

JOURNAL
OF
THE CHEMICAL SOCIETY

PERKIN TRANSACTIONS I
Organic and Bio-organic Chemistry

CONTENTS

	PAGE
<i>X</i> -Ray structure analysis of the tosylate ester of (1 <i>S</i> ,5 <i>S</i>)-6,6-dimethyl-2-[(2 <i>S</i>)-3,3,3-trichloro-2-hydroxypropyl]bicyclo[3.1.1]hept-2-ene, the major product of the iron(III) chloride-catalysed ene addition of chloral to (–)-(1 <i>S</i> ,5 <i>S</i>)-pin-2(10)-ene By MICHAEL J. BEGLEY, G. BRYON GILL, and BRIAN WALLACE	93
Ring strain and the reactivity of dibenzophospholes and their quaternary salts: crystal and molecular structure of 5-(<i>p</i> -bromobenzyl)-5-phenyldibenzophospholium bromide By DAVID W. ALLEN, IAN W. NOWELL, A. CHRISTOPHER OADES, and PHILIP E. WALKER	98
Biosynthesis of the necic acids of the pyrrolizidine alkaloids. Further investigations of the formation of senecic and isatineic acids in <i>Senecio</i> species By NICHOLAS M. BALE, ROSALIND CAHILL, NOEL M. DAVIES, MICHAEL B. MITCHELL, EDWARD H. SMITH, and DAVID H. G. CROUT	101
Tetracyclic triterpene synthesis. Part 1. Stereospecific conversion of 6-methoxy-1-tetralone into 7-methoxy- <i>trans</i> -3a,9b-dimethyl-1,3,3a,4,5,9b-hexahydrobenz[<i>e</i>]inden-2-one By RICHARD A. PACKER and J. STANLEY WHITEHURST	110
Tetracyclic triterpene synthesis. Part 2. Deduction of ring fusion configurations in <i>cis</i> - and <i>trans</i> -7-methoxy-3a,9b-dimethyl-1,3,3a,4,5,9b-hexahydrobenz[<i>e</i>]inden-2-ones by nuclear magnetic resonance spectroscopy By KEITH G. ORRELL, RICHARD A. PACKER, VLADIMIR ŠIK; and J. STANLEY WHITEHURST	117
Biosynthesis of the bisbenzylisoquinoline alkaloid cocsulin By DEWAN S. BHAKUNI, VIRENDER M. LABROO, AWADHESH N. SINGH, and RANDHIR S. KAPIL	121
Reactions of enol acetates with thallium(I) acetate-iodine By RICHARD C. CAMBIE, RODNEY C. HAYWARD, JEFFREY L. JURLINA, PETER S. RUTLEDGE, and PAUL D. WOODGATE	126
Reaction between 2',3',5'-tri- <i>O</i> -acetyladenosine and aryl chloroformates. 2',3',5'-Tri- <i>O</i> -acetyl- <i>N</i> (6)-phenoxy-carbonyl-adenosine as an intermediate in the synthesis of 6-ureidopurine ribosides By P. ANNE LYON and COLIN B. REESE	131
Structure and synthesis of some complex pyranoisoflavonoids from the bark of <i>Dalbergia nitidula</i> Welw. ex Bak. By FANIE R. VAN HEERDEN, E. VINCENT BRANDT, and DAVID G. ROUX	137
Tetracycline studies. Part 6. 6- and 12a-Hydroxylation of 6-methylpretetramid By CEDRIC H. HASSALL and GARETH J. THOMAS	145
Biosynthesis of flavoglucanin. Stereochemistry of aromatic isoprenylation By JANET K. ALLEN, KEVIN D. BARROW, ALAN J. JONES, and PETER HANISCH	152
The chemistry of terpenes. Part 23. Reaction of (+)-carane-3β,4α-diol with sulphuric acid By WESLEY COCKER and DAVID H. GRAYSON	155

The chemistry of terpenes. Part 24. Some oxidation products of 1,5,5,6-tetramethylcyclohexa-1,3-diene (α -pyronene)	
By WESLEY COCKER, KEVIN J. CROWLEY, and KRISHNASWAMY SRINIVASAN	159
18-Norpregna-8,11,13-trienes. Part 2. Preparation from 17 β -methyl-17 α -pregn-13-enes	
By ALEX. C. CAMPBELL, MAURICE S. MAIDMENT, JOHN H. PICK, DONALD F. M. STEVENSON, and GILBERT F. WOODS	163
Metabolic products of <i>Entomophthora virulenta</i>	
By NORMAN CLAYDON and JOHN FREDERICK GROVE	171
D-Homo-steroids. Part 7. Further studies on the mechanism of D-homoannulation of 17 α -hydroxypregnan-20-ones with Lewis acids	
By DAVID N. KIRK and CONOR R. MCHUGH	173
Intramolecular cyclisation of 2-phenylethyl isocyanates	
By ROY V. DAVIES, BRIAN IDDON, HANS SUSCHITZKY, and MAURICE W. GITTO	180