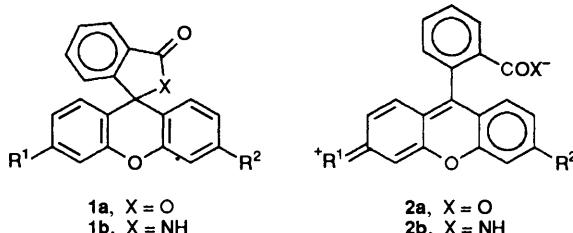


JOURNAL OF THE CHEMICAL SOCIETY
Perkin Transactions 2
Physical Organic Chemistry

CONTENTS**Perkin Communications**

1397 Theoretical study of the solvatochromic properties of rhodamines using the AM1 and PM3/COSMO solvation model

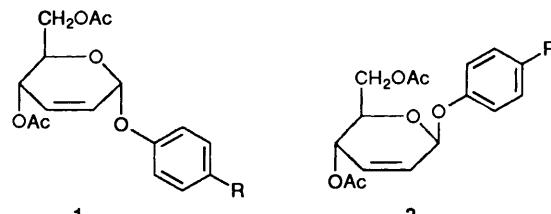


Henry S. Rzepa and Guillermo A. Suñer

AM1 and PM3/COSMO calculations reproduce the solvatochromic properties of rhodamine colour formers

1399 Aromatic Claisen rearrangements in carbohydrates: stereocontrol of rearrangement rates in unsaturated sugar substrates

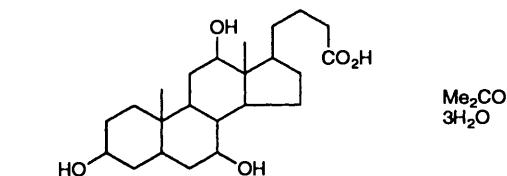
K. K. Balasubramanian, N. G. Ramesh, Animesh Pramanik and Jayaraman Chandrasekhar



2 Rearranges much faster than 1 due to conformational differences in the transition states

1403 Crystal structure and multiphase decomposition of a novel cholic acid inclusion compound with mixed guests

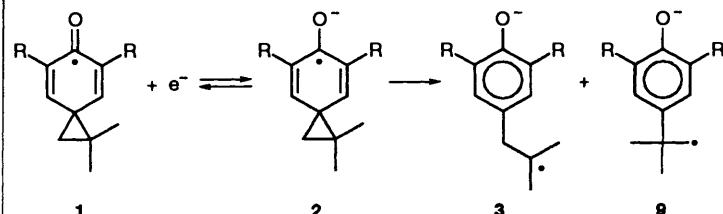
Mino R. Caira, Luigi R. Nassimbeni and Janet L. Scott



Cholic acid forms an inclusion compound with mixed guests, acetone and water, which decomposes via an intermediate phase shown to be that of the hemihydrate

1407 Characterization of a 'hypersensitive' probe for single electron transfer to carbonyl compounds

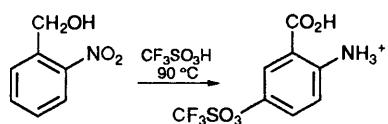
James M. Tanko, Larry E. Brammer, Jr., Manuel Hervas' and Kevin Campos



Electrochemical reduction of the spirodienone 1 yields radical anion 2 which ring opens to 3° and 1° distonic radical anions 3 and 9 in a 9:1 ratio at a rate constant $\geq 10^7 \text{ s}^{-1}$

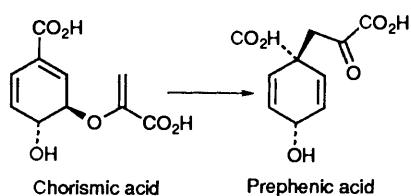
Articles

1411 Oxidation-reduction reactions involving nitro groups in trifluoromethanesulfonic acid. Part 3. The reactions of 2-nitrobenzyl alcohol and related compounds



Rupert P. Austin and John H. Ridd

1415 Claisen rearrangement of chorismic acid and related analogues: an *ab initio* molecular orbital study



Mark M. Davidson and Ian H. Hillier

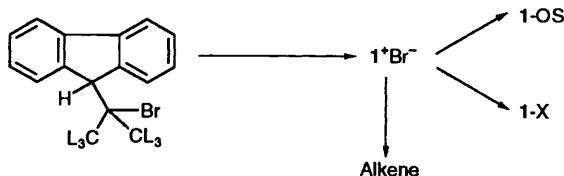
1419 Ring opening of α -pinene epoxide



Graham Carr, Gurinder Dosanjh, Andrea P. Millar and David Whittaker

The acid-catalysed ring opening of α -pinene epoxide is believed to proceed by initial carbon-to-carbon bond fission, followed by cleavage of the heterocyclic ring produced, and expansion of the cyclobutane ring to give the observed products

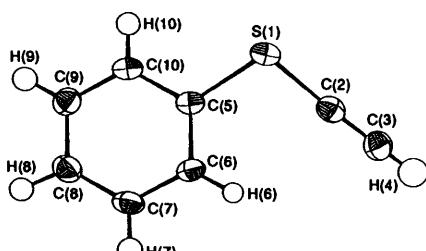
1423 Mechanisms of competing solvolytic elimination and substitution reactions. The role of ion-pair intermediates in aqueous solvents



