

JOURNAL OF THE CHEMICAL SOCIETY

Perkin Transactions II

Physical Organic Chemistry

CONTENTS

- 883 X-Ray photoelectron spectroscopic study of captodative olefins: electronic structure of α -thio-acrylonitrile derivatives **Joseph Riga, Jacques J. Verbist, Serge Mignani, Zdenek Janousek, Robert Merenyi, and Hienz G. Viehe**
- 887 Prototropic tautomerism of tri- and tetra-phenyl-2,3(2,5)-dihydro-1,3,5-triazines **Koko Maeda, Naoko Kihara, and Naomi Ishimura**
- 891 Kinetics and mechanism of tertiary amine-catalysed aqueous cleavage of maleimide **Mohammad Niyaz Khan**
- 899 X-Ray crystallographic, ^1H , and ^{13}C nuclear magnetic resonance investigation of the potentially heptadentate ligand trensal, 2,2',2"-tris(salicylideneimino)triethylamine **Necla Gündüz, Turgut Gündüz, Michael B. Hursthouse, Harold G. Parkus, Leylâ S. Shaw (née Gözen), Robert A. Shaw, and Mürside Tütün**
- 903 Photoinduced membrane potential changes. Poly(vinyl chloride) membranes entrapping a photoresponsive bis-(15-crown-5) derivative **Jun-ichi Anzai, Hiroshi Sasaki, Akihiko Ueno, and Tetsuo Osa**
- 909 Solvent effects on isomer distributions and relative rates in Friedel-Crafts benzylation and benzoylation of dibenzofuran derivatives **Takashi Keumi, Masatoshi Nakamura, Masao Kitamura, Naoto Tomioka, and Hidehiko Kitajima**
- 915 A theoretical conformational study of push-pull ethylenes. Part 1. Substituted methyleneimidazolidines **Giorgio Favini, Aldo Gamba, and Roberto Todeschini**
- 921 Ester hydrolysis by a 2-naphthylacetyl-substituted γ -cyclodextrin **Akihiko Ueno, Fumio Moriaki, Yoshihiro Hino, and Tetsuo Osa**
- 925 A quantitative analysis of the effect of hexadecyltrimethylammonium bromide micelles on the rate of alkaline hydrolysis of benzylpenicillin **Hernan Chaimovich, Valdir R. Correia, Pedro S. Araujo, Regina M. V. Aleixo, and Iolanda M. Cuccovia**
- 929 Solvent effects on the rate of the reaction of 2,4-dinitrofluorobenzene with the ethyl ester of tyrosine **Zhu Zhong-yuan, Sun Cheng-E, and Han Te-kang**
- 935 Enthalpy-entropy compensation in complexation of cations with crown ethers and related ligands **Yoshihisa Inoue and Tadao Hakushi**
- 947 X-Ray crystal structure and properties of (1,4-pyrazinio)bis(dicyanomethylide) (diazaTCNQ) **Gen-etsu Matsubayashi, Yoshito Sakamoto, Toshio Tanaka, and Kazumi Nakatsu**
- 951 Interaction between porphyrins and hydroxylated compounds. Part 2. Effect of *p*-nitrophenol during the metallation of tetraphenylporphyrin **Laure Guilleux, Pierre Krausz, Louis Nadjo, and Raoul Uzan**
- 955 Molecular determinants for drug-receptor interactions. Part 5. Anisotropic and internal motions in analgesic narcotics (morphine, oxymorphone) and related antagonists (nalorphine, naloxone) by carbon-13 nuclear magnetic resonance spin-lattice relaxation times **Giuseppe C. Pappalardo, Lajos Radics, Marcello Baldo, and Antonio Grassi**
- 961 Allylic alkylation catalysed by platinum complexes; structure and reactivity of intermediates, and the overall stereo-selectivity **John M. Brown and Jane E. MacIntyre**
- 971 The action of red light on solid caryophyllene nitrosite, $\text{C}_{15}\text{H}_{24}\text{N}_2\text{O}_3$: (i) the reaction products; (ii) the crystal structures

