

## JOURNAL OF THE CHEMICAL SOCIETY

## Perkin Transactions 2

## Organic and Bio-organic Chemistry

## CONTENTS

- 897 Aluminium chloride complexes of 2-isocyanatobenzoyl chloride and phenyl isocyanate—an infrared spectroscopic study **Bijaya K. Misra, Y. Ramachandra Rao, and Shiba N. Mahapatra**
- 903 Non-linear least squares program for the analysis of  $^{13}\text{C}$  spin-lattice relaxation data based on a symmetric top model. Description of the method and application **Hideaki Fujiwara, Tatsuya Takagi, Makiko Sugiura, and Yoshio Sasaki**
- 907  $^{13}\text{C}$  Spin-lattice relaxation times and molecular motion in *N*-alkyltetrahydroisoquinoline derivatives **Makiko Sugiura, Torei Sai, Narao Takao and Hideaki Fujiwara**
- 911 Conformation analysis of organic carbonyl compounds. Part 3. A  $^1\text{H}$  and  $^{13}\text{C}$  nuclear magnetic resonance study of formyl and acetyl derivatives of benzo[*b*]thiophen **Rois Benassi, Ugo Folli, Dario Iarossi, Luisa Schenetti, and Ferrinando Taddei**
- 917 Molecular complex formation between bridgehead amines and quinones **Michel J. M. Campbell, Basil Demetriou, and Ronald Jones**
- 923 Influence of the *N*-sulphonyl and *N*-alkyl groups on stereochemical features of the peroxy-acid-imine reaction **Maria Bucciarelli, Arrigo Forni, Irene Moretti, and Giovanni Torre**
- 927 The torsional barrier around the phenyl-C $^+$  bond in phenylcarbenium ions **Roland Jost and Jean Sommer**
- 933 Gas-phase methylation of toluene by CT<sub>3</sub>YCH<sub>3</sub> $^+$  (Y = F, Cl, and Br) ions **Marcello Colosimo and Roberto Bucci**
- 937 Stereochemistry of sulphur organic compounds. Part 11. A conformational study of some 2-thio-derivatives of *N*-phenyl-1-phenylethylamine **Ernesto Brunet, M. Carmen Carreño, M. Teresa Gallego, José L. García Ruano, and Felipe Alcudia**
- 943 Structural study of fosfomycin [(-)-*cis*-1,2-epoxypropylphosphonic acid] salts and related compounds **Carlos von Carsenn-Lichterfelde, Matilde Fernández-Ibañez, Enrique Gálvez-Ruano, and Juana Bellanato**
- 949 Oxidation of diphenylmethanol by bromamine T. A. kinetic and mechanistic study **Somasundaram Gunasekaran and Nagaswami Venkatasubramanian**
- 955 Kinetics of oxidation of epimeric piperidin-4-ols by vanadium(v) **Kuppusamy Selvaraj, Kondareddiar Ramalingam, and Krishnasamy Ramarajan**
- 961 Thiyil free radicals: direct observations of electron transfer reactions with phenothiazines and ascorbate **Luigi G. Forni, Jörg Möning, Victor O. Mora-Arellano, and Robin L. Willson**
- 967 Reactivity of *N*-phenacyloxycarbamates and related systems in the presence of bases: study of a new [1,2] anionic rearrangement **Piero Consonni, Duccio Favara, Amedeo Omodei-Salé, Giuseppe Bartolini, and Alfredo Ricci**
- 975 A kinetic and equilibrium study of the hydrolysis of Pyrrolidine Green **Steven F. Beach, John D. Hepworth, Donald Mason, and Geoffrey Hallas**
- 979 Equilibrium and activation thermodynamic parameters of the tautomerism of 6-methoxy-2-pyridone in water **Marianne Chevrier, Jean Guillerez, and Jacques-Emile Dubois**