Alf Thibblin and Harvinder Sidhu

1429 The structure of phenylsulfanylacetylene, PhSCCH, as determined in the gas phase by electron diffraction, in the crystalline phase at 150 K by X-ray diffraction and by *ab initio* computations

Alexander J. Blake, Paul T. Brain, Robert O. Gould, Hamish McNab, David W. H. Rankin, Heather E. Robertson, Pedro Amaro, Isabelle Landelle and Michael Bühl

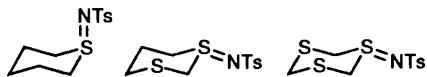


1435 Kinetic solvent isotope effects and activation parameters for the intramolecular addition–elimination between amino and amide groups in 1-amino-8-trifluoroacetylnaphthalene under acidic conditions



Andrew S. Baynham and Frank Hibbert

1439 Conformational preferences of sulfimides

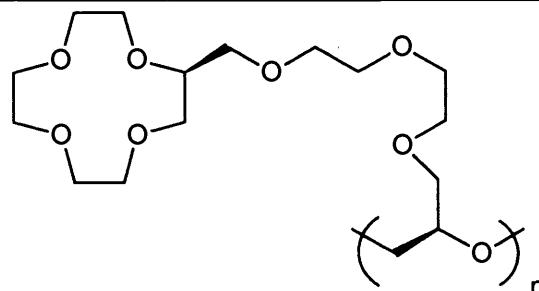


Attractive and repulsive special *gauche* effects are sufficient to rationalise the conformational preferences of sulfimides of six-membered cyclic sulfides

William Errington, Tim J. Sparey and Paul C. Taylor

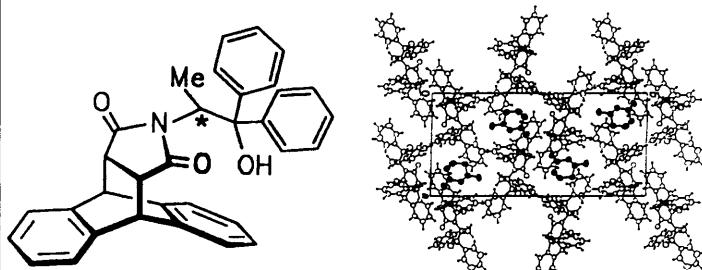
1445 Synthesis of crown ether polymers incorporating 12- and 13-membered tetraoxa rings linked to poly(propylene oxide) and poly(phosphazene) backbones and behaviour of the lithium-doped materials

James E. Denness, David Parker and Hugh St. V. A. Hubbard



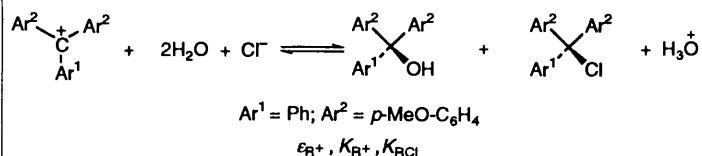
1455 Alanine-derived hosts comprising a roof-shaped carbonimide framework. Synthesis, inclusion formation and X-ray crystal structures of racemic and optically resolved free hosts, and their crystalline complexes with 3-methylcyclohexanone

Edwin Weber, Christiane Reutel, Concepción Foces-Foces and Antonio L. Llamas-Saiz



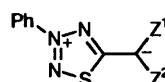
1463 Molar absorptivity and pK_{R^+} of the 4,4'-dimethoxytrityl carbenium ion in methanolic water, and its equilibrium with chloride ion

Won Heui Lee and H. Maskill



1467 Multinuclear NMR study of some mesoionic 3-phenyl-1-thia-2,3,4-triazol-3-iium-5-ylmethanides with various exocyclic groups

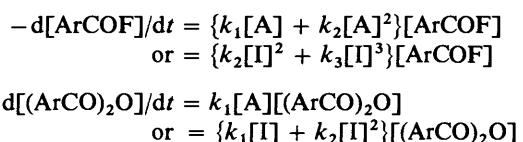
Wojciech Bocian, Jarosław Jaźwiński, Lech Stefaniak and Graham A. Webb



${}^1J({}^{13}\text{C}-{}^{13}\text{C}), {}^{13}\text{C}$ NMR, ${}^{15}\text{N}$ NMR

1471 Kinetics of aminolysis of some benzoyl fluorides and benzoic anhydrides in non-hydroxylic solvents

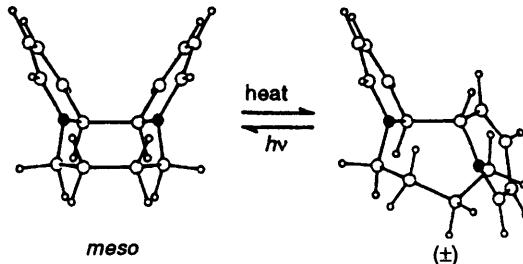
Maria Jedrzejczak, Richard E. Motie, Derek P. N. Satchell, Rosemary S. Satchell and Wasfy N. Wassef



