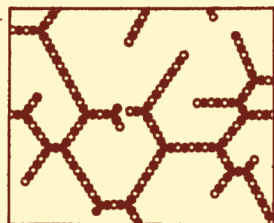


CS Publications News

New series of audio cassettes

The Educational Techniques Subject Group of The Chemical Society has published the first three titles in a new series of audio tapes called *Chemistry Cassettes* on which recognised authorities discuss aspects of their subject. The cassettes have been produced under the General Editorship of Peter Groves of the University of Aston and are designed for individual and group study purposes.

MONOGRAPHS FOR TEACHERS No. 28



Some Aspects of Basic Polymer Science

by Dr D. A. Blackadder

The monograph emphasizes the polymer molecule — the notion of a long chain has been used to bind together the three main sections. The first concerns procedures for assembling polymer molecules from monomer units. This is followed by a discussion of the configurational and conformational properties of polymer molecules, together with the definition and measurement of molecular weights. Finally aggregates of polymer molecules are classified, and the properties of different kinds of aggregates are interpreted in terms of the underlying structure.

Paperbound 62pp
8½" x 5½" 12 figures
£1.20 (CS Members 90p)

Orders to: The Publications Sales Officer, The Chemical Society, Blackhorse Road, Letchworth, Herts. SG6 1HN.

Each cassette is accompanied by a detailed booklet containing diagrams, equations, etc., which can be used by the student as the basis of a comprehensive set of notes.

The first three titles are:

Heavy Metals as Contaminants of the Human Environment by Professor Derek Bryce-Smith, *University of Reading*.

A discussion of some of the effects on man arising from the increasing use and distribution of heavy metals, particularly lead, cadmium and mercury.

Running time 100 minutes
£4.75 (CS Members £3.60)

Some Aspects of the Electrochemistry of Solutions by Professor Graham Hills, *University of Southampton*.

Professor Hills considers some general aspects of electrolyte solutions and shows how theoretical models are able to lead to a wider understanding of the nature and properties of such solutions.

Running time 34 minutes
£3.80 (CS Members £2.85)

Some Organic Reaction Pathways by Dr Peter Sykes, *Fellow and Director of Studies, Christ's College, Cambridge*.

Dr Sykes is well known through his book 'A Guidebook to Mechanism in Organic Chemistry'. On this cassette he discusses two important aspects of reaction mechanisms; those relating to elimination and to aromatic substitution.

Running time 68 minutes
£4.25 (CS Members £3.20)

Additional copies of the booklets may be obtained at 50p each or 10 copies for £4.00.

Orders should be sent to The Publications Sales Officer, The Chemical Society, Blackhorse Road, Letchworth, Herts. SG6 1HN.

SPECIALIST PERIODICAL REPORTS

Radiochemistry Vol. 2

Senior Reporter: Dr G. W. A. Newton
University of Manchester

The second volume in this biennial series reviews literature published between August 1971 and July 1973 in the areas covered in Volume 1, namely, Solid State Recoil Chemistry, Radiochemistry of Elements with $Z > 103$ and Radiochemical Methods of Analysis. In addition, this Volume provides coverage of Recoil Chemistry in Gases and Liquids over the period July 1969 — July 1973.

Clothbound 256pp 8½" x 5½" £13.00 (CS Members £9.75)

Molecular Spectroscopy Vol. 3

Senior Reporters:

Dr R. F. Barrow, *University of Oxford*
Professor D. A. Long, *University of Bradford*
Professor D. J. Millen, *University College, London*

In common with previous volumes, this third volume does not attempt comprehensive coverage, but instead provides a detailed and critical analysis of selected topics based on the 1973 and early 1974 literature. The volume covers: Microwave Spectroscopy; Force-constant Calculations in Molecules; Experimental Resonance Raman Spectroscopy; Matrix Isolation; Rotation and Vibration-Rotation Raman and Infrared Spectra of Gases; Raman Spectra of Solids; The Electronic Spectra of Triatomic Molecules and the Renner-Teller Effect.

Clothbound 603pp 8½" x 5½" £24.00 (CS Members £18.00)

Surface and Defect Properties of Solids Vol. 4

Senior Reporters:

Professor M. W. Roberts, *University of Bradford*
Professor J. M. Thomas, *University College of Wales, Aberystwyth*

This fourth volume covers the recent literature up to April 1974 on the following topics: Intrazeolitic Transition-metal Ion Complexes; The Steam Reforming of Hydrocarbons; Auger Electron Spectroscopy and its Applications in Surface Chemistry; The Behaviour of Metal Lattice Vacancies during Oxidation; Crystallographic Shear in Silicate Structures; Transmission Electron Microscopy of Extended Defects in Alkali Halide Crystals.

