

JOURNAL OF THE CHEMICAL SOCIETY

Perkin Transactions II

Physical Organic Chemistry

CONTENTS

- 1695 Acyl derivatives of cyclic secondary amines. Part 1. Dipole stabilization of anions: the cumulative effect of two stabilizing groups **Alan R. Katritzky, Ramiah Murugan, Hudson Luce, Michael Zerner, and George P. Ford**
- 1701 Acyl derivatives of cyclic secondary amines. Part 2. Dynamic ^1H and ^{13}C nuclear magnetic resonance studies on bis- and tris-amines: equilibria of *syn-anti* interconversion **Alan R. Katritzky, Ramiah Murugan, Hudson Luce, Ban Chin Chen, Wallace S. Brey, and Michael C. Zerner**
- 1707 Nuclear magnetic resonance investigations of calcium-antagonist drugs. Part 1. Conformational and dynamic features of nimodipine {3-[(2-methoxyethoxy)carbonyl]-5-(isopropoxycarbonyl)-4-(3-nitrophenyl)-2,6-dimethyl-1,4-dihydropyridine} in [$^2\text{H}_6$]dimethyl sulphoxide **Elena Gaggelli, Nadia Marchettini, and Gianni Valensin**
- 1713 A calorimetric study of complex formation between molecular iodine and pyridine or 2-ethylpyridine in weakly polar solvents **Irmira Uruska and Malgorzata Koschmidder**
- 1717 Kinetics and mechanism for the formation of phenylhydrazone from benzaldehydes, naphthaldehydes, and formyl-1,6-methano[10]annulenes **Neusa M. Somera, Antonia S. Stachissini, Antonia T. do Amaral, and Luciano do Amaral**
- 1723 Solvent effect on activation parameters for the neutral hydrolysis of phenyl trifluoroacetates in aqueous acetonitrile **Helmi Neuvonen**
- 1727 Continuous wave carbon dioxide laser-driven oxidation of tetrafluoroethene with molecular oxygen **Josef Pola and Jifi Ludvik**
- 1733 Carbon-13 chemical shifts of methanolic carbon and electron reorganization induced by hydrogen bonding for methanol-base complexes **Marie-Christine Moreau Descoings, Gérard Goethals, Jean-Paul Seguin, and Jean-Pierre Doucet**
- 1739 Structural studies of the interaction between indole derivatives and biologically important aromatic compounds. Part 19. Effect of base methylation on the ring-stacking interaction between tryptophan and guanine derivatives: a nuclear magnetic resonance investigation **Katsuhisa Kamiichi, Mitsunobu Doi, Michiko Nabae, Toshimasa Ishida, and Masatoshi Inoue**
- 1747 Hexamethylmelamine: a study of solvation and crystallisation **Manuel J. Aroney, Trevor W. Hambley, Emilios Patsalides, Raymond K. Pierens, Hak-Kim Chan, and Igor Gonda**
- 1753 1,3 Silicon to silicon migration of the methoxy group in solvolysis of (bromodiphenylsilyl)(methoxydimethylsilyl)bis(trimethylsilyl)methane. Crystal structures of (ethoxydimethylsilyl)(methoxydiphenylsilyl)bis(trimethylsilyl)methane and (methoxydimethylsilyl)(methoxydiphenylsilyl)bis(trimethylsilyl)methane **Nabeel H. Buttrus, Colin Eaborn, Peter B. Hitchcock, Paul D. Lickiss, and Sabah T. Najim**
- 1759 Kinetic study of the phenylurea-nitrous acid reaction: evidence for an *O*-nitrosation initial step **Francisco Meijide, José Vázquez Tato, Julio Casado, Albino Castro, and Manuel Mosquera**
- 1767 The rearrangement of aromatic nitro compounds. Part 1. The reactions of nitroanilines in aqueous sulphuric acid **J. Timothy Murphy and John H. Ridd**
- 1773 Homolytic reactions of ligated boranes. Part 7. An electron spin resonance study of the *t*-butyl isocyanide-boryl radical **Iain G. Green, Reggie L. Hudson, and Brian P. Roberts**