A = RNH₂ or R₂NH; I = imidazole or substituted imidazole

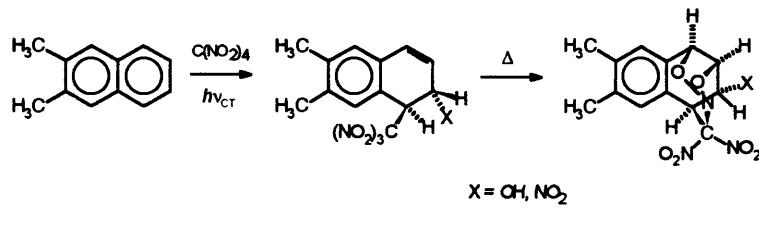
1481 Thermal and photochemical behaviour, structure and bonding of the stereoisomers of 6,7,8,9,14a,14b-hexahydrodipyrido[1,2-a:2',1'-c][1,4]diazocine

Takashi Muramatsu, Azumao Toyota and Yusaku Ikegami



1485 Photochemical nitration by tetranitromethane. Part XVIII. The regiochemistry of nitrito/trinitromethyl and nitro/trinitromethyl addition to 2,3-dimethylnaphthalene: thermal 1,3-dipolar additions of nitro groups to alkenes

Craig P. Butts, Jane L. Calvert, Lennart Eberson, Michael P. Hartshorn, Finn Radner and Ward T. Robinson



1491 Solvent effects on chemical processes. Part 6. The phenomenological model applied to the solubility of naphthalene and 4-nitroaniline in binary aqueous-organic solvent mixtures

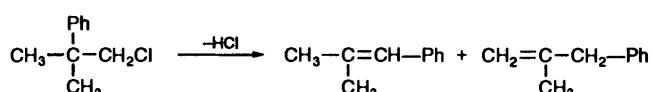
Jason M. LePree, Michael J. Mulski and Kenneth A. Connors

$$\delta_M \Delta G_{\text{soln}}^* = \Delta G_{\text{soln}}^*(x_2) - \Delta G_{\text{soln}}^*(x_2 = 0)$$

$$\delta_M \Delta G_{\text{soln}}^* = \frac{(gA\gamma' - kT \ln K_1)K_1 x_1 x_2 + (2gA\gamma' - kT \ln K_1 K_2)K_1 K_2 x_2^2}{x_1^2 + K_1 x_1 x_2 + K_1 K_2 x_2^2}$$

1499 Phenyl migration in the molecular pyrolytic elimination of 1-chloro-2-methyl-2-phenylpropane in the gas phase

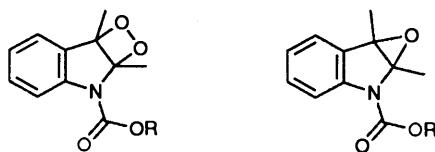
Gabriel Chuchani and Rosa M. Domínguez



Phenyl migration was the prevailing pathway for the rearrangement process

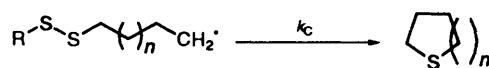
1503 Indole dioxetanes and epoxides by oxidation of N-acylated indoles with singlet oxygen and dimethyldioxirane: kinetics and chemiluminescence yields of the thermal dioxetane decomposition and fluoride ion-induced CIEEL emission

Waldemar Adam and Dirk Reinhardt



Synthesis of persistent N-acylated indole dioxetanes and epoxides; kinetics and chemiluminescence yields of the thermal dioxetane decomposition and fluoride ion-triggered CIEEL emission

1509 Kinetics of intramolecular alkyl radical attack on sulfur in disulfides and thioesters

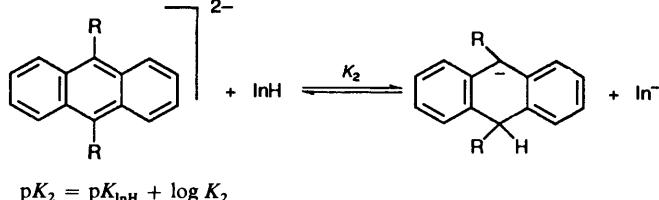


Athelstan L. J. Beckwith and Sandhya A. M. Duggan

The rate constants for ring closure by $\text{S}_\text{H}\cdot$ on sulfur when n is 1 or 2 and R is alkyl or acyl have been determined and compared with those for intermolecular reactions

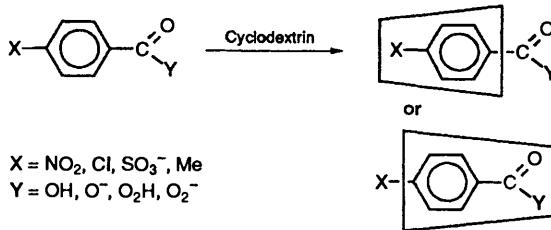
1519 Acidity of dibasic acids I: the second acidity constant of 9,10-dihydroanthracene and its 9,10-substituted derivatives: effect of substituent and counter ion

