

## JOURNAL OF THE CHEMICAL SOCIETY

## Perkin Transactions 2

## Physical Organic Chemistry

## CONTENTS

- 939 Transition state structure in cycloaddition reactions as a function of ring size and geometry **Henry S. Rzepa and William A. Wylie**
- 947 Intramolecular participation of the amide group in acid- and base-catalysed phosphonate monoester hydrolysis **J. Rahil and R. F. Pratt**
- 951 Effect of reduction potential on the rate of reduction of nitroacridines by xanthine oxidase and by dihydro-flavin mononucleotide **Charman J. O'Connor, Duncan J. McLennan, Bridget M. Sutton, William A. Denny and William R. Wilson**
- 955 Crystal and molecular structure of *cis*-[dichlorobis(methyl phenyl sulphoxide)]platinum(II) and *cis*-[dichlorobis(benzyl methyl sulphoxide)]platinum(II). An X-ray and NMR spectroscopic study **Luciano Antolini, Ugo Folli, Dario Iarossi, Luisa Schenetti and Ferdinando Taddei**
- 963 Synthesis and NMR and conformational studies of the four anomeric methyl glycosides of the trisaccharide D-Glc<sub>P</sub>-(1→2)-D-Glc<sub>P</sub>-(1→3)-α-D-Glc<sub>P</sub> **Adenrele Adeyeye, Per-Erik Jansson, Lennart Kenne and Göran Widmalm**
- 975 ·OH radical induced decarboxylation of γ-glutamylmethionine and S-alkylglutathione derivatives: evidence for two different pathways involving C- and N-terminal decarboxylation **Krzysztof Bobrowski, Christian Schöneich, Jerzy Holcman and Klaus-Dieter Asmus**
- 981 Studies in crystal engineering. Photochemical and crystallographic investigations of bromocoumarins and (±)-7-(*p*-bromobenzylidene)piperitone **P. Venugopalan, T. Bharati Rao and K. Venkatesan**
- 989 Reactivity scale for sizeable molecules **Hiroshi Fujimoto, Kazuya Hatakeyama, Shinichi Kawasaki and Yasuo Oishi**
- 995 Thermal and photochemical decomposition of 9-arylxanthen-9-yl hydroperoxides and peroxides **André Goosen, Cedric W. McCleland and Benjamin Taljaard**
- 1001 Unexpected products from the reaction of *tert*-butoxyl radicals with acetylenes in the presence of an aminoxy radical scavenger **Steven Bottle, W. Ken Busfield, Ian D. Jenkins, Brian W. Skelton, Allan H. White, Ezio Rizzato and David H. Solomon**
- 1009 Sandmeyer reactions. Part 1. A comparative study of the transfer of halide and water ligands from complexes of Cu<sup>II</sup> to aryl radicals **Peter Hanson, Jason R. Jones, Bruce C. Gilbert and Allan W. Timms**
- 1019 Chemical and electrochemical reduction of *ortho*-nitroanilides. A combined chemical, polarographic and EPR study **Angelo Alberti, Patricia Carloni, Lucedio Greci, Pierluigi Stipa, Romano Andruzzi, Giancarlo Marrosu and Antonio Triazza**
- 1025 Iminophosphorane-substituted proton sponges. Part 1. X-Ray molecular structures of 1,8-diaminonaphthalene and 1-amino-8-triphenylphosphoranylideneaminonaphthalene **Antonio L. Llamas-Saiz, Concepción Foces-Foces, Pedro Molina, Mateo Alajarín, Angel Vidal, Rosa M. Claramunt and José Elguero**
- 1033 The mechanism of alkylation reactions. Part 2. The effect of pressure and substituents on the reaction of phenacyl bromide with pyridine in methanol **William Forster and Robert M. Laird**
- 1045 Photoreaction of a stable thioaldehyde 2,4,6-*tri-tert*-butylthiobenzaldehyde **Mauro A. Cremonini, Lodovico Lunazzi, Giuseppe Placucci, Naoko Kumon, Akihiko Ishii, Takaguki Kawashima and Renji Okazaki**
- 1051 Diels-Alder reaction of fumaronitrile and cyclopentadiene in water: the influence of cosolutes **Ian Hunt and C. David Johnson**

