# CS Publications News

SPECIALIST PERIODICAL REPORTS





# Inorganic Biochemistry

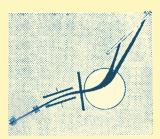
Senior Reporter: Dr H. A. O. Hill, University of Oxford

This subject has developed dramatically during this decade and it is believed that this volume, which reviews relevant work on the subject published in 1977, and those that follow in this new series will ease the burden of inorganic biochemists as they seek to relate their work to fields far beyond the confines of the traditional disciplines.

#### **Brief Contents:**

Inorganic Analogues of Biological Molecules; Inorganic Analogues of Biological Processes; Storage, Transport, and Function of Non-transition Elements; Storage and Transport of Transition-metal lons; Oxygen-transport Proteins: Part I — Haemoproteins, Part II — Haemocyanin and Haemerythrin; Electron-transport Proteins; Oxidases and Reductases; Metalloenzymes; Inorganic Elements in Biology and Medicine.

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## Mass Spectrometry Vol. 5

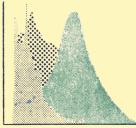
Senior Reporter: Dr R. A. W. Johnstone, *University of Liverpool* 

The fifth volume in this series reviews the literature published up to mid-1978 following the same general format as the previous volumes, but with the addition of a comprehensive cumulative subject index for volumes 1–5, thus providing an invaluable guide to the whole series.

#### **Brief Contents:**

Theory and Energetics; Structure, Energetics, and Mechanism in Mass Spectrometry; Photoelectron - Photoion Coincidence Spectroscopy; Computerized Data Acquisition and Interpretation; Trends in Instrumentation; Gas Chromatography - Mass Spectrometry; Drug Metabolism; Mass Spectrometry in Food Science; Environmental Applications of Mass Spectrometry; Organic Geochemistry; Reactions of Organic Functional Groups: Positive and Negative Ions; Natural Products; Organometallic, Co-ordination, and Inorganic Compounds.

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# Photochemistry Vol. 10

Senior Reporter: Professor D. Bryce-Smith, University of Reading

This volume is the tenth in the series of reviews in the field of photochemistry and covers the literature published between July 1977 and June 1978.

"There is no doubt that the Report is an extremely valuable source of information, and libraries would be well advised to have the series on their shelves." — R. P. Wayne reviewing Vol. 9 "Once again, Derek Bryce-Smith and his intrepid band of reporters have successfully sifted through the mountain of literature that appears annually on this topic and produced a compact and highly informative volume that is virtually indispensable to the active photochemist." — Journal of Molecular Structure reviewing Vol. 8

Brief Contents: Part I: Physical Aspects of Photo-chemistry; Part II: Photochemistry of Inorganic and Organometallic Compounds; Part III: Organic Aspects of Photochemistry; Part IV: Polymer Photochemistry; Part V: Photochemical Aspects of Solar Energy Conversion; Part VI: Chemical Aspects of Photobiology. Hardcover 680pp 8\frac{3}{4}" \times 5\frac{6}{6}" 0 85186 590 9 £40.00 CS Members softcover edition £16.00

#### ANNUAL REPORTS



## Annual Reports on the Progress of Chemistry Vol. 75

Senior Reporters: Dr G. P. Moss, Queen Mary College, Dr J. H. P. Utley, Queen Mary College, London, Professor P. A. H. Wyatt, FRSE, University of St Andrews Vol. 75 covers 1978 and again is divided into two parts.

Part A covers 1978 and again is divided into two parts.

Part A covers physical and inorganic chemistry as follows:

Physical Chemistry: Physical Chemistry of Proteins; Kinetic Sticles of Metal Ion Catalysis of Heterolytic Reactions; Infrared Laser Photochemistry; Electronic Energy Transfer in Polymers; Electron Spin Resonance Spectroscopy; Inorganic Chemistry: The Typical Elements; The Transition Elements; Organometallic Chemistry.

Part B covers organic chemistry as follows:

Physical Methods and Techniques; Theoretical Chemistry; Reaction Mechanisms; Arynes Carbenes; Nitrenes and Related Species; Organometallic Chemistry; Electro-organic Chemistry; Aliphatic Compounds; Heterocyclic Chemistry; Alicyclic Chemistry; Synthetic Methods; Biological Chemistry.

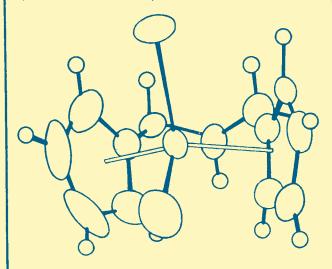
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Part B (Organic Chemistry)

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# CS Publications News

### Specialist Periodical Reports



# Molecular Structure by Diffraction Methods No. 6

Senior Reporters:

Dr L. E. Sutton, *University of Oxford*Professor M. R. Truter, *Rothamsted Experimental Station* 

This volume reviews the literature published up to September 1977. Coverage has changed slightly in that "molecular" is interpreted more widely to include macromolecules, and several new topics are discussed in which the reporters have been able to include background information on technique as well as results.

"The volume is packed with information pertaining to all aspects of molecular structure and as such is an unusually valuable reference."—B. W. Matthews, Journal of the American Chemical Society, reviewing Vol. 3

#### **Brief Contents:**

Electron Diffraction Determinations of Gas-phase Molecular Structures; Molecular Mechanics Calculations; Structures Calculated by the Molecular Mechanics Method; Chemists' Guide to Discovering Information about Molecular Structures in Crystalline Solids; Neutron Diffraction; Silicates and Related Compounds; Molecular Interactions; Mono-, Oligo-, and Poly-saccharide Crystal Structures; Nucleic Acids and Their Constituents; The Structure of Globular Proteins; Pharmaceutically Active Small Molecules.

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Special Publication No. 32



# Oxygen in the Metal and Gaseous Fuel Industries

The first of a series of triennial Priestley Conferences held at Leeds in 1977, was structured to mark the important contribution made by heterogeneous oxidation to the iron, steel, and non-ferrous metal industries, and to the production of gaseous fuels. It brought plenary lectures from Australia, Austria, and the USA, as well as from Britain. This volume contains the proceedings of the conference and covers the important contribution made by heterogeneous oxidation in iron and steel production, the LD Process, substitute natural gas manufacture, the gasifying and combustion of carbon, smelting, hydrometallurgical processes for winning metals, and welding.

## **Brief Contents:**

Priestley Lecture; Science and Education (Mrs Shirley Williams); Oxygen Today and Tomorrow; Oxygen in Iron and Steel Production; The Use of Oxygen in the LD Process for Steel Production; Oxygen in Substitute Natural Gas Manufacture; Oxygen in Substitute Natural Gas Manufacture as Viewed in the USA; How Oxygen Molecules Gasify Carbons; The Combustion of Carbon; Developments in Oxygen Smelting; Oxygen in Hydrometallurgical Processes for Winning Metals; Oxygen—The Good and Bad Performer in Welding.

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