Israel O. Shapiro, Malka Nir, Roy E. Hoffman and Mordecai Rabinovitz



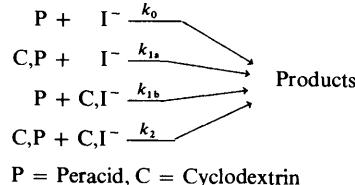
1525 Cyclodextrin complexes of substituted perbenzoic and benzoic acids and their conjugate bases: free energy relationships show the interaction of polar and steric factors

D. Martin Davies and James R. Savage



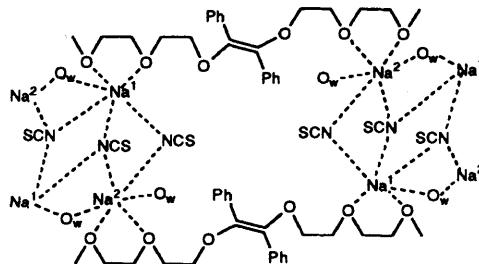
1531 Multiple pathways in the α -cyclodextrin catalysed reaction of iodide and substituted perbenzoic acids

D. Martin Davies, G. Alun Garner and James R. Savage



1539 Formation and X-ray analysis of the supramolecular system obtained by the complexation of (*E*)-9,10-diphenyl-2,5,8,11,14,17-hexaoxaoctadec-9-ene with sodium thiocyanate. A new coordination type for SCN^-

Bernard Tinant, Jean-Paul Declercq and Josy Weiler



1545 Photochemistry of triethylamine–acid chloride charge-transfer complexes

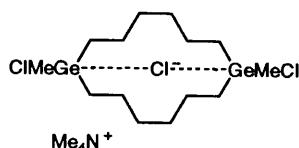
Suresh Das, C. S. Rajesh, T. L. Thanulingam, D. Ramaiah and M. V. George



Charge-transfer photochemistry of triethylamine–acid chloride complexes have been examined and this provides a cyclization route as illustrated in the synthesis of 3-methylchroman-4-one from *O*-allylsalicylyl chloride

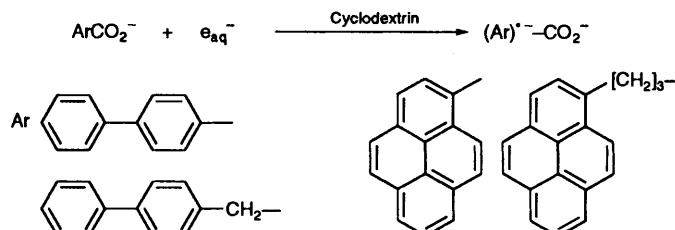
1549 1,8-Dimethyl-1,8-dihalo-1,8-digermacyclotetradecanes. The first germamacrocycles with anion transport capability

Shigenobu Aoyagi, Katsumi Tanaka and Yoshito Takeuchi



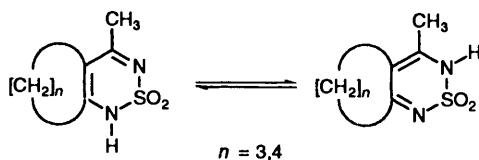
1555 Pulse radiolysis of aromatic carboxylates in aqueous solution and effect of cyclodextrin complexation on the one-electron reduction by the hydrated electron

Yukio Yamamoto



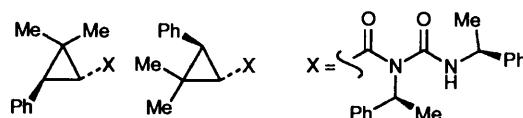
1561 Tautomerism of benzo- and cyclopenta-[1,2,3]thiadiazine S,S-dioxides

Ana Castro and Ana Martínez



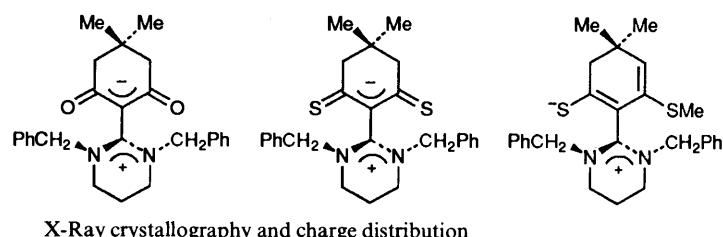
1565 Conformation of N-cyclopropylcarbonylureas. Solvent polarity dependent chemical shifts

Shigeo Kohmoto, Hideaki Kasimura, Takehiko Nishio, Ikuo Iida, Keiki Kishikawa, Makoto Yamamoto and Kazutoshi Yamada



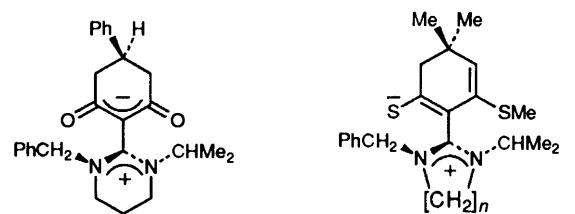
1569 Twist angles and bond lengths in three twisted push-pull ethylenes. Interplay between steric and electronic effects