- 1057 Solvent-dependent stereoselectivity in the non-stereospecific reactions of the diastereoisomers of a phosphonamidothioic chloride with *tert*-butylamine. A pointer to the lifetime of the thiometaphosphonimidate intermediate **Martin J. P. Harger**
- 1063 Synthesis and solvent extraction studies of novel calixarene-based uranophiles bearing hydroxamic groups **Takeshi Nagasaki and Seiji Shinkai**
- 1067 Kinetics of the enolisation reaction of 2- and 3-acetylthiophenes **Paolo De Maria, Antonella Fontana and Domenico Spinelli**
- 1071 Perfluoro- and polyfluoro-sulphonic acids. Part 22. Polyfluorophenyl pentafluorobenzenesulphonates and their electron transfer reaction with sodium iodide **Qing-Yun Chen and Ming-Fang Chen**
- 1077 Combined X-ray crystallographic and infrared and Raman spectroscopic study of hydrogen bonding patterns in keto acid phosphoranes **Andrew D. Abell, John O. Trent and Kathryn B. Morris**
- 1085 Route of triacylamine formation in the thermal conversion of 2,3,7-trioxa-5-azabicyclo[2.2.1]hept-5-enes investigated by nuclear magnetic resonance experiments **M. Rosaria Iesce, M. Liliana Graziano, Guido Cimminiello, Flavio Cermola, Michelangelo Parrilli and Rachele Scarpati**

## AUTHOR INDEX

- Abell, Andrew D., 1077  
Adeyeye, Adenrele, 963  
Alajarín, Mateo, 1025  
Alberti, Angelo, 1019  
Andruzzì, Romano, 1019  
Antolini, Luciano, 955  
Asmus, Klaus-Dieter, 975  
Bobrowski, Krzysztof, 975  
Bottle, Steven, 1001  
Busfield, W. Ken, 1001  
Carloni, Patricia, 1019  
Cermola, Flavio, 1085  
Chen, Ming-Fang, 1071  
Chen, Qing-Yun, 1071  
Cimminiello, Guido, 1085  
Claramunt, Rosa M., 1025  
Cremonini, Mauro A., 1045  
De Maria, Paolo, 1067  
Denny, William A., 951  
Elguero, José, 1025  
Foces-Foces, Concepción,  
    1025
- Folli, Ugo, 955  
Fontana, Antonella, 1067  
Forster, William, 1033  
Fujimoto, Hiroshi, 989  
Gilbert, Bruce C., 1009  
Goosen, André, 995  
Graziano, M. Liliana, 1085  
Greci, Lucedio, 1019  
Hanson, Peter, 1009  
Harger, Martin J. P., 1057  
Hatakeyama, Kazuya, 989  
Holcman, Jerzy, 975  
Hunt, Ian, 1051  
Iarossi, Dario, 955  
Iesce, M. Rosaria, 1085  
Ishii, Akihiko, 1045  
Jansson, Per-Erik, 963  
Jenkins, Ian D., 1001  
Johnson, C. David, 1051  
Jones, Jason R., 1009  
Kawasaki, Shinichi, 989  
Kawashima, Takaguki, 1045
- Kenne, Lennart, 963  
Kumon, Naoko, 1045  
Laird, Robert M., 1033  
Llamas-Saiz, Antonio L.,  
    1025  
Lunazzi, Lodovico, 1045  
Marrosu, Giancarlo, 1019  
McCleland, Cedric W., 995  
McLennan, Duncan J., 951  
Molina, Pedro, 1025  
Morris, Kathryn B., 1077  
Nagasaki, Takeshi, 1063  
O'Connor, Charmian J., 951  
Oishi, Yasuo, 989  
Okazaki, Renji, 1045  
Placucci, Giuseppe, 1045  
Parrilli, Michelangelo,  
    1085  
Pratt, R. F., 947  
Rahil, J., 947  
Rao, T. Bharati, 981  
Rizzardo, Ezio, 1001
- Rzepa, Henry S., 939  
Scarpati, Rachele, 1085  
Schenetti, Luisa, 955  
Schöneich, Christian, 975  
Shinkai, Seiji, 1063  
Skelton, Brian W., 1001  
Solomon, David H., 1001  
Spinelli, Domenico, 1067  
Stipa, Pierluigi, 1019  
Sutton, Bridget M., 951  
Taddei, Ferdinando, 955  
Taljaard, Benjamin, 995  
Timms, Allan W., 1009  
Trazza, Antonio, 1019  
Trent, John O., 1077  
Venkatesan, K., 981  
Venugopalan, P., 981  
Vidal, Angel, 1025  
White, Alian H., 1001  
Widmalm, Göran, 963  
Wilson, William R., 951  
Wylie, William A., 939

---

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

