New Publications

Compendium of Chemical Terminology: IUPAC Recommendations, 2nd Edn

Since publication of the first edition in 1987, the IUPAC *Compendium of Chemical Terminology*, popularly referred to as the 'Gold Book' in recognition of the contribution of the late Victor Gold who initiated the work, has been the standard work on chemical terminology. Definitions published by IUPAC are drafted by international committees of experts in the appropriate chemistry subdisciplines and ratified by IUPAC's Interdivisional Committee on Nomenclature and Symbols. In this second edition, the IUPAC-approved definitions are supple-

mented with some definitions from ISO and from the *International Vocabulary of Basic and General Terms in Metrology*. Since the first edition was published 11 years ago, the majority of the material in the 'Gold Book' has been revised and updated by IUPAC; thus many of the first-edition definitions have been modified or replaced. Furthermore, since 1986 IUPAC has published new terminology documents covering many areas of chemistry not previously treated, and definitions from these documents are now included. Among new areas covered are polymer science, photochemistry, stereochemistry, clinical chemistry, biotechnology, toxicology, class names for organic chemicals and

atmospheric chemistry. The result is a collection of nearly 7000 terms, with authoritative definitions, spanning the whole range of chemistry. All IUPAC recommendations published up to the end of 1995 were considered for inclusion, together with some particularly significant material published in 1996. A selection was made on the basis of general utility; some terms were omitted as being of interest only to a highly specialist audience.

Compendium of Chemical Terminology: IUPAC Recommendations, 2nd edn. Compiled by Alan D. McNaught & Andrew Wilkinson. Published by Blackwell Science, Osney Mead, Oxford OX2 0EL, UK. Price: GBP 39.50/USD 49.50. ISBN 0-86542-684-8.

Interfacial Science

The ability to design a solid surface with specific properties has been a central theme in research in physical chemistry over the past 20 years. The aims may be as diverse as production of an efficient and selective catalyst and the creation of a new optical device. Over the past decade the emergence of sophisticated surfacesensitive techniques and innovative computational methods has opened up new avenues for exploration in surface science. Interfacial Science sees a blurring of the traditional approaches to the condensed phase and surface chemistry, and reflects the broad perspective of the subject. It examines advances and new directions in both experimental and computational approaches and in both fundamental and applied research. Undoubtedly, the book will make an important contribution to one of the most exciting areas of physical chemistry.

Interfacial Science—a Chemistry for the 21st Century monograph. Edited by M.W. Roberts; Foreword by Sir John Meurig Thomas. Published by Blackwell Science, Osney Mead, Oxford OX2 0EL, UK, 1997. ISBN 0-632-04219-2.

Environmental Chemistry in Classroom Experiments

Environmental Chemistry in Classroom Experiments, an English translation of the 1990 German edition of the book Umweltchemie im Experiment, is published by IUPAC's Committee on Teaching of Chemistry. The book focuses on the task of teaching environmental chemistry through a hands-on approach by describing 130 close-to-reality experiments. Also described are details of the required equipment, chemicals, procedures, precautions and safety instructions needed for conducting the experiments. This volume is intended as a resource book for teachers of chemistry and biology.

The experiments can be integrated in the formal laboratory curricula (for example, as small projects) or used in an informal manner for creating environmental awareness. In addition, several experiments can be used as the basis of classroom demonstrations.

Environmental Chemistry in Classroom Experiments. By Rüdiger Blume and Hans Joachim Bader in collaboration with Manfred Kuballa. Translated by Johannes 'Hans' Bouma. Published for IUPAC Committee on Teaching of Chemistry by S.M.V. Traders and Printers, Delhi 110 009, India, with the permission of Cornelsen Verlag Scriptor, Berlin, Germany. ISBN 81-86968-00-8. Further information can be obtained from Peter Towse, Centre for Studies in Science and Mathematics Education, University of Leeds, Leeds LS2 9JT, UK. Fax: +44 1132 334683. E-mail: p.j.towse@education.leeds.ac.uk

A Proceedings on Cost-Effective Chemistry: Ideas for Hands-on Activities

The proceedings of a workshop hosted by the Institute for Chemical Education at the University of Wisconsin, Madison, 15–26 July 1996, on cost-effective instrumentation and ideas for teaching chemistry are reproduced in the form of a source book. The aim is to stimulate the teaching of chemistry, make the subject more enlightening, and give students a greater experience of hands-on activities. The main topics covered are: low-cost instrumentation; low-cost apparatus; small-scale chemistry and low-cost reagents; chemical and bio-sensors; and low cost microprocessor-based data loggers and instrument controllers.