Agha Zul-Qarnain Khan, Fen-Ling Liao, Jan Sandström and Sue-Lein Wang

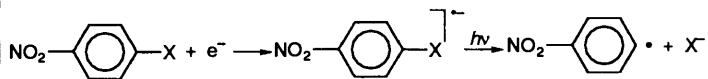


1575 Enantiomer and diastereoisomer resolution, rotational barriers, and CD and UV spectra of some twisted push-pull ethylenes

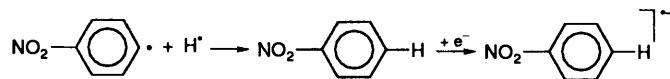
Agha Zul-Qarnain Khan and Jan Sandström



1581 Photoelectrochemical reduction of *p*-halo-nitrobenzenes

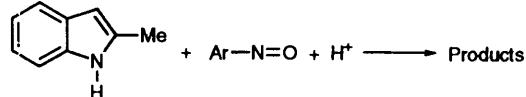


Richard G. Compton, Robert A. W. Dryfe and Adrian C. Fisher



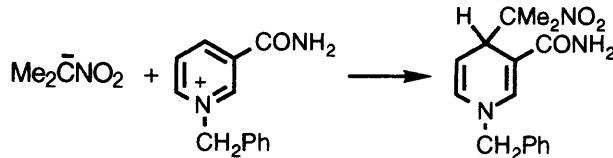
1589 Nitrenium ions. Part 1. Acid-catalysed reactions of 2-methylindole with nitrosobenzenes. Crystal structures of 2-phenylamino-3-phenylimino-3*H*-indole, 2-(*o*-tolylamino)-3-(*o*-tolylimino)-3*H*-indole, *N*-phenyl-*N*-(2-phenylamino)-3*H*-indol-3-ylidene)amine *N*-oxide and bis(2-methyl-1*H*-indol-3-yl)methane

Liberato Cardellini, Patricia Carloni, Elisabetta Damiani, Lucedio Greco, Pierluigi Stipa, Corrado Rizzoli and Paolo Sgarabotto



2-Methylindole reacts with nitrosobenzenes activated with acid to give compounds which indicate the presence of a nitrenium ion through the formation of carbon–nitrogen bonds; the reaction has been interpreted as a competition between electrophilic attack and electron transfer process

1597 Regioselective addition of 2-nitropropane anion to NAD⁺ analogues

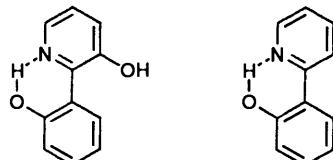


Shunichi Fukuzumi, Morifumi Fujita, Junichi Maruta and Michel Chanon

Regioselective addition of the tetramethylammonium salt of 2-nitropropane to NAD⁺ analogues has been investigated

1603 Structure and photophysics of deazabipyridyls. Excited internally hydrogen-bonded systems with one proton transfer reaction site

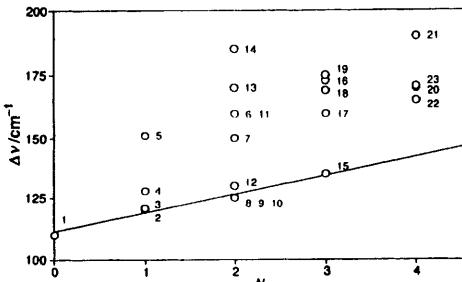
Łukasz Kaczmarek, Roman Balicki, Janusz Lipkowski, Paweł Borowicz and Anna Grabowska



Proton transfer reaction in S₁ state is discussed

1611 Complexes of ketones with SbF₅ in the condensed phase. Structural effects on the carbonyl stretching frequencies

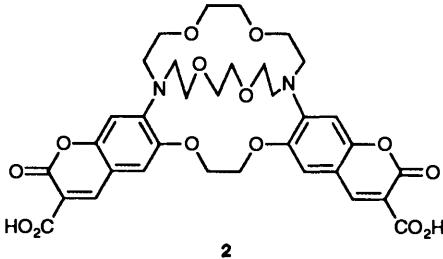
Hrvoj Vančik, Vesna Gabelica, Zlatko Mihalić and Dionis E. Sunko



The relationship of experimental $\Delta\nu [\nu_{\text{C}=\text{O}}(\text{ketone}) - \nu_{\text{C}=\text{O}}(\text{complex})]$ vs. N (number of C_α-C_β bonds)

1615 Synthesis and properties of a potential extracellular fluorescent probe for potassium

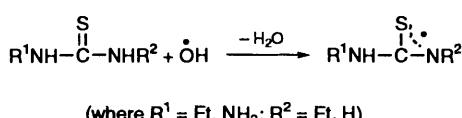
Roger Crossley, Zia Goolamali and Peter G. Sammes



Compound **2** shows high, selective affinity for potassium ions, with K_D values in the range 1–10 mmol dm⁻³ of potential value as an extracellular potassium probe

