

JOURNAL
OF
THE CHEMICAL SOCIETY

PERKIN TRANSACTIONS II
Physical Organic Chemistry

CONTENTS

	PAGE
Dipole moments and molecular conformation of diazo-compounds. Part III. Benzoylphenyldiazomethane and related molecules	
By S. SORRISO and A. FOFFANI	1497
Rotational barriers in 2-dimethylamino-1,3,4-oxadiazoles and -thiadiazoles. A CNDO/2 study	
By TOMMY LILJEFORS, JAN SANDSTRÖM, and GÖRAN RIBBEGÅRD	1500
Vinylic cations from solvolysis. Part XV. β -Phenyl and β - <i>p</i> -methoxyphenyl rearrangement during the solvolysis of 2,2-diaryl-1-phenylvinyl bromides	
By ZVI RAPPOPORT and YORAM HOUMINER	1506
Intra- and inter-molecular catalysis in the iodination of 4-diethylaminobutan-2-one and 5-diethylaminopentan-2-one	
By RONALD P. BELL and BAKIR A. TIMIMI	1518
The solvent dependence of fluorine chemical shifts. Part II. Anisotropic and polar solvents	
By RAYMOND J. ABRAHAM and DAVID F. WILEMAN	1521
The chemistry of nitroso-compounds. Part VI. Direct and indirect transnitrosation reactions of <i>N</i> -nitrosodiphenylamine	
By BRIAN C. CHALLIS and MARTIN R. OSBORNE	1526
Steric effects observed in the electron spin resonance spectra of some arylsemiquinones	
By PAUL ASHWORTH and WILLIAM T. DIXON	1533
Elimination reactions on the borderline between concerted and stepwise processes. Base-promoted dehydrohalogenation of 2-phenylsulphonylethyl bromide, chloride, and fluoride	
By VITO FIANDANESE, GIUSEPPE MARCHESE, and FRANCESCO NASO	1538
The effect of <i>d</i> orbitals on the calculated ultraviolet spectra of organosulphur compounds	
By JOHN R. GRUNWELL and HOWARD S. BAKER	1542
The kinetics and mechanism of the acid and alkaline hydrolyses of some perbenzoic acids	
By FERNANDO SECCO, MARCELLA VENTURINI, and STELVIO CELSI	1544
Kinetics of the reaction of hydrogen peroxide with cysteine and cysteamine	
By JOHN P. BARTON, JOHN E. PACKER, and RITCHIE J. SIMS	1547
2,6-Divinyltetrahydropyran	
By GEORGE C. CORFIELD, ALLAN CRAWSHAW, STEPHAN J. THOMPSON, and ALAN G. JONES	1549
Hydrogen transfer from <i>N</i> -arylhydroxylamines to nitrosoarenes: an accompaniment to azoxyarene formation	
By GEOFFREY T. KNIGHT and BRIAN SAVILLE	1550
The conformational analysis of saturated heterocycles. Part LII. The stereochemical orientation of the benzylation of piperidines	
By R. P. DUKE, RICHARD A. Y. JONES, and A. R. KATRITZKY	1553

Crystal and molecular structure of the major products from the benzylation of 1-ethyl-4-phenylpiperidine and 1-isopropyl-4-phenylpiperidine By J. ROBERT CARRUTHERS, WALTER FEDELI, FERNANDO MAZZA, and ALESSANDRO VACIAGO	1558
γ -Radiolysis of pure acyl chlorides at 77 K: an electron spin resonance study of intermediate radicals By A. FAUCITANO and F. FAUCITANO MARTINOTTI.	1563
Mechanism of the permanganate oxidation of unsaturated compounds. Part III. Intermediates in the oxidation of maleic and fumaric acids By MIKLÓS JÁKY, LÁSZLÓ I. SIMÁNDI, LÁSZLÓ MAROS, and IBOLYA MOLNÁR-PERL	1565
Free radical substitution in aliphatic compounds. Part XXIX. Halogen atom abstraction from alkyl halides by trimethyltin radicals in the gas phase By DAVID A. COATES and JOHN M. TEDDER	1570
Configurational stability of pyramidal nitrogen in spiro-oxaziridines By JOHANNES BJØRGO and DEREK R. BOYD.	1575
The partial anodic oxidation of n-alkanes in acetonitrile and trifluoroacetic acid By DAVID B. CLARK, MARTIN FLEISCHMANN, and DEREK FLETCHER	1578
The photochemistry of 1-phenylpropenes By MARK G. ROCKLEY and KINGSLEY SALISBURY	1582
Electrophilic substitution with rearrangement. Part VII. Reaction paths in the bromination of cholest-4-en-3-one By PETER B. D. DE LA MARE and BRIAN N. B. HANNAN	1586
Redox equilibria of aromatic cation radicals and aromatic compounds By ULLA SVANHOLM and VERNON D. PARKER	1594
The chemistry of nitroso-compounds. Part VII. The first 'fast' proton transfer for an aromatic nitrosation By BRIAN C. CHALLIS and RICHARD J. HIGGINS	1597