A Proceedings on Cost-Effective Chemistry: Ideas for Hands-on Activities. Edited by Peter Towse, Centre for Studies in Science and Mathematics Education, University of Leeds, UK, and Amy Huseth, Institute for Chemical Education, University of Wisconsin-Madison, USA. Published on behalf of the Institute for Chemical Education and the International Network for Cost-Effective Science Education by S.M.V. Traders and Printers, Delhi 110 009, India. ISBN 81-86968-01-6.

Macromolecular Symposia, Vol. 118: IUPAC Macro Seoul '96

Volume 118 of *Macromolecular Symposia* presents 96 manuscripts of plenary and invited lectures presented at the 36th International Symposium on Macromolecules held in Seoul, Korea, 4–9 August 1996. The symposium was sponsored by IUPAC, and organized by the Polymer Society of Korea. The volume follows the scientific programme in being divided into a plenary session followed by 11 topic sessions: polymer synthesis and re-

action; polymer structure and properties; thermodynamics and molecular dynamics; polymer processing; polymer blends and composites; polymer membranes; field responsive polymers; biorelated polymers; supramolecular assembly and polymer thin films; polymers and environment; and polymer education.

Macromolecular Science, Vol. 118: IUPAC Macro Seoul '96. Symposium Editor, Jung-II Jin; Editor-in-Chief, Hartwig Höcker; Editors, R.E. Bareiss, W. Guth, B. Jung & I. Meisel. Published by Hüthig & Wepf Verlag, Zug, June 1997, pp 1–766. ISSN 1022-1360. Price (Vol. 118): Sfr 246/DM 290/USD 176, plus mailing.

Macromolecular Symposia, Vol. 122: Polycondensation

Volume 122 of *Macromolecular Symposia* presents invited lectures and selected contributions presented at the International Symposium of Polycondensation, Related Processes and Materials held in Paris, France, 23–26 September 1996. The symposium was sponsored by IUPAC in conjunction with the European Polymer Federation, Centre National de Recherche Scientifique, GFP—Division Polymères et Elastomères de La Société Française de Chimie and the Université Pierre et Marie Curie—Paris, and was held in honour of Prof. Ernest Maréchal.

Macromolecular Science, Vol. 122: Polycondensation. Symposium Editor, Alain Fradet; Editor-in-Chief, Hartwig Höcker; Editors, W. Guth, B. Jung, I. Meisel & S. Spiegel. Published by Hüthig & Wepf Verlag, Zug, August 1997, pp. 1–386. ISSN 1022-1360. Price (Vol. 122): Sfr 140/DM 164/USD 99, plus mailing.

Macromolecular Symposia, Vol. 123: (Bio)degradable Polymers

Volume 123 of *Macromolecular Symposia* presents most of the invited main and special lectures presented at the 37th Microsymposium on Macromolecules (Bio)degradable Polymers: Chemical, Biological and Environmental Aspects held in Prague, the Czech Re-

public, 15–18 July 1996. The symposium was sponsored by the Macromolecular Division of IUPAC in conjunction with the Academy of Science of the Czech Republic and the Czech Chemical Society.

Macromolecular Science, Vol.

123: (Bio)degradable Polymers. Symposium Editor, J.

Kahovec; Editor-in-chief,

Hartwig Höcker; Editors, W.

Guth, B. Jung, I. Meisel & S. Spiegel. Published by

Hüthig & Wepf Verlag, Zug, September 1997, pp. 249.

ISSN 1022-1360. Price (Vol. 123): Sfr 90/DM 106/USD

65, plus mailing.

Sustainability Indicators: Report of the Project on Indicators of Sustainable Development

To be able to track progress towards the Agenda 21 'sustainable development' blueprint passed at the UN Conference on Environment and Development held in Rio in 1992, scientists have been required to devise measuring sticks, or sustainable development indicators, showing where we are and which way we are headed. Such indicators serve both as an information tool and as the basis for policy making. SCOPE, the Scientific Committee on Problems of the Environment, has collected and coordinated work on sustainability indicators from around the world, and the results are presented in this book. Included are a rich diversity of perspectives and approaches, described by more than 50 contributors from many different countries and cultures working in a wide range of fields and organizations at all levels.

Sustainability Indicators: Report of the Project on Indicators of Sustainable Development. Edited by Bedrich Moldan & Suzanne Billharz. Published by John Wiley & Sons, Baffins Lane, Chichester, West Sussex PO19 1UD, UK, 1997. ISBN 0-471-97352-1.