### ISSN: 0300-922X

# JOURNAL OF THE CHEMICAL SOCIETY

## PERKIN TRANSACTIONS I

## Organic and Bio-organic Chemistry

#### **CONTENTS**

PA
Coupling reactions of 1-alkylpyridinium salts. Part 1. With phosphite and phosphinite ions By John G. Carey and John R. Case
Coupling reactions of 1-alkylpyridinium salts. Part 2. Reaction of 1-methylpyridinium-4-carboxylate with cyanide and diphenylphosphinite ions  By John G. Carey and John R. Case
Synthesis of 4,4a-5,6,7,8-hexahydro-5β-hydroxy-4aβ,8α-dimethylnaphthalen-2(3H)-one, a versatile intermediate for sesquiterpene synthesis  By Μισημακυ Κατο, Ηικοshi Κυκιμακα, Ηικοshi Κοsugi, Μαςατακα Wαταναβε, Shigeru Asuka, and Ακικα Υοςημακος
Condensed thiophen ring systems. Part 20. Synthesis of 5-arylthieno[3,2-b]pyrroles and 5-arylthieno-[3,2-c]pyrazoles  By Veronica M. Colburn, Brian Iddon, and Hans Suschitzky
The chemistry of prasinons A and B. Identification of the nitrogen-containing moiety  By John Frederick Grove, Michi Fukuoka, Alan W. Johnson, and José N. C. Lopes
Naturally occurring compounds related to phenalenone. Part 8. Structure and synthesis of demethylherqueichrysin  By David A. Frost, David D. Halton, and George A. Morrison
Electrochemical reactions. Part 19. Intermolecular radical substitution during the reduction of 2-halogeno-N-methylbenzanilides  By James Grimshaw, Reginald J. Haslett, and Jadwiga Trocha-Grimshaw
Electrochemical reactions. Part 20. Intramolecular cyclisation during the reduction of 2-chloro-NN-diphenylbenzamides  By James Grimshaw and David Mannus
Addition of dimethyl acetylenedicarboxylate to 4-(pyrrolidin-1-yl)coumarin and to 1-methyl-4-(pyrrolidin-1-yl)quinolin-2(1H)-one  By David J. Haywood and Stewart T. Reid
Photochemical transformations. Part 10. Photocycloaddition reactions of 4-hydroxycoumarin with cycloalkenes
By David J. Haywood, Russell G. Hunt, Christopher J. Potter, and Stewart T. Reid
By Russell G. Hunt and Stewart T. Reid

ii Contents

	PAGE
Oxidation of steroidal 5-enes with thallium triacetate; a Westphalen-type rearrangement of epicholesteroi By Anchel Schwartz and Erwin Glotter	<b>47</b> 0
Synthesis of 1,4-oxathian-2-one, 5-methyl-1,4-oxathian-2-one, and 1,4-oxathiepan-2-one By David I. Davies, Lyn Hughes, Yashwant D. Vankar, and Jack E. Baldwin	476
Syntheses based on 1,2-secopenicillins. Part 5. Penicillin analogues with electron-withdrawing 2-substituents  By Edward G. Brain, A. John Eglington, John H. C. Nayler, Neal F. Osborne, Robert Southgate, and Patricia Tolliday	<b>47</b> 9
Photoinduced transformations. Part 36. Stereochemical integrity of the terminus of the migrating carbon in the photo-Beckmann rearrangements of some cholestanone oximes  By Hiroshi Suginome and Fujio Yagihashi	<b>48</b> 8
The reaction of αω-dodecatrienediylnickel with allene and reactions of the resulting bis-π-allylnickel intermediates with carbon monoxide and alkyl isocyanides  By RAYMOND BAKER and ALISON H. COPELAND	497
Tetracycline studies. Part 5. New syntheses of anthracenes and anthraquinones through benzophenone carbanions  By Michael J. Broadhurst, Cedric H. Hassall, and Gareth J. Thomas	502
Preparation of benzyl ethers of 1,2-dideoxy-2'-methyl- $\alpha$ -D-glucopyranoso[2,1- $d$ ]- $\Delta^2$ '-oxazoline for use in oligosaccharide synthesis By Patrick Rollin and Pierre Sinaÿ	513
Cytotoxic compounds. Part 22. Reaction of 2,2'-iminodiethanol with some chloronitrobenzenes By Anthony J. Abela Medici, Leonard N. Owen, and Constantine Sflomos	517