

JOURNAL
OF
THE CHEMICAL SOCIETY

PERKIN TRANSACTIONS II
Physical Organic Chemistry

CONTENTS

	PAGE
Chemistry of a colour test for abscisic acid By R. MALLABY and G. RYBACK	919
<i>EZ</i> Isomerization of 2,4-dinitrophenylhydrazones By JOHN P. IDOUX and JAMES A. SIKORSKI	921
Participation of an upper excited $n-\pi^*$ triplet state in the photoreduction of 1-dimethylaminoanthraquinone By A. K. DAVIES, R. FORD, J. F. MCKELLAR, and G. O. PHILLIPS	923
Pyrolysis of carbonates. Part I. The gas-phase pyrolysis of some symmetrical primary alkyl carbonates By D. B. BIGLEY and C. M. WREN	926
Solvolysis of methyl <i>OS</i> -ethylene phosphorothioate By D. C. GAY and N. K. HAMER.	929
Crystal structure of racemic <i>trans</i> -1a,7b-dihydro-oxireno[<i>a</i>]naphthalene-3-spiro-2'-oxiran-2(3 <i>H</i>)-one By B. M. GATEHOUSE and D. J. LLOYD	932
Crystal and molecular structure of 7-oxabicyclo[2,2,1]hept-5-ene-2,3- <i>exo</i> -dicarboxylic anhydride By S. BAGGIO, A. BARRIOLA, and P. K. DE PERAZZO	934
Stereochemistry of carbohydrate derivatives. Part IV. Crystal structure of 3,6-(acetylpimino)-3,6-dideoxy-1,2- <i>O</i> -isopropylidene- β -L-idofuranose By J. S. BRIMACOMBE, J. IBALL, and J. N. LOW	937
Crystal structures of the acid salts of some dibasic acids. Part VI. An <i>X</i> -ray study of potassium hydrogen glutarate By A. L. MACDONALD and J. C. SPEAKMAN	942
Conformational studies. Part III. Crystal and molecular structures of <i>N</i> -(2,4-dichlorobenzylidene)aniline By J. BERNSTEIN	946
Conformational studies. Part IV. Crystal and molecular structure of the metastable form of <i>N</i> -(<i>p</i> -chlorobenzylidene)- <i>p</i> -chloroaniline, a planar anil By J. BERNSTEIN and (the late) G. M. J. SCHMIDT.	951
Nucleophilic attacks on carbon-carbon double bonds. Part XV. Further evidence for base-catalysis in the reaction of 1,1-dicyano-2- <i>p</i> -dimethylaminophenyl-2-fluoroethylene with substituted anilines in acetonitrile By ZVI RAPPOPORT and NELLA RONEN.	955
Protonation and sulphonation reactions of anisole in sulphuric and fluorosulphuric acid By ULLA SVANHOLM and VERNON D. PARKER	962
Free-radical substitution in aliphatic compounds. Part XXV. The gas-phase chlorination of chlorocyclobutane and methylcyclobutane By D. S. ASHTON and J. M. TEDDER	965

	PAGE
Charge-transfer complexes in organic chemistry. Part VI. Solvent effects on charge-transfer absorption bands. Interpretation of the behaviour of <i>n</i> -donor solvents By O. B. NAGY, J. B. NAGY, and A. BRUYLANTS	968
Solvent effects on the kinetics of alkaline hydrolysis of dimethylacetylacetone. Part II. Influence of dipolar aprotic solvent-water mixtures By JEAN-PIERRE CALMON and JEAN-LOUIS CANAVY	972
Reactions in strongly basic media. Part III. Kinetic acidity-dependences in methanolic solutions of sodium methoxide By R. A. MORE O'FERRALL.	976
The isomerisation of 1,4-diarylbutenes by ruthenium-phosphine complexes By JOCHANAN BLUM and YIGAL BECKER	982
Mechanism of iodine migration during the nitrodeiodination of 4-iodoanisole By ANTHONY R. BUTLER and ANTHONY P. SANDERSON	989
Homolytic organometallic reactions. Part VII. An electron spin resonance study of the reaction of <i>t</i> -butoxyl radicals with trialkyl phosphites: kinetics of β -scission of the <i>t</i> -butoxytriethoxyphosphoranyl radical By ALWYN G. DAVIES, D. GRILLER, and B. P. ROBERTS.	993
Benzoquinone imines. Part X. The mechanism and kinetics of the reactions of <i>p</i> -benzoquinone di-imine and <i>p</i> -benzoquinone monoimine with <i>C</i> -methoxy- <i>m</i> -diamines and <i>p</i> -methoxy- and <i>p</i> -chloro-phenols By JOHN F. CORBETT.	999
Nuclear magnetic resonance spectroscopy of diphenylallyl carbanions. Part I. The determination of equilibrium constants for ion pairing By J. W. BURLEY and R. N. YOUNG	1006
Nucleophilic substitution in carbonic acid derivatives. Part II. Kinetics and mechanism of the solvolyses of <i>NN</i> -dialkylcarbamoyl chlorides By R. BACALOGLU, C. DĂESCU, and G. OSTROGOVICH	1011
Substituent effect on polarographic reduction of aryl diphenylmethyl sulphides in <i>NN</i> -dimethylformamide By G. FARNIA, A. CECCON, and P. CESSSELLI	1016
Proton ionisation constants and kinetics of base hydrolysis of some α -amino-acid esters in aqueous solution. Part III. Hydrolysis and intramolecular aminolysis of $\alpha\omega$ -diamino-acid methyl esters By R. W. HAY and P. J. MORRIS	1021
Conformations of some saturated carbonyl compounds. Part I. Infrared spectra of methyl formate, acetate, propionate, and <i>n</i> -butyrate; [$^2\text{H}_3$]methyl propionate and [$^2\text{H}_3$]methyl <i>n</i> -butyrate By W. O. GEORGE, D. V. HASSID, and W. F. MADDAMS.	1029
Crystal and molecular structure of the 1 : 1 complex of urea and <i>syn</i> -5-nitro-2-furaldehyde oxime By M. MATHEW and GUS J. PALENIK	1033
Crystal and molecular structure of hippuric acid By W. HARRISON, S. RETTIG, and J. TROTTER	1036