

JOURNAL
OF
THE CHEMICAL SOCIETY

PERKIN TRANSACTIONS I
Organic and Bio-organic Chemistry

CONTENTS

	PAGE
Chemical constituents of gentianaceae. Part 22. Structures of new 1,3,5-tri- and 1,3,5,6,7-penta-oxygenated xanthenes of <i>Canscora decussata</i> Schult By SHIBNATH GHOSAL, KANIKA BISWAS, and RATAN K. CHAUDHURI	1597
Heterocyclic compounds. Part 15. <i>NN'</i> -Di- <i>t</i> -butylthiadiaziridine 1,1-dioxide: synthesis and reactions By HSIEN-HSIN CHANG and BORIS WEINSTEIN	1601
Reactions involving fluoride ion. Part 14. Anionic σ -complexes from polyfluorinated <i>s</i> -triazines By RICHARD D. CHAMBERS, PAUL D. PHILPOT, and PETER L. RUSSELL	1605
2- <i>C</i> -Nitromethyl and 2- <i>C</i> -aminomethyl derivatives of <i>D</i> -ribose. Preparation of 2'- <i>C</i> -nitromethyluridines By ABRAHAM J. BRINK, OLOF G. DE VILLIERS, and AMOR JORDAAN.	1608
Reactions of dehydrodithizone with dimethyl acetylenedicarboxylate and with benzyne. <i>X</i> -Ray crystal structure of azobenzene <i>N</i> -(4,5-bismethoxycarbonylthiazol-2-yl)imide, a stable dipole By GERHARD V. BOYD, TIMOTHY NORRIS, PETER F. LINDLEY, and MUDHAFAR M. MAHMOUD	1612
Mononuclear heterocyclic rearrangements. Part 11. Rearrangements of 1,2,4-oxadiazoles, isoxazoles, and 1,2,5-oxadiazoles involving a sulphur atom By NICOLÒ VIVONA, GIUSEPPE CUSMANO, and GABRIELLA MACALUSO	1616
Reactions of 5,6,8,9,10,11-hexahydro-4 <i>H</i> -pyrido[3,2,1- <i>jk</i>]carbazole and of 5,6,9,10,11,12-hexahydro-4 <i>H</i> ,8 <i>H</i> -cyclohepta[4,5]pyrrolo[3,2,1- <i>ij</i>]quinoline with arenesulphonyl azides By GULAM A. BAHADUR, A. SYDNEY BAILEY, and PATRICIA A. BALDRY	1619
Reaction of ethyl diazoacetate with cobalt porphyrins. Part 3. Structure and reactions of the 2 : 1 adducts By PETER BATTEN, ALAN L. HAMILTON, ALAN W. JOHNSON, MAILVAGANAM MAHENDRAN, DAVID WARD, and TREVOR J. KING	1623
Plant proanthocyanidins. Part 3. Conformational and configurational studies of natural procyanidins By ANTHONY C. FLETCHER, LAWRENCE J. PORTER, EDWIN HASLAM, and (in part) RAJ K. GUPTA	1628
Plant proanthocyanidins. Part 4. Biosynthesis of procyanidins and observations on the metabolism of cyanidin in plants By DAVID JACQUES, CLIVE T. OPIE, LAWRENCE J. PORTER, and EDWIN HASLAM	1637
Bis-porphyrin derivatives. Part 1. Reaction of <i>meso</i> -hydroxymethylporphyrinatometal derivatives with acids By DENNIS ARNOLD, ALAN W. JOHNSON, and MANFRED WINTER	1643
Oxidation of ethyl <i>trans</i> - and <i>cis</i> -3-bromo-1-methyl-2-oxocyclohexanecarboxylates by dimethyl sulphoxide By KIKUMASA SATO, SEIICHI INOUE, MASAO HIRAYAMA, and MASAO ŌHASHI	1647
Synthesis of a new eighteen-membered ring tetrathia[2.1.2.1]metacyclophane with alternating disulphide and methylene linkages By FRANCESCO BOTTINO, SALVATORE FOTI, and SEBASTIANO PAPPALARDO	1652

	PAGE
Synthesis of a (2,3-dideoxyglyc-2-enopyranosyl)thymine and a (2,3-dideoxyglycopyranosyl)thymine <i>via</i> a 2,2'-anhydro-nucleoside	
By TATSUMI YAMAZAKI, KAZUO MATSUDA, HIROSHI SUGIYAMA, SHUICHI SETO, and NAOTAKA YAMAOKA	1654
Synthesis and properties of 4,4'-bi(cyclopentene)-3,3',5,5'-tetraone	
By MASAJI KASAI, MAKOTO FUNAMIZU, MASAJI ODA, and (the late) YOSHIO KITAHARA	1660
Biosynthesis of reticuline	
By DEWAN S. BHAKUNI, AWADHESH N. SINGH, SHOBHA TEWARI, and RANDHIR S. KAPIL	1662
Reactions of $\alpha\alpha'$ -dibromocycloalkanones with bases	
By KIKUMASA SATO, SEIICHI INOUE, SHIN-ICHI KURANAMI, and MASAO OHASHI	1666
Synthesis of thioesters by reactions of carboxylic acids with tris(ethylthio)borane	
By ANDREW PELTER, TERENCE E. LEVITT, KEITH SMITH, and (in part) ANN JONES	1672
Total synthesis of the antileukaemic lignan (\pm)-steganacin	
By DAN BECKER, LESLIE R. HUGHES, and RALPH A. RAPHAEL	1674
Photoreactions of some benzylic sulphones	
By GRAHAM E. ROBINSON and JOHN M. VERNON	1682
Intramolecular addition of aryl radicals to the azo-group; synthesis and properties of <i>N</i> -(carbazol-9-yl)-phenylaminy radicals	
By LUISA BENATI, GIUSEPPE PLACUCCI, PIERO SPAGNOLO, ANTONIO TUNDO, and GIUSEPPE ZANARDI	1684
Action of nitrous acid on some methylpyrimidines	
By DEREK T. HURST and (in part) STEPHEN G. JONAS, JERRY OUTRAM, and (MISS) ROSEMARY A. PATTERSON	1688
<i>N</i> -Oxides and related compounds. Part 58. Some precursors of pyridinium methylide	
By JAYANT B. BAPAT, JAN EPSZTAJN, ALAN R. KATRITZKY, and BERNARD PLAU	1692
A new approach to the synthesis of ellipticines	
By ANTHONY H. JACKSON, PAUL R. JENKINS, and PATRICK V. R. SHANNON	1698