

JOURNAL OF THE CHEMICAL SOCIETY

Perkin Transactions II

Physical Organic Chemistry

CONTENTS

- 1449 Termination reactions of C₅—C₁₂ cycloalkyl radicals and carbenes **László Wojnárovits**
- 1453 Inclusion complexes of pyrenylbutyrate with γ -cyclodextrin **William G. Herkstroeter, Peter A. Martic, and Samir Farid**
- 1459 X-Ray and infrared spectral studies of the ionic structure of trimethoprim-sulfamethoxazole 1:1 molecular complex **Hiroshi Nakai, Mamoru Takasuka, and Motoo Shiro**
- 1465 Experimental and theoretical studies on physicochemical properties of novel six-membered cyclic α -monocarbonyl azo-compounds **Masayuki Kuzuya, Fumio Miyake, and Takachiyo Okuda**
- 1471 A novel regiospecific intramolecular cycloaddition of an aromatic ring. Molecular orbital study of conjugated ketenes thermally generated from six-membered α -monocarbonyl azo-compounds. **Masayuki Kuzuya, Fumio Miyake, and Takachiyo Okuda**
- 1479 Conformational analysis of organic carbonyl compounds. Part 4. A ¹H and ¹³C nuclear magnetic resonance study of formyl and acetyl derivatives of benzo[*b*]furan **Rois Benassi, Ugo Folli, Dario Iarossi, Luisa Schenetti, and Ferdinando Taddei**
- 1487 The observation of remarkable effects of remotely connected but spatially proximate hydroxy-groups on the rates and regiochemistry of the Birch reduction of aromatic rings and double bonds. **Evangelo Cotsaris and Michael N. Paddon-Row**
- 1501 A linear dichroism study of the 1,4-naphthoquinone chromophore **Giovanni Gottarelli and Gian P. Spada**
- 1505 Electronic interaction in heterosubstituted acetones studied by means of ultraviolet photoelectron and electron transmission spectroscopy **Paulo R. Olivato, Sandra A. Guerrero, Alberto Modelli, Gaetano Granozzi, Derek Jones, and Giuseppe Distefano**
- 1511 An X-ray crystallographic, ¹H nuclear magnetic resonance, and MNDO SCF-MO conformational study of *o*-substituted *N*-benzylbenzothiohydroxamic acids **Ana M. Lobo, Sundaresan Prabhakar, M. Amelia Santos, Henry S. Rzepa, and David J. Williams**
- 1517 Through-bond effects in pyrazino[2,3-*b*]pyrazine. Photoelectron spectroscopy and model calculations **Rolf Gleiter, Jens Spanget-Larsen, and Wilfred L. F. Armarego**
- 1521 Kinetics of the decomposition of 1-aryl-2,2,2-trihalogenoethanols in aqueous base **Hilvania Silva e Lins, Faruk Nome, Marcos Caroli Rezende, and Iolanda de Sousa**
- 1527 Intermediates in the decomposition of aliphatic diazo-compounds. Part 19. Kinetics and mechanism of the reactions of 9-diazofluorene cation radical **Iftikhar Ahmad, Donald Bethell, and Vernon D. Parker**
- 1531 Intermediates in the decomposition of aliphatic diazo-compounds. Part 20. Kinetic studies on reductively initiated electron transfer chain catalysis of the decomposition of 9-diazofluorene **Donald Bethell, Linda J. McDowell, and Vernon D. Parker**
- 1537 Factors governing product distribution in the oxidation of alkenes by manganese(III) acetate in acetic acid and acetic anhydride **Gary Midgley and C. Barry Thomas**

- 1545 Relationships of the ^{15}N nuclear magnetic resonance chemical shift and the $^{15}\text{N}-^1\text{H}$ spin coupling constant to the infrared stretching frequency of the amino group in saturated primary amines and anilines **Mamoru Takasuka and Yoshihiro Terui**
- 1551 Amine radical cations: an electron spin resonance study of cations generated by radiolysis **George W. Eastland, D. N. Ramakrishna Rao, and Martyn C. R. Symons**
- 1559 The relationship between nonaqueous hydrogen bonding and aqueous acidities **Stephen E. Schullery and Ronald M. Scott**
- 1567 Computer calculations as an aid to drug design: more stable compounds related to thromboxane A₂ **J. Michael Williams**
- 1569 X-Ray crystallographic evidence for intermolecular hydrogen bonding, including a bifurcated hydrogen bond, between nitro and hydroxy groups in two 3-chloro-6-nitrobicyclo[2.2.1]heptan-2-ols **Jan C. A. Boeyens, Louis Denner, and Joseph P. Michael**
- 1575 Reactions of oxygenated radicals in the gas phase. Part 16. Decomposition of isopropoxyl radicals **Najah Y. Al Akeel and David J. Waddington**
- 1581 The back-and-forwards flipping of t-butyl groups in 1,8-di-t-butylnaphthalenes **J. E. Anderson and R. W. Franck**
- 1583 Amine oxidation. Part 15. A product and stoichiometric study of the oxidation of amino alcohols by vanadium(V) ions in aqueous perchloric acid **Richard J. Hutchinson, John R. Lindsay Smith, and Martyn V. Twigg**

AUTHOR INDEX

- Ahmad, Iftikhar, 1527
Al Akeel, Najah Y., 1575
Anderson, J. E., 1581
Armarego, Wilfred L. F., 1517
Benassi, Rois, 1479
Bethell, Donald, 1527, 1531
Boeyens, Jan C. A., 1569
Cotsaris, Evangelo, 1487
de Sousa, Iolanda, 1521
Denner, Louis, 1569
Distefano, Giuseppe, 1505
Eastland, George W., 1551
Farid, Samir, 1453
Folli, Ugo, 1479
Franck, R. W., 1581
- Gleiter, Rolf, 1517
Gottarelli, Giovanni, 1501
Granozzi, Gaetano, 1505
Guerrero, Sandra A., 1505
Herkstroeter, William G., 1453
Hutchinson, Richard J., 1583
Iarossi, Dario, 1479
Jones, Derek, 1505
Kuzuya, Masayuki, 1465, 1471
Lindsay Smith, John R., 1583
Lins, Hilvania Silva e, 1521
Lobo, Ana M., 1511
Martic, Peter A., 1453
McDowell, Linda J., 1531
Michael, Joseph P., 1569
- Midgely, Gary, 1537
Miyake, Fumio, 1465, 1471
Modelli, Alberto, 1505
Nakai, Hiroshi, 1459
Nome, Faruk, 1521
Okuda, Takachiyo, 1465, 1471
Olivato, Paulo R., 1505
Paddon-Row, Michael N., 1487
Parker, Vernon D., 1527, 1531
Prabhakar, Sundaresan, 1511
Rao, D. N. Ramakrishna, 1551
Rezende, Marcos Caroli, 1521
Rzepa, Henry S., 1511
Santos, M. Amelia, 1511
Schenetti, Luisa, 1479
- Schullery, Stephen E., 1559
Scott, Ronald M., 1559
Shiro, Motoo, 1459
Spada, Gian P., 1501
Spanget-Larsen, Jens, 1517
Symons, Martyn C. R., 1551
Taddei, Ferdinando, 1479
Takasuka, Mamoru, 1459, 1545
Terui, Yoshihiro, 1545
Thomas, C. Barry, 1537
Twigg, Martyn V., 1583
Waddington, David J., 1575
Williams, David J., 1511
Williams, J. Michael, 1567
Wojnárovits, László, 1449

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