- 1781 Nucleophilic aromatic substitution: transmission of substituent effects in alkaline hydrolysis of 4-aminophenylazobenzothiazolium dyes **Augustine P. D'Rozario, Andrew Williams, and Brian Parton**
- 1785 Nucleophilic aromatic substitution: effect of complexation on the alkaline hydrolysis of 4-aminophenylazobenzothiazolium dyes **Augustine P. D'Rozario, Andrew Williams, and Brian Parton**
- 1789 Hydrogen abstraction from primary amines. Substituent effects on the carbon–nitrogen bond rotation barriers in aminoalkyl radicals **Iain MacInnes, John C. Walton, and Derek C. Nonhebel**
- 1795 Radical cations from alkyl iodides in aqueous solution **Hari Mohan and Klaus-Dieter Asmus**
- 1801 An electron spin resonance investigation of free radicals with oxygen- and sulphur-containing substituents **Athelstan L. J. Beckwith and Steven Brumby**
- 1809 Dynamics of internal rotation in 2-(cycloalkenyl)ethyl radicals **John C. Walton**
- 1815 Formation of hydrogen-bonded complexes between phenol and some heterocyclic bases in carbon tetrachloride **Miklós Orbán, Ágnes Kiss, and Lajos Barcza**
- 1819 An MNDO SCF-MO study of the mechanism of the benzoic acid and related rearrangements **Indira Rajyaguru and Henry S. Rzepa**
- 1829 Substituent effect on the spin-trapping reactions of substituted *N*-benzylidene-*t*-butylamine *N*-oxides **Katsumi Murofushi, Kazuhisa Abe, and Minoru Hirota**
- 1835 Crystal structures and photoelectron spectra of some trimethanoanthracenes, tetramethanonaphthalenes, and pentamethanopentacenes. Experimental evidence for laticyclic hyperconjugation **Michael N. Paddon-Row, Lutz M. Englehardt, Brian W. Skelton, Allan H. White, Flemming S. Jørgensen, and Harish K. Patney**
- 1851 Conformational analysis of organic carbonyl compounds. Part 8. Conformational properties of aroyl derivatives of thiophene and benzo[*b*]thiophene studied by *X*-ray crystallography, nuclear magnetic resonance lanthanide-induced shifts spectroscopy, and MO *ab initio* calculations **Rois Benassi, Ugo Folli, Dario Iarossi, Amos Musatti, Mario Nardelli, Luisa Schenetti, and Ferdinando Taddei**
- 1861 Kinetics of the reactions of silicon compounds. Part 11. Kinetics and mechanism of the gas-phase photochemical reactions between trimethylsilane and 1,1-difluoroethylene **Stuart A. Barker, Robert N. Haszeldine, and Peter J. Robinson**
- 1867 Electrophilic substitution of heteroaromatic compounds. Part 54. Intramolecular base-catalysed hydrogen exchange at the 3-position in substituted pyridines **Alan R. Katritzky and Ramiah Murugan**
- 1871 Triazene drug metabolites. Part 6. The interaction of *N*-hydroxymethyltriazenes with lanthanide-induced shift reagents **Shee C. Cheng and Jim Iley**
- 1877 Lactone formation in superacidic media **Graham Carr and David Whittaker**
- 1881 Synthesis and mesogenic properties of *N'*-(4-acylphenyl)-*N*-alkylpiperazines **Juan Bartulin, Celia Zuñiga, Hedio Muller, and Ted R. Taylor**
- 1887 Electrochemical reduction of *N*-(2,2,2-trichloroethyl)acetamides **Maria Antonietta Casadei, Franco Micheletti Moracci, Donatella Occhialini, and Achille Inesi**
- 1893 Propentdyopents and related compounds. Part 3. Some semiempirical calculations on propentdyopent systems **Raymond Bonnett and María Asunción Vallés**
- 1899 Catalysed decomposition of bis(ethoxythiocarbonyl) sulphide with tributylphosphine. A kinetic study in dimethyl sulphoxide, acetonitrile, and their mixtures with toluene **M. Stella Giovanetti, José G. Santos, and Fernando Ibáñez**
- 1903 Variation in the hydrophilicity of hexapyranose sugars explains features of the anomeric effect **Malcolm D. Walkinshaw**
- 1907 The effects of ionizing radiation on deoxyribonucleic acid. Part 5. The rôle of thiols in chemical repair **Paul M. Cullis, George D. D. Jones, Jeremy Lea, Martyn C. R. Symons, and Marion Sweeney**
- S1 Tables of bond lengths determined by *X*-ray and neutron diffraction. Part 1. Bond lengths in organic compounds **Frank H. Allen, Olga Kennard, David G. Watson, Lee Brammer, A. Guy Orpen, and Robin Taylor**