INDEX OF AUTHORS' NAMES

- ABRAHAM, R. J., and Wileman, D. F., 1521
Ashworth, P., and Dixon, W. T., 1533
Baker, H. S. See Grunwell, J. R., 1542
Barton, J. P., Packer, J. E., and Sims, R. J., 1547
Bell, R. P., and Timimi, B. A., 1518
Bjørge, J., and Boyd, D. R., 1575
Boyd, D. R. See Bjørge, J., 1575
Carruthers, J. R., Fedeli, W., Mazza, F., and Vaciago, A., 1558
Celsi, S. See Secco, F., 1544
Challis, B. C., and Higgins, R. J., 1597
Challis, B. C., and Osborne, M. R., 1526
Clark, D. B., Fleischmann, M., and Pletcher, D., 1578
Coates, D. A., and Tedder, J. M., 1570
Corfield, G. C., Crawshaw, A., Thompson, S. J., and Jones, A. G., 1549
Crawshaw, A. See Corfield, G. C., 1549
de la Mare, P. B. D., and Hannan, B. N. B., 1586
Dixon, W. T. See Ashworth, P., 1533
Duke, R. P., Jones, R. A. Y., and Katritzky, A. R., 1553
Faucitano, A., and Martinotti, E. F., 1563
Fedeli, W. See Carruthers, J. R., 1558
Fiandanese, V., Marchese, G., and Naso, F., 1538
Fleischmann, M. See Clark, D. B., 1578
Foffani, A. See Sorriso, S., 1497
Grunwell, J. R., and Baker, H. S., 1542
Hannan, B. N. B. See de la Mare, P. B. D., 1586
Higgins, R. J. See Challis, B. C., 1597
Houminer, Y. See Rappoport, Z., 1506
Jáky, M., Simándi, L. I., Maros, L., and Molnár-Perl, I., 1565
Jones, A. G. See Corfield, G. C., 1549
Jones, R. A. Y. See Duke, R. P., 1553
Katritzky, A. R. See Duke, R. P., 1553
Knight, G. T., and Saville, B., 1550
Liljefors, T., Sandström, J., and Ribbegård, G., 1500
Marchese, G. See Fiandanese, V., 1538
Maros, L. See Jáky, M., 1565
Martinotti, E. F. See Faucitano, A., 1563
Mazza, F. See Carruthers, J. R., 1558
Molnár-Perl, I. See Jáky, M., 1565
Naso, F. See Fiandanese, V., 1538
Osborne, M. R. See Challis, B. C., 1526
Packer, J. E. See Barton, J. P., 1547
Parker, V. D. See Svanholm, U., 1594
Pletcher, D. See Clark, D. B., 1578
Rappoport, Z., and Houminer, Y., 1506
Ribbegård, G. See Liljefors, T., 1500
Rockley, M. G., and Salisbury, K., 1582
Salisbury, K. See Rockley, M. G., 1582
Sandström, J. See Liljefors, T., 1500
Saville, B. See Knight, G. T., 1550
Secco, F., Venturini, M., and Celsi, S., 1544
Simándi, L. I. See Jáky, M., 1565
Sims, R. J. See Barton, J. P., 1547
Sorriso, S., and Foffani, A., 1497
Svanholm, U., and Parker, V. D., 1594
Tedder, J. M. See Coates, D. A., 1570
Thompson, S. J. See Corfield, G. C., 1549
Timimi, B. A. See Bell, R. P., 1518
Vaciago, A. See Carruthers, J. R., 1558
Venturini, M. See Secco, F., 1544
Wileman, D. F. See Abraham, R. J., 1521

* The author to whom correspondence should be addressed is indicated by an asterisk after his name in the heading of the Paper.

