

JOURNAL OF THE CHEMICAL SOCIETY

Perkin Transactions 2

Physical Organic Chemistry

CONTENTS

- 215 A kinetic study on the base-catalysed *E*—*Z* isomerization of some arylhydrazones of 3-benzoyl-5-phenyl-1,2,4-oxadiazole: effect of the substituents in the arylhydrazone moiety **Vincenzo Frenna, Silvestra Buscemi, Domenico Spinelli, and Giovanni Consiglio**
- 223 Effect of substituents on the ^{13}C chemical shifts of the azomethine carbon atom of *N*-benzylideneanilines and 2-*N*-arylimino-2-*p*-nitrophenylethanenitriles **Atsushi Kawasaki**
- 229 An INDO/S MO study of alloxazine and its monomethyl derivatives **Henryk Szymusiak, Jerzy Konarski, and Jacek Kozioł**
- 237 The structure of *N*-aminoazoles: an experimental (X-ray and ^{15}N NMR) and theoretical study **M. de la Concepción Foces-Foces, Félix Hernández Cano, Rosa M. Claramunt, Dionisia Sanz, Javier Catalán, Fernando Fabero, Alain Fruchier, and José Elguero**
- 245 A kinetic study of the 1,3-cycloaddition of benzonitrile oxides to *para*-substituted β -aminocinnamonnitriles **Gioanna Gelli, Enzo Cadoni, Antonello Deriu, and Paolo Beltrame**
- 251 Fast interannular proton transfer in gaseous protonated α,ω -diphenylalkanes: stereocontrol by the cyclohexane-1,4-diyl unit **Dietmar Kuck, Detlef Thömlmann, and Hans-Friedrich Grützmacher**
- 257 Photoreactions of halogeno-1,4-naphthoquinones with electron-rich alkenes **Kazuhiro Maruyama and Hiroshi Imahori**
- 267 Base-initiated Reformatsky condensations in the gas phase **Lyle W. Castle, Roger N. Hayes, and Michael L. Gross**
- 273 Retention of configuration in ligand coupling reactions in σ -sulphuranes **Shigeru Oae, Takashi Takeda, Shoji Wakabayashi, Fujiko Iwasaki, Norimasa Yamazaki, and Yukiteru Katsume**
- 277 Formation of radical cations of polyiodomethanes: a pulse radiolysis study **Hari Mohan and Pervaje N. Moorthy**
- 283 Stereochemistry of benzodiazepine receptor ligands. Possible role of C—H \cdots X interactions in drug–receptor binding and crystal structures of CL218-872, zopiclone and DMCM **Valerio Bertolasi, Valeria Ferretti, Gastone Gilli, and Pier Andrea Borea**
- 291 Thermodynamics of solute transfer from water to hexadecane **Michael H. Abraham, Garry S. Whiting, Richard Fuchs, and Eric J. Chambers**
- 301 Reaction of thiol and selenolo esters of phosphorus acids with halogens. Part 2. Interaction of *S*-methyl t-butyl(phenyl)- and di-t-butyl-phosphinothiolates with elemental bromine and iodine **Bożena Krawiecka and Elżbieta Wojna-Tadeusiak**
- 311 Amidines. Part 30. Influence of substitution at amino nitrogen atom on pK_a values of N^2 -phenylacetamidines and N^2 -phenylformamidines **Janusz Oszczapowicz, Waldemar Krawczyk, and Przemysław Łyżwiński**
- 315 The reaction of coenzyme PQQ with hydrazines **Minae Mure, Kazumi Nii, Teruhisa Inoue, Shinobu Itoh, and Yoshiki Ohshiro**
- 321 Comparative study of mono- and di-substituted 14-crown-4 derivatives as lithium ionophores **Ritu Kataky, Patrick E. Nicholson, and David Parker**
- 329 Accurate calculations of the oxo–hydroxy tautomers of uracil **Ian R. Gould and Ian H. Hillier**
- 331 *ab initio* Study of positive charge stabilization by silicon in five-membered rings **Gen-tai Wang, Dequan Li, Erik C. Chelius, and Joseph B. Lambert**

CONTENTS

- 335 Generation of radical-cations from naphthalene and some derivatives, both by photoionization and reaction with SO_4^{2-} : formation and reactions studied by laser flash photolysis **Steen Steenken, Kathryn J. Warren, and Bruce C. Gilbert**
- 343 ^1H NMR study of the stereochemistry of lubimin and related vetispirane sesquiterpenoids **David F. Ewing, Ian M. Whitehead, Anne Atkinson, and David R. Threlfall**
- 349 Dioxirane chemistry. Part 15. Rate studies on epoxidations by dimethyldioxirane **Robert W. Murray and Dawn L. Shiang**

AUTHOR INDEX

- Abraham, Michael H., 291
Atkinson, Anne, 343
Beltrame, Paolo, 245
Bertolasí, Valerio, 283
Borea, Pier Andrea, 283
Buscemi, Silvestra, 215
Cadoni, Enzo, 245
Cano, Félix Hernández, 237
Castle, Lyle W., 267
Catalán, Javier, 237
Chambers, Eric J., 291
Chelius, Erik C., 331
Claramunt, Rosa M^a., 237
Consiglio, Giovanni, 215
Deriu, Antonello, 245
Elguero, José, 237
Ewing, David F., 343
Fabero, Fernando, 237
Ferretti, Valeria, 283
- Foces-Foces, M^a. de la Concepción, 237
Frenna, Vincenzo, 215
Fruchier, Alain, 237
Fuchs, Richard, 291
Gelli, Gioanna, 245
Gilbert, Bruce C., 335
Gilli, Gastone, 283
Gould, Ian R., 329
Gross, Michael L., 267
Grützmacher, Hans-Friedrich, 251
Hayes, Roger N., 267
Hillier, Ian H., 329
Imahori, Hiroshi, 257
Inoue, Teruhisa, 315
Itoh, Shinobu, 315
Iwasaki, Fujiko, 273
Kataky, Ritu, 321
- Katsube, Yukiteru, 273
Kawasaki, Atsushi, 223
Konarski, Jerzy, 229
Koziol, Jacek, 229
Krawczyk, Waldemar, 311
Krawiecka, Bożena, 301
Kuck, Dietmar, 251
Lambert, Joseph B., 331
Li, Dequan, 331
Łyżwiński, Przemysław, 311
Maruyama, Kazuhiro, 257
Mohan, Hari, 277
Moorthy, Pervaje N., 277
Mure, Minae, 315
Murray, Robert W., 349
Nicholson, Patrick E., 321
Nii, Kazumi, 315
Oae, Shigeru, 273
- Ohshiro, Yoshiki, 315
Oszczapowicz, Janusz, 311
Parker, David, 321
Sanz, Dionisia, 237
Shiang, Dawn L., 349
Spinelli, Domenico, 215
Steenken, Steen, 335
Szymborska, Henryk, 229
Takeda, Takashi, 273
Thömlmann, Detlef, 251
Threlfall, David R., 343
Wakabayashi, Shoji, 273
Wang, Gen-tai, 331
Warren, Cathryn J., 335
Whitehead, Ian M., 343
Whiting, Garry S., 291
Wojna-Tadeusia, Elżbieta, 301
Yamazaki, Norimasa, 273

Deposition of Crystallographic Data

To assist the Cambridge Crystallographic Data Centre in handling data submitted for deposition, authors are asked to include with their manuscript a completed abstract form for each crystallographic determination. A blank form is reproduced, for photocopying, on the following pages.

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