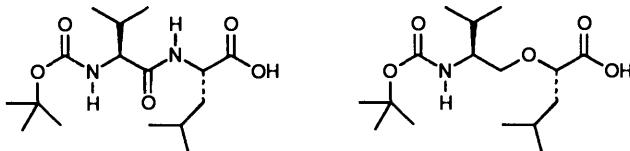
1625 Nature of the transient species formed in the pulse radiolysis of some thiourea derivatives

Ghasi Ram Dey, Devidas B. Naik, Kamal Kishore and Pervaje N. Moorthy



1631 Insertion of the methylene-oxy surrogate of the amide bond into Boc-Val-Leu-OH: X-ray crystal structure, solution conformation and molecular modelling study

Gérald Villeneuve, John DiMaio, Marc Drouin and André G. Michel



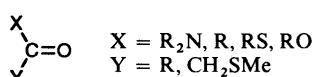
1641 Using theoretical descriptors in quantitative structure–property relationships: 3-carboxybenzisoxazole decarboxylation kinetics

George R. Famini and Leland Y. Wilson

Decarboxylation rate data of substituted 3-carboxybenzisoxazoles in various solvents is correlated with computationally derived molecular parameters involving size, polarizability, acidity and basicity

1651 *Ab initio* and electron spectroscopy study of carbonyl derivatives

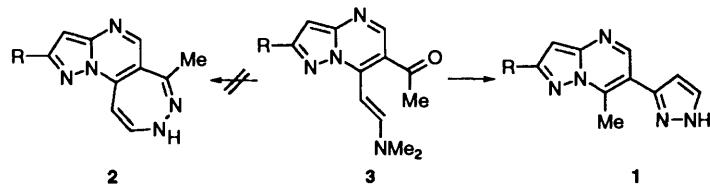
Derek Jones, Alberto Modelli, Paulo R. Olivato, Maurizio Dal Colle, Marcello de Palo and Giuseppe Distefano



Filled and empty MO energies and electron charge distribution give information on the interactions between the carbonyl and X and Y groups

1657 Chemistry of substituted pyrazolo[1,5-*a*]-pyrimidines. Part 4. A structural correction of a series of pyrazolo[5',1':2,3]pyrimido[5,4-*d*]-[1,2]diazepines on the basis of NMR spectroscopy and X-ray diffraction analysis

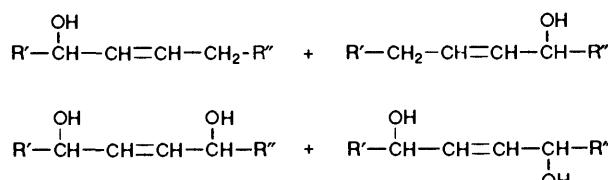
Stefano Chimichi, Barbara Cosimelli, Fabrizio Bruni, Silvia Selleri, Annarella Costanzo, Gabriella Guerrini and Giovanni Valle



7-Methyl-6-(pyrazol-3'-yl)pyrazolo[1,5-*a*]pyrimidines **1** and not, as formerly claimed, 6-methylpyrazolo[5',1':2,3]pyrimido[5,4-*d*][1,2]-diazepines **2** are shown to be the final products in the reaction of 6-acetyl-7-(2-dimethylaminovinyl)pyrazolo[1,5-*a*]pyrimidines **3** with hydrazine hydrate in acetic acid

1661 Allylic mono- and di-hydroxylation of isolated double bonds with selenium dioxide-*tert*-butyl hydroperoxide. NMR characterization of long-chain enols, allylic and saturated 1,4-diols, and enones

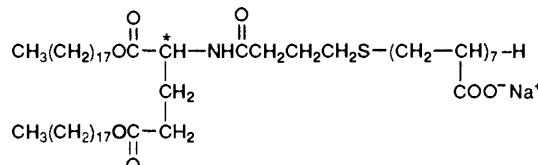
Gerhard Knothe, Marvin O. Bagby, David Weisleder and Robert E. Peterson



^{13}C NMR identifies diastereoisomers and positional isomers

1671 Formation of specific hydrophobic sites for incorporation of methylene blue by laterally arranged L-glutamate residues in anionic, crystalline bilayer aggregates

Hiroshi Hachisako, Tetsuya Yamazaki, Hirotaka Ihara, Chuichi Hirayama and Kimiko Yamada



1681 Recognition of molecular planarity of cationic dyes by anionic, crystalline bilayer aggregates. Evidence using metachromatic and solvatochromic properties

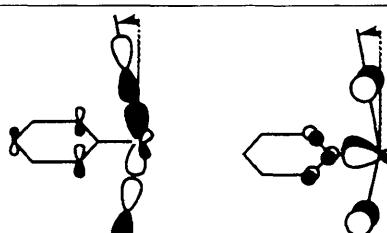
Hiroshi Hachisako, Tetsuya Yamazaki, Hirotaka Ihara, Chuichi Hirayama and Kimiko Yamada



