JOURNAL OF THE CHEMICAL SOCIETY

PERKIN TRANSACTIONS I

Organic and Bio-organic Chemistry

CONTENTS

Condensed cyclic and bridged-ring systems. Part IV. Stereochemically controlled synthesis of some endo-2-aryl-6-oxobicyclo[3.2.1]octanes and related compounds through intramolecular alkylations of $\gamma\delta$ -unsaturated α' -diazomethyl ketones By Usha R. Ghatak, Shaikh Khairul Alam, Prabir C. Chakraborti, and Brindaban C. Ranu	1669
Cycloaddition reactions of dehydrodithizone. X-Ray crystal structures of 5-diethylamino-4-methyl-1-phenyl-3-phenylazopyrazole, 4a,5,6,7,8,8a-hexahydro-6-methyl-8a-morpholino-1-phenyl-3-phenylazo-1H-pyrido[4,3-e][1,3,4]thiadiazine, and 3'-phenyl-5'-phenylazo-2-pyrrolidinospiro-[1H-indene-1,2'(3'H)-[1,3,4]-thiadiazole] By Gerhard V. Boyd, Timothy Norris, and Peter F. Lindley	1673
Syntheses with carbanions derived from carbonyl-stabilized sulphonium ylides: a novel route to furan-3(2H)-ones By Макото Уамамото	1688
Macrocyclic sulphide synthesis: trithia $[n^{n+1,2n+4}][2n+1]$ metacyclophanes By Alfredo Ricci, Roberto Danieli, and Sandra Rossini	1691
Neighbouring group participation in isoxazole ring bromination. Part II By Guglielmo Stagno d'Alcontres, Corrado Caristi, Alida Ferlazzo, and Mario Gattuso	1694
The cymopols, a group of prenylated bromohydroquinones from the green calcareous alga <i>Cymopolia barbata</i> By Hans-Erik Högberg, R. H. Thomson, and Trevor J. King	1696
Stereochemistry of the 1,3-dipolar cycloaddition reaction between N-(phenanthridin-5-io)benzamidate and olefins By Yasamitsu Tamura, Yasuyoshi Miki, and Masazumi Ikeda	1702
Oxidation and bimolecular condensation reactions of 2-alkyliminocyclopentanedithiocarboxylic acids, 2-oxocyclopentanedithiocarboxylic acids, and 3-methyl-5-oxo-1-phenyl- Δ^2 -pyrazoline-4-dithiocarboxylic acid By Tatsuo Takeshima, Naoaki Fukada, Tetsuko Ishii, and Motomu Muraoka	1706
Alkylation, acylation, and Beckmann rearrangement of oximes in the presence of an oxidation-reduction system By Shmuel Bittner and Sarina Grinberg.	1708
Studies on pyrophosphates. Part III. A new method for the synthesis of nucleotide coenzymes by means of di-n-butylphosphinothioyl bromide By Kiyotaka Furusawa, Mitsuo Sekine, and Tsujiaki Hata	1711
Photo-oxidation of tanshinone II (6,7,8,9-tetrahydro-1,6,6-trimethylphenanthro[1,2-b]furan-10,11-dione) By Takenori Kusumi, Toshiko Kishi, Hiroshi Kakisawa, and Takeshi Kinoshita	1716
Total synthesis of the macrocyclic antibiotic (±)-pyrenophorin By Ernest W. Colvin, Thomas A. Purcell, and Ralph A. Raphael	1718

ii	Contents

	PAGE
The N-amination and subsequent oxidation by bromine of imidazo[1,5-a]pyridines By Stephen Anderson, Edward E. Glover, and (in part) Kenneth D. Vaughan	. 1722
Syntheses of heterocyclic compounds. Part XXXIII. Preparation and reactions of 4-(2-dialkylamino phenyl)azetidin-2-ones By Robert L. Bentley and Hans Suschitzky	. 1725
Selective oxidation of two dialkyl sulphides catalysed by ruthenium complexes By Michael A. Ledlie, Keith G. Allum, Ian V. Howell, and Robert C. Pitkethly	. 1734
Phosphorus-nitrogen compounds. Part XLIII. Reactions of NN-dialkylanilines with phosphorus(v chlorides; examples of ambident nucleophilic behaviour By (MISS) CHING YEE CHENG and ROBERT A. SHAW	r) . 1739
Stereochemistry of iodofluorination of phenyl-substituted olefins with (difluoroiodo)methane By Marko Zupan and Alfred Pollak	. 1745
Nitrene-induced cyclisations accompanied by rearrangement in thermolyses of aryl 2-azidophenyl sulphones a note on quantitative high-speed liquid chromatographic analysis of substituted phenothiazine 5,5-dioxide By J. I. G. CADOGAN, JOHN N. DONE, GEORGE LUNN, and (in part) Peter K. K. Lim	
Novel aspects in the synthesis and acid-promoted cyclisation of some 2-diazo-2'-(p-tolylsulphonylamino) acetophenones: electrophilic displacement of an arylsulphonyl group from a sulphonamide By William T. Flowers, Geoffrey Holt, Constantine P. Poulos, and Kleoniki Poulos	. 1757
Manganese(III)-induced radical additions to 3,7-dimethylocta-1,6-diene By Francis J. McQuillin and Michael Wood	. 1762
Reactions of 1,6-dioxaspiro[3.3]heptan-2-one derivatives By Tetsuzo Kato, Masayuki Sato, and Yoshinori Kitagawa	. 1769
Determination of the configuration of some penicillin S -oxides by 13 C nuclear magnetic resonance spectroscopy. By Charles R. Harrison and Phillip Hodge	y . 1772
The shikimate pathway. Part V. Chorismic acid and chorismate mutase By Robert J. Ife, Leslie F. Ball, Peter Lowe, and Edwin Haslam	. 1776
Preparation and properties of some 1,2-dihydropyrimidinium salts By Douglas Lloyd and Hamish McNab	. 1784
Chemistry of the <i>Coprosma</i> genus. Part XIV. Constituents of five New Zealand species By (the late) Lindsay H. Briggs, John F. Beachen, Richard C. Cambie, Nicholas P. B. Dudman, Allan W. Steggles, and Peter S. Rutledge	N . 1789
Generation of acyclic trienes and cyclic dienes by mild dehydration and dehydrohalogenation in aprotic media By Charles W. Spangler and Terry W. Hartford	a . 1792
Sensitised photo-oxidation of 5-methylene-cyclohexa- and -cyclohepta-1,3-diene derivatives By Nobuyuki Harada, Akira Kawamoto, Yûki Takuma, and Hisashi Uda	. 1796
Amine oxidation. Part XII. Reactions of some NN -dimethylbenzylamine N -oxides with acetic anhydridated and of some N -acetoxy- NN -dimethylbenzylammonium perchlorates with acetate ion. The Polonovsk reaction	
By Robert A. Jessop and John R. Lindsay Smith	. 1801
Syntheses of 5-deazaflavines By Fumio Yoneda, Yoshiharu Sakuma, Shunjiro Mizumoto, and Reiko Ito	. 1805