- of caryophyllene nitrosite and of dinitrocaryophyllene, C₁₅H₂₄N₂O₄; (*iii*) electron paramagnetic resonance studies; and (*iv*) the solid-state reaction mechanisms **Andrew A. Freer, Derek K. MacAlpine, Judith A. Peacock and Andrew L. Porte**
- 983 Competing S_N2 and carbonyl addition pathways for solvolyses of benzoyl chloride in aqueous media **T. William Bentley, Gillian E. Carter, and H. Carl Harris**
- 991 Substituted benzene cations formed by radiolysis: an electron spin resonance study **D. N. Ramakrishna Rao and Martyn C. R. Symons**
- 1001 The photoelectron spectrum of 7b-methyl-7bH-cyclopent[cd]indene **Peter Bischof, Rolf Gleiter, Rudolf Haider, and Charles W. Rees**
- 1005 Conformation and stereodynamics of *N,N*-dialkylbenzamides; a ¹H and ¹³C nuclear magnetic resonance investigation of *para*-substituted 4-benzoyl-*cis*-2,6-dimethylmorpholines **W. Brian Jennings and Barahman Movassagh Saket**
- 1011 Ryanoid insecticides: structural examination by fully coupled two-dimensional ¹H-¹³C shift correlation nuclear magnetic resonance spectroscopy **Andrew L. Waterhouse, Ian Holden, and John E. Casida**
- 1017 Intramolecular nucleophilic catalysis of anilide hydrolysis by pyrimidine nitrogen **Iva B. Blagoeva and Anthony J. Kirby**
- 1021 Vinylgous systems. Part 5. Vibrational spectroscopy of the nitroenamine system **Daryl L. Ostercamp and Peter J. Taylor**
- 1029 The kinetics of the addition of ethanol to *p*-chlorophenyl isocyanate in diethyl ether solution in the presence of covalent metal halides **Graham Hazzard, Steven A. Lammiman, Nai L. Poon, Derek P. N. Satchell, and Rosemary S. Satchell**
- 1035 Use of deuteration, endoperoxidation, and ²H nuclear magnetic resonance spectroscopy to demonstrate thermal [1,5] sigmatropic rearrangements in cycloalka-1,3-dienes **A. J. Bloodworth and Henny J. Eggelte**
- 1039 Reactions of benzophenone in its triplet state with aliphatic substrates: hydrogen isotope exchange, formation of organochromium(III) species, and related reactions **Abu Bakar bin Baba, Victor Gold, and Frank Hibbert**
- 1045 A theoretical scale of substituent resonance parameters (σ_R°) **Stephen Marriott and Ronald D. Topsom**
- 1049 Model systems for cytochrome P450 dependent mono-oxygenases. Part 4. The epoxidation of alkenes by peroxyacids in the presence of cobalt complexes **M. Andrew Brook, John R. Lindsay Smith, Raymond Higgins, and David Lester**
- 1057 Effects of ionising radiation on deoxyribonucleic acid. Part 2. The influence of nitroimidazole drugs on the course of radiation damage to aqueous deoxyribonucleic acid **Philip J. Boon, Paul M. Cullis, Martyn C. R. Symons, and Brendan W. Wren**
- 1063 The photophysics of some tertiary aliphatic amines in solution **Richard A. Beecroft and R. Stephen Davidson**
- 1069 Fluorescent excimer formation by α,ω -diaminoalkanes and related compounds **Richard A. Beecroft, R. Stephen Davidson, and Terence D. Whelan**
- 1073 Rotational barriers in pentadienyl and pent-2-en-4-ynyl radicals **Iain MacInnes and John C. Walton**
- 1077 Nuclear magnetic resonance studies and conformations of bicyclic inhibitors of angiotensin-converting enzyme. Part 1. Octahydropyridazo[1,2-*a*]pyridizanediones as models for alanylproline and captopril **Philip J. Gilbert and W. Anthony Thomas**
- 1083 Kinetics and mechanism of the reaction of benzenesulphinic acid with nitrous acid **Tracey Bryant and D. Lyn H. Williams**

AUTHOR INDEX

- Aleixo, Regina M. V., 925
Anzai, Jun-ichi, 903
Araujo, Pedro S., 925
Baba, Abu Bakar bin, 1039
Baldo, Marcello, 955
Beecroft, Richard A., 1063, 1069
Bentley, T. William, 983
Bischof, Peter, 1001
Blagoeva, Iva B., 1017
Bloodworth, A. J., 1035
Boon, Philip J., 1057
Brook, M. Andrew, 1049
Brown, John M., 961
Bryant, Tracey, 1083
Carter, Gillian E., 983
Casida, John E., 1011
Chaimovich, Hernan, 925
Cheng-E, Sun, 929
Correia, Valdir R., 925
Cuccovia, Iolanda M., 925
Cullis, Paul M., 1057
Davidson, R. Stephen, 1063, 1069
Eggelte, Henny J., 1035
Favini, Giorgio, 915
Freer, Andrew A., 971
Gamba, Aldo, 915
Gilbert, Philip J., 1077
Gleiter, Rolf, 1001
Gold, Victor, 1039
Grassi, Antonio, 955
Gündüz, Necla, 899
Gündüz, Turgut, 899
Guilleux, Laure, 951
Haider, Rudolf, 1001
Hakushi, Tadao, 935
Harris, H. Carl, 983
Hazzard, Graham, 1029
Hibbert, Frank, 1039
Higgins, Raymond, 1049
Hino, Yoshihiro, 921
Holden, Ian, 1011
Hursthouse, Michael B., 899
Inoue, Yoshihisa, 935
Ishimura, Naomi, 887
Janousek, Zdenek, 883
Jennings, W. Brian, 1005
Keumi, Takashi, 909
Khan, Mohammad Niyaz, 891
Kihara, Naoko, 887
Kirby, Anthony J., 1017
Kitajima, Hidehiko, 909
Kitamura, Masao, 909
Krausz, Pierre, 951
Lammiman, Steven A., 1029
Lester, David, 1049
Lindsay Smith, John R., 1049
MacAlpine, Derek K., 971
MacInnes, Iain, 1073
MacIntyre, Jane E., 961
Maeda, Koko, 887
Marriott, Stephen, 1045
Matsubayashi, Gen-etsu, 947
Merenyi, Robert, 883
Mignani, Serge, 883
Moriwaki, Fumio, 921
Nadjo, Louis, 951
Nakamura, Masatoshi, 909
Nakatsu, Kazumi, 947
Osa, Tetsuo, 903, 921
Ostercamp, Daryl L., 1021
Pappalardo, Giuseppe C., 955
Parkus, Harold G., 899
Peacock, Judith A., 971
Poon, Nai L., 1029
Porte, Andrew L., 971
Radics, Lajos, 955
Rao, D. N. Ramakrishna, 991
Rees, Charles W., 1001
Riga, Joseph, 883
Sakamoto, Yoshito, 947
Saket, Barahman Movassagh, 1005
Sasaki, Hiroshi, 903
Satchell, Derek P. N., 1029
Satchell, Rosemary S., 1029
Shaw, Leylá S., 899
Shaw, Robert A., 899
Symons, Martyn C. R., 991, 1057
Tanaka, Toshio, 947
Taylor, Peter J., 1021
Te-kang, Han, 929
Thomas, W. Anthony, 1077
Todeschini, Roberto, 915
Tomioka, Naoto, 909
Topsom, Ronald D., 1045
Tüzün, Mürside, 899
Ueno, Akihiko, 903, 921
Uzan, Raoul, 951
Verbist, Jacques J., 883
Viehe, Hienz G., 883
Walton, John C., 1073
Waterhouse, Andrew L., 1011
Whelan, Terence D., 1069
Williams, D. Lyn H., 1083
Wren, Brendan W., 1057
Zhong-yuan, Zhu, 929

NOTE: An asterisk in the heading of each paper indicates the author who is to receive any correspondence.