Schematic representation of molecular planarity of cationic dyes

1691 Electronic structure and bonding in polycoordinated iodine compounds

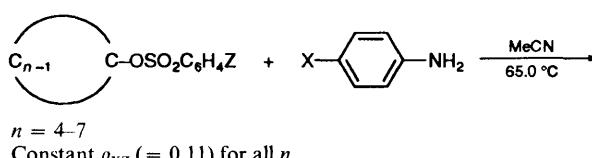
Vassilios E. Mylonas, Michael P. Sigalas, George A. Katsoulos, Constantinos A. Tsipis and Anastasios G. Varvoglou



Stabilizing orbital interactions in the PhICl_2 molecule

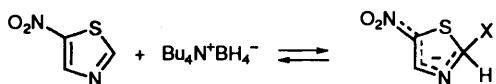
1697 Kinetics and mechanism of the aminolysis of cycloalkyl arenesulfonates

Hyuck Keun Oh, Young Bong Kwon, In Ho Cho and Ikchoon Lee



1703 Formation of σ -anionic complexes in reactions between 5-nitrothiazole, 6-nitrobenzothiazole and tetrabutylammonium borohydride

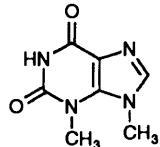
Luciano Forlani, Antonio Ferrara, Andrea Lugli and Paolo E. Todesco



Stability and rate of formation of σ -anionic complexes are investigated in toluene, tetrahydrofuran and in dimethylsulfoxide

1709 Oxidation of 3,9-dimethylxanthine at stationary pyrolytic graphite electrode

Rajendra N. Goyal, Amit K. Srivastava and Vandana Bansal



The electroactive species in oxidation is an anion with two-positive charge which leads to the formation of 1-methylalloxane and 5-hydroxy-3-methylhydantoin-5-carboxamide as the products in an EC mechanism

AUTHOR INDEX

- Adam, Waldemar, 1503
Amaro, Pedro, 1429
Aoyagi, Shigenobu, 1549
Austin, Rupert P., 1411
Bagby, Marvin O., 1661
Balasubramanian, K. K., 1399
Balicki, Roman, 1603
Bansal, Vandana, 1709
Baynham, Andrew S., 1435
Beckwith, Athelstan L. J., 1509
Blake, Alexander J., 1429
Bocian, Wojciech, 1467
Borowicz, Paweł, 1603
Brain, Paul T., 1429
Brammer, Larry E., 1407
Bruni, Fabrizio, 1657
Bühl, Michael, 1429
Butts, Craig P., 1485
Caira, Mino R., 1403
Calvert, Jane L., 1485
Campos, Kevin, 1407
Cardellini, Liberato, 1589
Carloni, Patricia, 1589
Carr, Graham, 1419
Castro, Ana, 1561
Chandrasekhar, Jayaraman, 1399
Chanon, Michel, 1597
Chimichi, Stefano, 1657
Cho, In Ho, 1697
Chuchani, Gabriel, 1499
Colle, Maurizio Dal, 1651
Compton, Richard G., 1581
Connors, Kenneth A., 1491
Cosimelli, Barbara, 1657
Costanzo, Annarella, 1657
Crossley, Roger, 1615
Damiani, Elisabetta, 1589
Das, Suresh, 1545
Davidson, Mark M., 1415
Davies, D. Martin, 1525, 1531
de Palo, Marcello, 1651
Declercq, Jean-Paul, 1539
Denness, James E., 1445
Dey, Ghazi Ram, 1625
DiMaio, John, 1631
Distefano, Giuseppe, 1651
Domínguez, Rosa M., 1499
Dosanjh, Gurinder, 1419
Drouin, Marc, 1631
Dryfe, Robert A. W., 1581
Duggan, Sandhya A. M., 1509
Eberson, Lennart, 1485
Errington, William, 1439
Famini, George R., 1641
Ferrara, Antonio, 1703
Fisher, Adrian C., 1581
Foces-Foces, Concepción, 1455
Forlani, Luciano, 1703
Fujita, Morifumi, 1597
Fukuzumi, Shunichi, 1597
Gabelica, Vesna, 1611
Garner, G. Alun, 1531
George, M. V., 1545
Goolamali, Zia, 1615
Gould, Robert O., 1429
Goyal, Rajendra N., 1709
Grabowska, Anna, 1603
Greci, Lucedio, 1589
Guerrini, Gabriella, 1657
Hachisako, Hiroshi, 1671, 1681
Hartshorn, Michael P., 1485
Hervas', Manuel, 1407
Hibbert, Frank, 1435
Hillier, Ian H., 1415
Hirayama, Chuichi, 1671, 1681
Hoffman, Roy E., 1519
Hubbard, Hugh St. V. A., 1445
Ihara, Hirotaka, 1671, 1681
Iida, Ikuo, 1565
Ikegami, Yusaku, 1481
Jaźwiński, Jarosław, 1467
Jedrzejczak, Maria, 1471
Jones, Derek, 1651
Kaczmarek, Łukasz, 1603
Kasimura, Hideaki, 1565
Katsoulos, George A., 1691
Khan, Agha Zul-Qarnain, 1569, 1575
Kishikawa, Keiki, 1565
Kishore, Kamal, 1625
Knothe, Gerhard, 1661
Kohmoto, Shigeo, 1565
Kwon, Young Bong, 1697
Landelle, Isabelle, 1429
Lee, Ikchoon, 1697
Lee, Won Heui, 1463
LePree, Jason M., 1491
Liao, Fen-Ling, 1569
Lipkowski, Janusz, 1603
Llamas-Saiz, Antonio L., 1455
Lugli, Andrea, 1703
Martinez, Ana, 1561
Maruta, Junichi, 1597
Maskill, H., 1463
McNab, Hamish, 1429
Michel, André G., 1631
Mihalić, Zlatko, 1611
Millar, Andrea P., 1419
Modelli, Alberto, 1651
Moorthy, Pervaje N., 1625
Motie, Richard E., 1471
Mulski, Michael J., 1491
Muramatsu, Takashi, 1481
Mylonas, Vassilios E., 1691
Naik, Devidas B., 1625
Nassimbeni, Luigi R., 1403
Nir, Malka, 1519
Nishio, Takehiko, 1565
Oh, Hyuck Keun, 1697
Olivato, Paulo R., 1651
Parker, David, 1445
Peterson, Robert E., 1661
Pramanik, Animesh, 1399
Rabinovitz, Mordecai, 1519
Radner, Finn, 1485
Rajesh, C. S., 1545
Ramaiah, D., 1545
Ramesh, N. G., 1399
Rankin, David W. H., 1429
Reinhardt, Dirk, 1503
Reutel, Christiane, 1455
Ridd, John H., 1411
Rizzoli, Corrado, 1589
Robertson, Heather E., 1429
Robinson, Ward T., 1485
Rzepa, Henry S., 1397
Sammes, Peter G., 1615
Sandström, Jan, 1569, 1575
Satchell, Derek P. N., 1471
Satchell, Rosemary S., 1471
Savage, James R., 1525, 1531
Scott, Janet L., 1403
Selleri, Silvia, 1657
Sgarabotto, Paolo, 1589
Shapiro, Israel O., 1519
Sidhu, Harvinder, 1423
Sigalas, Michael P., 1691
Sparey, Tim J., 1439
Srivastava, Amit K., 1709
Stefaniak, Lech, 1467
Stipa, Pierluigi, 1589
Suñer, Guillermo A., 1397
Sunko, Dionis E., 1611
Takeuchi, Yoshito, 1549
Tanaka, Katsumi, 1549
Tanko, James M., 1407
Taylor, Paul C., 1439
Thanulingam, T. L., 1545
Thibblin, Alf, 1423
Tinant, Bernard, 1539
Todesco, Paolo E., 1703
Toyota, Azumao, 1481
Tsipis, Constantinos A., 1691
Valle, Giovanni, 1657
Vančík, Hrvoj, 1611
Varvoglou, Anastasios G., 1691
Villeneuve, Gérald, 1631
Wang, Sue-Lein, 1569
Wassem, Wasfy N., 1471
Webb, Graham A., 1467
Weber, Edwin, 1455
Weiler, Josy, 1539
Weisleder, David, 1661
Whittaker, David, 1419
Wilson, Leland Y., 1641
Yamada, Kazutoshi, 1565
Yamada, Kimiko, 1671, 1681
Yamamoto, Makoto, 1565
Yamamoto, Yukio, 1555
Yamazaki, Tetsuya, 1671, 1681

