

Physical Organic Chemistry

CONTENTS

Communications

2241 A remarkable mechanistic dichotomy in the acid-catalysed decomposition of the N- and C-adducts of indolide anions with 1,3,5-trinitrobenzene

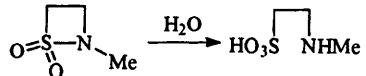
Patricia Sepulcri, Régis Goumont,
François Terrier and Erwin Buncel



N- and C-adducts of indolide anions with 1,3,5-trinitrobenzene are found to decompose through different acid-catalysed processes in aqueous solution; in the case of the C-adducts, the overall process is simply a S_EAr substitution of the trinitrocyclohexadienylide moiety by hydronium ion

2245 The hydrolytic reactivity of β -sultams

Nicholas J. Baxter, Andrew P. Laws,
Laurent Rigoreau and Michael I. Page



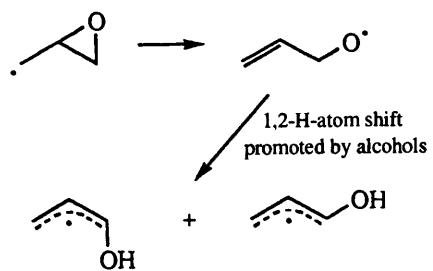
$> 10^7$ rate enhancement in base

$> 10^9$ rate enhancement in acid

Articles

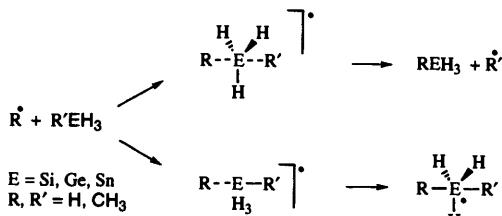
2247 EPR studies of the formation and transformation of isomeric radicals $[\text{C}_3\text{H}_5\text{O}]^\cdot$. Rearrangement of the allyloxyl radical in non-aqueous solution involving a formal 1,2-H-atom shift promoted by alcohols

Patrick E. Elford and Brian P. Roberts



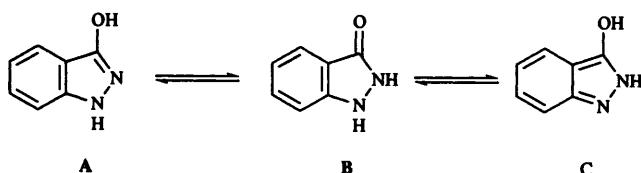
2257 *Ab initio* study of some free-radical homolytic substitution reactions at silicon, germanium and tin

Carl H. Schiesser, Michelle L. Styles and
Lisa M. Wild



2263 The tautomerism of indazolinone in aqueous solution. A note on the 'principle of vinylogy'

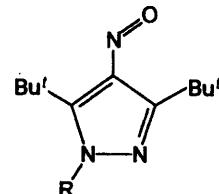
Pierre Bruneau, Peter J. Taylor and Anthony J. Wilkinson



About 95% of **B** is present, with *ca.* $10^{-4.7}$ of **C**

2271 Studies in nitrosopyrazoles. Part 1. Preparative and spectroscopic studies of some 3,5-dialkyl-4-nitrosopyrazoles

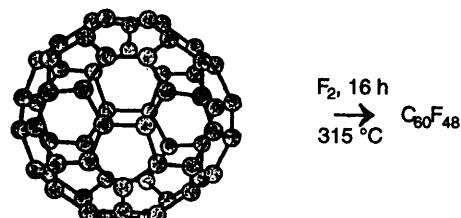
Mailer Cameron, Brian G. Gowenlock and Alan S. F. Boyd



^{13}C NMR studies demonstrate that the steric effects of the flanking *tert*-butyl groups upon the NO are smaller than in 2,4,6-tri-*tert*-butylnitrosobenzene

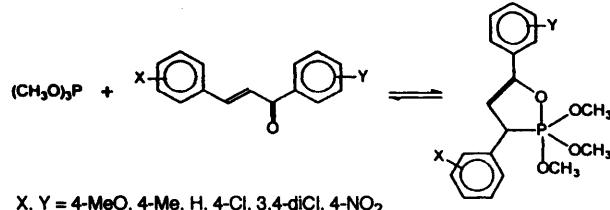
2275 Formation of $\text{C}_{60}\text{F}_{48}$ and fluorides of higher fullerenes

Olga V. Boltalina, Lev N. Sidorov, Vladimir F. Bagryantsev, Viktor A. Seredenko, Adolf S. Zapol'skii, Joan M. Street and Roger Taylor



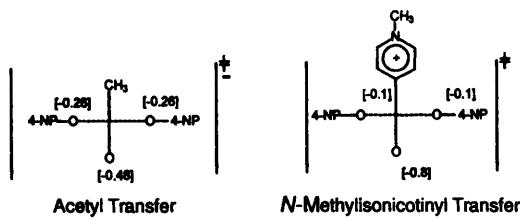
2279 The kinetics and mechanism of the reaction of trimethyl phosphite with benzylideneacetophenones

Imre Petneházy, György Clementis, Zsuzsa M. Jászay, László Töke and C. Dennis Hall



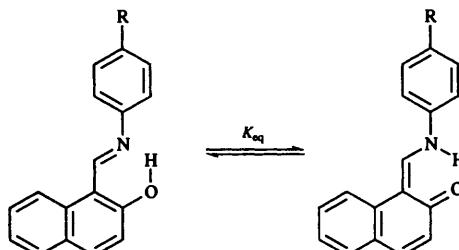
2285 Transfer of a positively charged acyl group between substituted phenolate ion nucleophiles: the Brønsted β for the calibrating equilibrium for *N*-methylisonicotinyl (4-carbonyl-*N*-methylpyridinium) transfer

Matthew J. Colthurst, Matilde Nanni and Andrew Williams



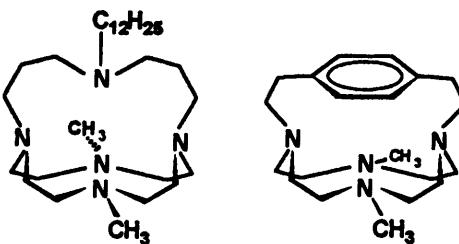
2293 Solid-state electronic absorption, fluorescence and ^{13}C CPMAS NMR spectroscopic study of thermo- and photo-chromic aromatic Schiff bases

Sergio H. Alarcón, Alejandro C. Olivieri, Alison Nordon and Robin K. Harris



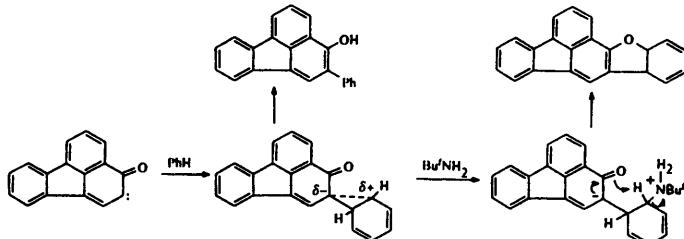
- 2297 Aza-macrocycles bearing lipophilic functions. Their synthesis and selective lithium complexation**

Andrea Bencini, Vieri Fusi, Claudia Giorgi, Mauro Micheloni, Nicoletta Nardi and Barbara Valtancoli



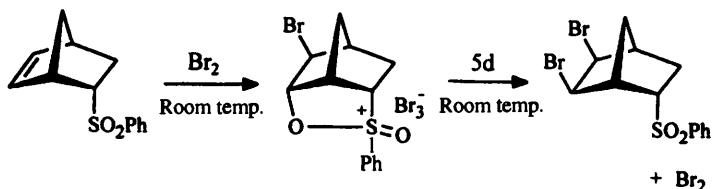
- 2303 Photolytic decomposition of some polycyclic α -diazo ketones: generation and reactivity of 1,2-oxocarbenes in benzene with and without *tert*-butylamine**

Peter J. N. Brown, J. I. G. Cadogan, Ian Gosney, Alexander Johnstone, R. Michael Paton and Norman H. Wilson



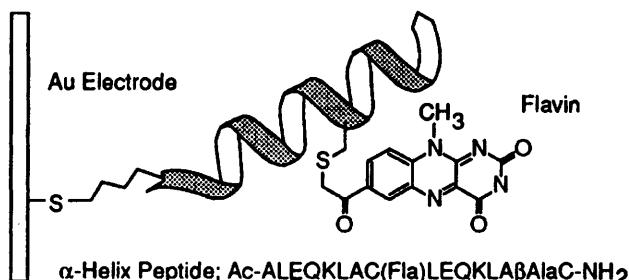
- 2309 Intramolecular nucleophilic interception by the sulfonyl group of reaction intermediates arising from electrophilic addition to unsaturated non-conjugated bicyclic sulfones**

J. I. G. Cadogan, Donald K. Cameron, Ian Gosney, John R. A. Millar, