Journal of Chemical Research, Issue 11, 1987

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 11, is reproduced below.

- 353 Some Studies on *syn*-Elimination Reactions
- (M 2928) David Crich and Linda B. L. Lim
- 354 Pyrrole Studies. Part 37. Characterisation of the Adduct derived from 5,6-Dimethyl-2-phenacyl-6*H*-pyrrolo[3,4-*d*]pyridazinium (M 2901) Bromide and Dimethyl Acetylenedicarboxylate under Basic Conditions. An X-Ray Crystallographic Study Fernanda Fuentes-Rodriguez, José Sepulveda-Arques, R. Alan Jones, Paul A. Bates, and Michael R. Hursthouse
- 356 Pyrrole Studies. Part 39. The Disparate Reactivity of 5,7-Dimethyl-6*H*-pyrrolo[3,4-*d*]pyridazines with Acetylenic Esters and with (*M* 3001) Azodicarboxylic Esters **Fernanda Fuentes-Rodriguez, José Sepulveda-Arques,** and **R. Alan Jones**
- 357 A Synthesis of 3-Azoxpyridines by Cyclisation of Hydroxyimino-substituted Diketones with Ammonia Thomas L. Gilchrist, (*M* 3030) John R. Moxey, and Ahmed K. Yagoub
- 358 Solvent Effect on the Relative Nucleofugalities of Pyridines and Chloride Ion from a Tetrahedral Intermediate Enrique A. (*M* 3008) Castro and Carmen Ureta
- 360 Heterogeneous Photocatalytic Oxidation of Oxalate over Semiconducting Oxides
- (M 2915) Javier Domenech and Jose Peral
- 362 Ring-opening Reactions of Cyclopropanes. Part 1. Formal [3+2] Cycloaddition of *trans*-Ethyl 2,2-Dimethoxy-3-methylcyclo-(*M* 2942) propane-1-carboxylate to Phenyl Isocyanate **M. Lilina Graziano** and **M. Rosaria lesce**
- 364 A Note on the Chemical Reactivity of Hydroxylated Pyridines
- (M 2951) Eckehard V. Dehmlow and Hans-Joachim Schulz
- 366 The Synthesis and Chemistry of Azolenines. Part 11. Protonation and Alkylation at the Ring Nitrogen Atom in 3,5-Diaryl-2*H*-(*M* 3042) pyrrole-2,2-dicarboxylic Esters, and an Unusual Rearrangement in the Reaction with Dimethyl Acetylenedicarboxylate Margaret W. L. Chung, Ting-Fong Lai, and Michael P. Sammes
- 368 Amine-Carboxyboranes, the Boron Analogues of α -Amino Acids: Synthesis, Acidity Constants, and Amide-bond Formation (*M* 2974) **Mrinal K. Das** and **Purnendu Mukherjee**
 - 369 A Practical Synthesis of (*S*)-5-Hydroxymethylfuram-2(5*H*)-one from 1,2:5,6-Di-*O*-isopropylidene-D-mannose John Mann, (--) Neil K. Partlett, and Alison Thomas
 - A Convenient Method for the Synthesis of Aldehydes by One-carbon Homologation of Carbonyl Compounds Gurinder J. S.
 (-) Doad
 - 372 Allylic Phenylation of 3-Hydroxy-2-methylenealkanoic Esters with Benzene and K10 Montmorillonite Djamila Saib and André (--) Foucard
 - 374 A New Source of the Dicyanomethylene Functionality through a Phenyliodonium Intermediate **Evangelia** (---) Hatzigrigoriou, Maria Bakola-Christianopoulou, and Anastasios Varvoglis
 - 376 Mechanism of the Reaction between Nitrous Acid and t-Butylhydrazine
 - (--) Geoffrey Stedman and Nermin Uysal
 - 378 A Convenient Synthesis of 3-Alkylthio- and 3-Arylthio-pyridines
 - (--) Shariar Batmanghelich and (in part) John R. Turner
 - 380 Autocatalysis by Colloidal Manganese Dioxide in the Permanganate Oxidation of ∟-Isoleucine Jose A. Garrido, Joaquin F. (--) Perez-Benito, Rosa M. Rodriguez, Jaime de Andres, and Enrique Brillas
 - 382 Novel Synthesis of 21-Aminopregnanes
 - (--) Péter Krajcsi and Péter Arányi

 - 386 Oxidation of Aromatic Hydrocarbons by Cerium(IV) in Emulsions containing a Phase-transfer Reagent Derek Pletcher and (--) Erika M. Valdes
 - 2-(Arylsulphonyl)ethyl Hydroperoxides and Bis-(2-hydroperoxyethyl) Sulphones by Base-catalysed Addition of Dihydrogen
 (--) Peroxide to Vinyl Sulphones Heinz Kropf and Felix Wöhrle

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*.