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G. S. Ušćumlić and M. D. Muškatirović

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 $\text{X} = \text{Cl}, \text{NCS}$ or N_3 **C. Eaborn, P. D. Lickiss and A. D. Taylor**

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R. Bonnett, B. D. Djelal, G. E. Hawkes, P. Haycock and F. Pont

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P. K. J. Robertson and B. R. Egging

Ergogaline, a new ergot alkaloid, produced by *Claviceps purpurea*: isolation, identification, crystal structure and molecular conformation **L. Cvak, A. Jegorov, P. Sedmera, V. Havlíček, J. Ondráček, M. Hušák, S. Pakhomova, B. Kratochvíl and J. Granzin**

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M. Hojo, H. Hasegawa and H. Yoneda

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S. Gronowitz and P. Zanirato

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T. Partanen, M. Pykäläinen, H. Hulkkonen, O. Savolainen and P. Vainiotalo

Physicochemical properties of mixed anionic–non-ionic micelles: effects on chemical reactivity
L. Freire, E. Iglesias, C. Bravo, J. R. Leis and M. E. Peña

Theoretical study on the mechanism of ester hydrolysis in micellar catalysis using model systems
K. Hori, A. Kamimura, J. Kimoto, S. Gotoh and Y. Ihara

Synthesis, surface active properties and antimicrobial activity of new bis quaternary ammonium compounds
M. Díz, A. Manresa, A. Pinazo, P. Erra and M^aR. Infante

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L. B. Pfendt and G. V. Popović

Ab Initio Study of heterodienophile addition to oxazole **B. S. Jursic and Z. Zdravkovski**

Linear oligopeptides. Part 316. Conformational characterization of syndiotactic homo-peptides from C^{α,α}-disubstituted glycines
M. Crisma, F. Formaggio, M. Pantano, G. Valle, G. M. Bonora, C. Toniolo, H. E. Schoemaker and J. Kamphuis