutam Biswas, Sampa Pain (Biswas), Bibhuti B. Maji, Kanai L. Ghatak, Subhendu N. Ganguly and Yoichi Iitaka**  
(M 0553)
- 62 Preparation of (*S*)- and (*R*)-4-Methylcyclohex-2-en-1-one  
(—) **Lars Eklund, Carl Johan Ryberg and Torbjörn Frejd**
- 64 The Reaction of Tetrakis(triphenylphosphine)platinum with 4,5,6,7,8,9-Hexahydrocycloocta-1,2,3-selenadiazole **Pawan K. Khanna and Christopher R. Morley**  
(—)
- 66 Mechanistic Studies on the Formation of *N*-Phenyl-2,3-dihydro-1*H*-pyrrolo[1,2-*a*]indol-1-imine via a Dimethylvinyl Sulfonium Salt **Debbie L. Smith, Zheng Wang and Leslie S. Jimenez**  
(—)
- 68 Site Preferences in Boron- and Nitrogen-substituted Fullerenes  
(—) **Patrick W. Fowler and John P. B. Sandall**
- 70 Relative Reactivities in Aminolysis Reactions of Alkyl Alkanesulfonates **David W. Roberts, Robert S. Ward and Paul J. Hughes**  
(—)
- 72 Electrochemical Reduction of 2-(1,3-Thiazin-2-yl)-2-phthalimidopropanoates: a Possible Access to 2-Methylidenedihydrothiazines  
(—) **Pierrick Hudhomme, Eugène Raoult, André Tallec, Jean-Paul Pradère and Guy Duguay**
- 74 A Novel Reaction of Tetracyanoethene with 4-Arylmethylidene-2-phenyl-1,3-oxazol-5(4*H*)-ones **Alaa A. Hassan, Kamal U. Sadek and Nasr K. Mohamed**  
(—)
- 76 An Unexpected Condensation of Oximinonitriles with Benzylhydrazine: a Facile Route to a Substituted 4,5-Diaminopyrazolone  
(—) **Gautam Chattopadhyay and Tapas Kumar Saha**
- 78 Chromone Studies. Part 8. Dynamic NMR Analysis of Rotational Isomerism in Chromone-derived Polyfunctional Acrylamides  
(—) **Perry T. Kaye and Isaiah D. I. Ramaite**
- 80 Bromination Mediated by a Vanadium(v)-Peroxo Complex [V<sub>2</sub>O<sub>2</sub>(O<sub>2</sub>)<sub>3</sub>(GlyH)<sub>2</sub>(H<sub>2</sub>O)<sub>2</sub>] (GlyH = Glycine): a Functional Model for the Enzyme Bromoperoxidase **Manish Bhattacharjee, Somenath Ganguly and Joy Mukherjee**  
(—)

*N.B.* The numbers in parentheses, prefaced by *M*, indicate the first frame occupied by the full-text version of the paper in *J. Chem. Research (M)*. Where no such number is given, the paper as published in *J. Chem. Research (S)* is complete in itself, and there is no extra material in Part *M*.