Clothbound 265pp 8½" x 5½" £14.00 (CS Members £10.50)

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CS Publications News

Safety in the chemical laboratory

The 1974 legislation on Health and Safety at Work has created a renewed concern for wider knowledge of safety precautions and procedures in potentially

dangerous work environments such as laboratories. Particularly appropriate to this problem is the Society's publication, *Hazards in the Chemical Laboratory*. Although the present edition was published in 1971, well before the 1974 Act, it does contain much valuable information on the potentially dangerous properties, toxic effects, first aid treatment and spillage disposal, of over 430 corrosive materials or groups of materials commonly used in laboratories. It is unlikely that this information will be greatly altered as a result of any code of practice published under the 1974 Act. The listings mentioned above occupy over 190 pages of the book's 266 pages, the remaining pages being devoted to chapters on: planning for safety; fire protection; first aid; safety in hospital biochemistry laboratories; precautions against radiations.

"Highly authoritative. The overall presentation is so clear and so well thought out that it should rapidly become a *vade-mecum* for every single one of the people who are responsible for the safety of personnel in chemical laboratories. A handbook that deserves the wildest possible circulation in laboratories."
— *Laboratory Equipment Digest*

"This book unquestionably deserves a place on every laboratory reference shelf: but it should never be placed there until after it has been studied and its recommendations adopted."
— *The Times Educational Supplement*

The volume is still available priced at £2.00 (CS Members £1.50) from: The Publications Sales Officer, The Chemical Society, Blackhorse Road, Letchworth, Herts. SG6 1HN

ACS ADVANCES IN CHEMISTRY

Chemistry of Food Packaging

Edited by Charles M. Swalm

A timely study that highlights the emergence of sophisticated new food packaging techniques that have resulted from today's rapid changes in food production and processing.

Key technological advances in container design and adaptability are outlined, focusing on specific improvements in glass, tin, and aluminium containers. Plastics packaging is reviewed in detail with particular reference to applications and test methods.

Clothbound 109pp
9½" x 6½"
£5.00

Food Related Enzymes

Edited by John R. Whitaker

A timely, in-depth study of the basic and applied aspects of food related enzymes which stresses the commercial uses of naturally occurring enzymes and those added during food processing.

This collection of thirteen papers assesses current developments in the field with emphasis on chemical analysis, treatment of illnesses, nutrition, historical use, biosynthesis, terminology, substrates, kinetics, mechanisms and applications.

Clothbound 376pp
9½" x 6½"
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Orders to: the Publications Sales Officer, The Chemical Society, Blackhorse Road, Letchworth, Herts. SG6 1HN.

SPECIALIST PERIODICAL REPORTS

Aromatic and Heteroaromatic Chemistry Vol. 3

Senior Reporters:
Dr. C. W. Bird and Dr. G. W. H. Cheeseman
Queen Elizabeth College, University of London

Volume 3 follows the same format as that adopted for previous volumes and provides coverage of literature abstracted between July 1973 and June 1974 based on Volumes 77 and 78 of *Chemical Abstracts*.

"The organisation of the book is a sensible one, stressing as it does the unity of carbocyclic and heterocyclic aromatic chemistry. The reporters deserve the highest commendation for having undertaken such a formidable task and having produced such a detailed picture of the field."

— E. S. Waight, *Chemistry and Industry reviewing Vol. 1*

Clothbound 516pp 8¾" x 5½" £20.00
(CS Members £15.00)

Alicyclic Chemistry Vol. 3

Senior Reporter: Professor W. Parker
University of Stirling

The third volume in this annual series covers the literature on the subject published during 1973. Its overall structure is, as before, based on a ring size division.

"Nearly 2000 references are quoted in this volume which indicates... the effort put in by the contributors to the volume, who are also to be congratulated on their excellent presentation of the material which is well written and supported by clearly drawn formulae and reaction schemes. Strongly recommended to all research workers in this area."

— R. H. Ellam, *Chemistry and Industry reviewing Vol. 2*

Clothbound 590pp 8¾" x 5½" £24.00
(CS Members £18.00)

Saturated Heterocyclic Chemistry Vol. 3

Senior Reporter: Dr. M. F. Ansell
Queen Mary College, University of London

The third volume in this annual series is as before based on ring size division. It covers literature published during 1973.

"The coverage includes excellent reviews on the formation and reactions of epoxides, aziridines and azirines and cycloaddition reactions as well as a full and dazzling array of small, medium and large ring heterocycles. It is not only a useful survey of the subject but a most stimulating and compact source of new ideas."

— O. Meth-Cohn, *Chemistry and Industry reviewing Vol. 2*

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