AUTHOR INDEX

- Abe, Kazuhisa, 1829
Allen, Frank H., S1
Aroney, Manuel J., 1747
Asmus, Klaus-Dieter, 1795
Barcza, Lajos, 1815
Barker, Stuart A., 1861
Bartulin, Juan, 1881
Beckwith, Athelstan L. J., 1801
Benassi, Rois, 1851
Bonnett, Raymond, 1893
Brammer, Lee, S1
Brey, Wallace S., 1701
Brumby, Steven, 1801
Buttrus, Nabeel H., 1753
Carr, Graham, 1877
Casadei, Maria Antonietta, 1887
Casado, Julio, 1759
Castro, Albino, 1759
Chan, Hak-Kim, 1747
Chen, Ban Chin, 1701
Cheng, Shee C., 1871
Cullis, Paul M., 1907
D'Rozario, Augustine P., 1781, 1785
do Amaral, Antonia, T, 1717
do Amaral, Luciano, 1717
Doi, Mitsunobu, 1739
Doucet, Jean-Pierre, 1733
Eaborn, Colin, 1753
Englehardt, Lutz M., 1835
Folli, Ugo, 1851
Ford, George P., 1695
Gaggelli, Elena, 1707
Giovannetti, M. Stella, 1899
Goethals, Gérard, 1733
Gonda, Igor, 1747
Green, Iain G., 1773
Hambley, Trevor W., 1747
Haszeldine, Robert N., 1861
Hirota, Minoru, 1829
Hitchcock, Peter B., 1753
Hudson, Reggie L., 1773
Iarossi, Dario, 1851
Ibáñez, Fernando, 1899
Iley, Jim, 1871
Inesi, Achille, 1887
Inoue, Masatoshi, 1739
Ishida, Toshimasa, 1739
Jørgensen, Flemming S., 1835
Jones, George D. D., 1907
Kamiichi, Katsuhisa, 1739
Katritzky, Alan R., 1695, 1701, 1867
Kennard, Olga, S1
Kiss, Ágnes, 1815
Koschmidder, Małgorzata, 1713
Lea, Jeremy, 1907
Lickiss, Paul D., 1753
Luce, Hudson, 1695, 1701
Ludvik, Jifí, 1725
MacInnes, Iain, 1789
Marchettini, Nadia, 1707
Meijide, Francisco, 1759
Micheletti, Moracci, Franco, 1887
Mohan, Hari, 1795
Moreau Descoings, Marie-Christine, 1733
Mosquera, Manuel, 1759
Muller, Hedio, 1881
Murofushi, Katsumi, 1829
Murphy, J. Timothy, 1767
Murugan, Ramiah, 1695, 1701, 1867
Musatti, Amos, 1851
Nabae, Michiko, 1739
Najim, Sabah T., 1753
Nardelli, Mario, 1851
Neuvonen, Helmi, 1723
Nonhebel, Derek C., 1789
Occhialini, Donatella, 1887
Orbán, Miklós, 1815
Orpen, A. Guy, S1
Paddon-Row, Michael N., 1835
Parton, Brian, 1781, 1785
Patney, Harish K., 1835
Patsalides, Emiliós, 1747
Pierens, Raymond K., 1747
Pola, Josef, 1725
Rajyaguru, Indira, 1819
Ridd, John H., 1767
Roberts, Brian P., 1773
Robinson, Peter J., 1861
Rzepa, Henry S., 1819
Santos, José G., 1899
Schenetti, Luisa, 1851
Seguin, Jean-Paul, 1733
Skelton, Brian W., 1835
Somera, Neusa M., 1717
Stachissini, Antonia S., 1717
Sweeney, Marion, 1907
Symons, Martyn C. R., 1907
Taddei, Ferdinando, 1851
Taylor, Robin, S1
Taylor, Ted R., 1881
Uruska, Irmina, 1713
Valensin, Gianni, 1707
Vázquez Tato, José, 1759
Vallés, María Asunción, 1893
Walkinshaw, Malcolm D., 1903
Walton, John C., 1789, 1809
Watson, David G., S1
White, Allan H., 1835
Whittaker, David, 1877
Williams, Andrew, 1781, 1785
Zerner, Michael C., 1695, 1701
Zuñiga, Celia, 1881

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