## CONTENTS

- 983 Singlet photosensitization of simple alkenes. Part 4. *cis-trans* Photoisomerization of cycloheptene sensitized by aromatic esters. Some aspects of the chemistry of *trans*-cycloheptene **Yoshihisa Inoue, Toshihiko Ueoka, Takayuki Kuroda, and Tadao Hakushi**
- 989 Reduction of pyridinoid heterocyclic compounds. A MINDO/3 study **Peter H. M. Budzelaar, Adrian J. de Koning, and Ben G. K. van Aarssen**
- 993 Regiospecific alkenylation of phenols by 1,1-dimethylallene promoted by platinum catalysts **Augusto De Renzi, Achille Panunzi, Antonio Saporito, and Aldo Vitagliano**
- 997 A theoretical investigation on the role of solvent in solvolytic reactions. Part 5. Fluoromethane in methane **Pierfranco Demontis, Aldo Gamba, Giuseppe B. Suffritti, and Massimo Simonetta**
- 1003 Electrophilic aromatic substitution. Part 29. The kinetics and products of the solvolyses in aqueous sulphuric acids of 2-cyano-3,4-dimethyl-4-nitrocyclohexa-2,5-dienyl acetate: the non-occurrence of an intramolecular 1,3-migration of the nitro-group in the solvolytic reactions of the diene. The kinetics and products of nitration of 2,3- and 3,4-dimethylbenzonitrile **Colin Bloomfield, Roy B. Moodie, and Kenneth Schofield**
- 1011 Ionization constants of some Schiff's bases in 80% (w/w) dimethyl sulphoxide–water solvent at 25 °C **Sau-Fun Tan, Kok-Peng Ang, and Harilakshmi Jayachandran**
- 1015 The photochemistry of  $\alpha$ -substituted 2-vinylstilbenes **Paul M. op den Brouw and Wim H. Laarhoven**
- 1021 The photochemistry of azo dyes. Photoisomerisation *versus* photoreduction from 4-diethylaminoazobenzene and 4-diethylamino-4'-methoxyazobenzene **Angelo Albini, Elisa Fasani, and Silvio Pietra**
- 1025 Intermolecular proton transfers in the solid state. Conversion of the hydroxyazo into the quinone hydrazone tautomer of 2-amino-3-hydroxy-6-phenylazopyridine. X-Ray crystal structures of the two forms **Gautam R. Desiraju**
- 1031 Fluorescence and induced circular dichroism studies on host–guest complexation between  $\gamma$ -cyclodextrin and pyrene **Nagao Kobayashi, Rumiko Saito, Hiroaki Hino, Yoshihiro Hino, Akihiko Ueno, and Tetsuo Osa**
- 1037 The regiospecific alkylation of amides. MNDO SCF-MO calculations **Brian C. Challis, James N. Iley, and Henry S. Rzepa**
- 1043 An electron spin resonance study of trivinylmethyl and hepta-2,6-dien-4-ynyl radicals **John C. Walton**
- 1049 Line multiplicities in solid-state  $^{13}\text{C}$  nuclear magnetic resonance: separation of splittings due to conformational and crystallographic effects in *p*-alkoxybenzoic acids **Gary R. Hays**

## AUTHOR INDEX

- Albini, A., 1021  
Alcudia, F., 937  
Ang, K-P., 1011  
Bartolini, G., 967  
Beach, S. F., 975  
Bellanato, J., 943  
Benassi, R., 911  
Bloomfield, C., 1003  
Brunet, E., 937  
Bucci, R., 933  
Bucciarelli, M., 923  
Budzelaar, P. H. M., 989  
Campbell, M. J. M., 917  
Carreño, M. C., 937  
Challis, B. C., 1037  
Chevrier, M., 979  
Colosimo, M., 933  
Consonni, P., 967  
de Koning, A. J., 989  
de Renzi, A., 993  
Demetriou, B., 917  
Demontis, P., 997  
Desiraju, G. R., 1025  
Dubois, J-E., 979
- Fasani, E., 1021  
Favara, D., 967  
Fernandez-Ibañez, M., 943  
Folli U., 911  
Forni, A., 923  
Forni, J. G., 961  
Fujiwara, H., 903, 907  
Gallego, M. T., 937  
Gálvez-Ruano, E., 943  
Gamba, A., 997  
Guillerez, J., 979  
Gunasekaran, S., 949  
Hakushi, T., 983  
Hallas, G., 975  
Hays, G. R., 1049  
Hepworth, J. D., 975  
Hino, H., 1031  
Hino, Y., 1031  
Iarossi, D., 911  
Iley, J. N., 1037  
Inoue, Y., 983  
Jayachandran, H., 1011  
Jones, R., 917  
Jost, R., 927
- Kobayashi, N., 1031  
Kuroda, T., 983  
Laarhoven, W. H., 1015  
Mahapatra, S. N., 897  
Mason, D., 975  
Misra, B. K., 897  
Mönig, J., 961  
Moodie, R. B., 1003  
Mora-Arellano, V. O., 961  
Moretti, I., 923  
Omodei-Salé, A., 967  
op den Brouw, P. M., 1015  
Osa, T., 1031  
Panunzi, A., 993  
Pietra, S., 1021  
Ramalingam, K., 955  
Ramarajan, K., 955  
Rao, Y. R., 897  
Ricci, A., 967  
Ruano, J. L. G., 937  
Rzepa, H. S., 1037  
Sai, T., 907  
Saito, R., 1031  
Saporito, A., 993
- Sasaki, Y., 903  
Schenetti, L., 911  
Schofield, K., 1003  
Selvaraj, K., 955  
Simonetta, M., 997  
Sommer, J., 927  
Suffritti, G. B., 997  
Sugiura, M., 903, 907  
Taddei, F., 911  
Takagi, T., 903  
Takao, N., 907  
Tan, S-F., 1011  
Torre, G., 923  
Ueno, A., 1031  
Ueoka, T., 983  
van Aarsen, B. G. K., 989  
Venkatasubramanian, N.,  
    949  
Vitagliano, A., 993  
von Carstenn-Lichterfelde,  
    C., 943  
Walton, J. C., 1043  
Willson, R. L., 961

---

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