Printed in Great Britain by Richard Clay (The Chaucer Press), Ltd., Bungay, Suffolk

NEW BOOKS FOR ORGANIC CHEMISTS AND BIOCHEMISTS

Amino Acids and Peptides Vol. 18

This series was previously entitled 'Amino Acids, Peptides, and Proteins'. The latest volume in the series covers the literature published on the subject during 1985.

Brief Contents:

Amino Acids; Peptide Synthesis; Analogue and Conformational Studies on Peptide Hormones and Other Biologically Active Peptides; Cyclic Modified and Conjugate Peptides; β-Lactam Antibiotic Chemistry; Metal Complexes of Amino Acids and Peptides.

Specialist Periodical Report

Senior Reporter: J. H. Jones, University of Oxford

Hardcover 314pp ISBN 0 85186 164 4 Price £64.00 (\$96.00) RSC Members price £42.00

General and Synthetic Methods Vol. 9

Hardcover 734pp ISBN 0 85186 904 1 Price £120.00 (\$230.00) RSC Members price £65.00

A review of the literature published during 1984.

Brief Contents: Saturated and Unsaturated Hydrocarbons; Aldehydes and Ketones; Carboxylic Acids and Derivatives; Alcohols, Halogeno-compounds, and Ethers; Amines, Nitriles and Other Nitrogen-containing Functional Groups; Organometallics in Synthesis; Saturated Carbocyclic Ring Synthesis; Saturated Heterocyclic Ring Synthesis; Highlights in Total Synthesis of Natural Products; Reviews on General and Synthetic Methods.

Senior Reporter: G. Pattenden, University of Nottingham

Specialist Periodical Report

Topics in Lipid Research

From structural elucidation to biological function

Over the last decade many lipid chemists and biochemists have made a conscious effort to move from purely structural investigations to those which throw more light on the biological function of lipid molecules.

For many years lipids were considered to be molecules containing just C, H and O, related to fatty acids and hydrocarbons, with high oil-water partition co-efficients; more recently, however, it has been realized that the more complex structures such as glycolipids and lipoproteins, and indeed glycolipoproteins, are fascinating both as structural challenges and as functional elements of the cell.

The book includes both reviews and research papers dealing with recent developments in lipid research.

Brief Contents:

Platelet Activating Factor; Eicosanoids; Glycolipids; Probes and Anaesthetics; Membrane Structure and Function; Environmental Adaptation. Edited by R. A. Klein and B. Schmitz *Molteno Inst. University of Cambridge*

Hardcover 348pp ISBN 0 85186 353 1 Price £37.50 (\$65.00) RSC Members price £24.50

Chemical Aspects of Food Enzymes

Softcover 326pp ISBN 0 85186 686 7 Price £37.50 (\$72.00) RSC Members price £24.50 This publication reviews current applications of enzymes in food processes. It should stimulate interest and point the way forward in this area of vital importance. **Contents:**

Contents: Enzyme Structure and Specifity: Factors Affecting Enzyme Activity and Kinetics; Genetic Engineering: Basic Considerations; The Potential for Chemical modifications of Enzymes; Applications of Immobilized Enzymes and Cells in the Food Industry; Encapsulation of Enzymes and other Agents in Liposomes; Developments in the Microencapsulation of Enzymes in Food Technology; Protein Engineering of Food Enzymes; Extending Enzyme Applications in the Food Industry; Enzymatic Modification of Lipids; Enzymatic Modification of Food Carbohydrates; Genetic Engineering of Lactic Acid Bacteria; The Molecular Biology of Plant Thiol Proteinases; Production of Heterologous Products in *Escherichia coli* and Yeast; Enzymic Modification of Dairy and Other Food Proteins; Biosensors: Principles and Potential; The SERC Biotechnology Directorate's Programme in Protein Engineering; Food Enzymes: Industrial Potential and Scientific Challenges; Subject Index.

Edited by A. T. Andrews AFRC Institute of Food Research, Reading

ORDERING:

RSC Members should send their orders to: The Royal Society of Chemistry, Membership Manager, 30 Russell Square, London WC1B 5DT, UK. Non-RSC Members should send their orders to: The Royal Society of Chemistry, Distribution Centre, Blackhorse Road, Letchworth, Herts SG6 1HN, UK.

