

RSC Publications News

ANNUAL REPORTS

Annual Reports on the Progress of Chemistry Vol. 77

Annual Reports provides for the general reader critical coverage of the significant advances in the major areas of chemistry on an annual basis. From 1980, Section A became devoted solely to inorganic chemistry and therefore exhibits enhanced coverage of this area compared with previous years. Section C, a new **Annual Reports** volume on physical chemistry has been introduced which consists of authoritative critical accounts of progress in major areas of chemistry by acknowledged experts. Section B covers organic chemistry.
Vol. 77 1980 (to be published in Autumn 1981)
Section A Inorganic Chemistry £36.50 (\$90.50)
RSC Members £11.50
Section B Organic Chemistry £40.50 (\$100.00)
RSC Members £12.75
Section C Physical Chemistry £36.50 (\$90.50)
RSC Members £10.00

SPECIALIST PERIODICAL REPORTS

Terpenoids and Steroids Vol. 10

Senior Reporter: J. R. Hanson

This tenth volume in a highly successful series covers the literature published between September 1978 and August 1979.

Brief Contents:

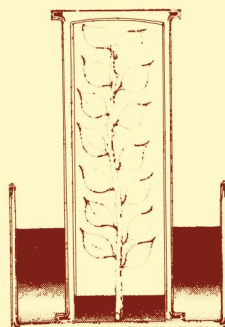
Part I: Terpenoids: Sesquiterpenoids; Diterpenoids; Triterpenoids; Carotenoids and Polyterpenoids; Part II: Steroids: Physical Methods; Steroid Reactions and Partial Synthesis. "This book is, as usual, well written and profusely illustrated".—*Alton Ochsner Medical Foundation, reviewing Vol. 8*

Hardcover 295pp 0 85186 336 1 Price £45.00 (\$115.00)
RSC Members £25.00

ROYAL
SOCIETY OF
CHEMISTRY

SPECIAL PUBLICATIONS

Oxygen and Life



Second BOC Priestley Conference

No. 39 in the Royal Society of Chemistry's series of Special Publications, this book is based on lectures with the general theme of 'Oxygen and Life', delivered at the Second Priestley Conference. The conference was sponsored by the BOC Gases Division Trust and organised by The Royal Society of Chemistry in conjunction with the University of Birmingham, September 15-18th 1980. The second BOC Priestley Conference encompassed biochemical and biological properties of oxygen and several exciting new developments were disclosed which are described in the papers contained in this volume. This book contains 17 papers on 'Oxygen and Life' which reflect new developments in the field contributed by 23 eminent scientists.

Contents:

Priestley Lecture: Mars, Biogenesis, and the Role of Oxygen; Oxygen and Life: An Introduction; The Photo-activation of Oxygen and the Evolution of O₂; Manganese Porphyrins as Sensitisers for Photo-oxidation of Water to Oxygen; A Comment on the Hypothesis that Oxygen Toxicity is Mediated by Superoxide; The Exploitation of Molecular Oxygen by Human Neutrophils: Spin-trapping of Radicals Produced During the Respiratory Burst; Oxygen as a Weapon: How Neutrophils Use Oxygen to Kill Bacteria; Manganese (II) Phosphine Complexes; Analogues of Dioxygen Transport and Storage Proteins; Perfluorochemicals as Oxygen Transport Agents in Partial and Total Blood Replacement; Development of Fluosol-DA and its Perspective as a Blood; Hemocyanin, Transporter of Oxygen in the Blue Blood Substitute; Dopamine β-Monooxygenase; Models for Functional Intermediates in the Reaction of Cytochrome c Oxidase with Oxygen; The Role of Copper and Iron in the Reduction of Oxygen by Biological Systems; The Mechanism of the Reaction of Fully Reduced Cytochrome Oxidase with Oxygen at Low Temperatures; From Oxygenase to Superoxygenase; Address Preceding the Toast to Joseph Priestley at the Priestley Dinner on 17th September 1980.

Softcover 236pp 0 85186 825 8 Price £11.00 (\$27.00)
RSC Members £7.00

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30, Russell Square, London WC1B 5DT.

All other orders should be sent to:

The Royal Society of Chemistry, Distribution Centre,
Blackhorse Road, Letchworth, Herts SG6 1HN.

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SPECIALIST PERIODICAL REPORTS

Aliphatic and Related Natural Product Chemistry Vol. 2

Senior Reporter : F. D. Gunstone

This second volume in the series reviews the literature published during 1978 and 1979

Brief contents :

Natural Acetylenic and Olefinic Compounds, excluding Marine Natural Products; Acyclic Terpenoids; Insect Pheromones and Related Behaviour—modifying Chemicals; Olefinic Microbial Metabolites, including Macrocyclin Compounds; Prostaglandins; Fatty Acids and Glycerides; Polar Lipids;

"The volume contains many references and should provide an excellent start for anyone initiating a research program in any areas indicated. Every library should have a copy of this book."

—*J.A.O.C.S., reviewing Vol. 1.*

Hardcover 278pp 0 85186 652 2

Price : £40.00 (\$104.00) RSC Members £29.00

Foreign Compound Metabolism in Mammals Vol. 6

Senior Reporter : D. E. Hathway

The sixth volume in this series covers the literature published during 1978 and 1979

Brief contents :

Drug Kinetics; Enzymic Mechanisms of Oxidation, Reduction, and Hydrolysis; Enzymic Mechanisms of Conjugation; Species; Strain, and Sex Differences in Metabolism; Mechanisms of Chemical Carcinogenesis; Effect of Drugs on the Central Nervous System; Cardiovascular Drugs; Sympathomimetic Agents and Bronchodilators; Anti-infective Agents; Prostaglandins and Steroids; Food Constituents; Agricultural Chemicals; Industrial Chemicals and Miscellaneous Organic Compounds.

"Overall, this volume is recommended highly as an organised source of metabolism-pharmacokinetics literature on important xenobiotics of many kinds."

—*Journal of Pharmaceutical Sciences, reviewing Vol. 5*

Hardcover 406pp 0 85186 058 3

Price not yet available

ROYAL
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Inorganic Biochemistry Vol. 2

Senior Reporter : H. A. O. Hill

This subject has developed dramatically in recent years and it is believed that this series will ease the burden to inorganic biochemists as they seek to relate their work to fields far beyond the confines of the traditional disciplines. This second volume in the series reviews relevant literature on the subject published up to late 1978.

Brief contents :

Inorganic Analogues of Biological Molecules; Storage, Transport, and Function of Non-transition Elements; Electron-transport Proteins; Oxidases and Reductases; Zinc Metalloenzymes; Manganese Metalloproteins and Manganese-activated Enzymes; Trace Elements in Animal Nutrition; Inorganic Elements in Biology and Medicine;

"For those with any interest in this area—and biochemists—the volume is a 'must'!"

—*Chemistry and Industry, reviewing Vol. 1*

Hardcover 362pp 0 85186 555 0

Price : £40.00 (\$100.00) RSC Members £25.00

Nuclear Magnetic Resonance Vol. 10

Senior Reporter : G. A. Webb

A review of the literature published between June 1979 and May 1980

Brief contents :

Theoretical and Physical Aspects of Nuclear Shielding; Applications of Nuclear Shielding; Theoretical Aspects of Spin-Spin Couplings; Applications of Spin-Spin Couplings; Nuclear Spin Relaxation Fluids; Solid State N.M.R.; Multiple Resonance; Natural Macromolecules; Synthetic Macromolecules; Conformational Analysis; N.M.R. of Paramagnetic Molecules; N.M.R. of Liquid Crystals and Micellar Solutions.

"A subject index at the end, many tables and a clear table of contents at the beginning of each chapter complete this volume, which ought to be present in all university chemistry libraries."—*European Spectroscopy News, reviewing Vol. 8*

Hardcover approx 372pp 0 85186 332 9

Price : £51.00 (\$126.00) RSC Members £31.00

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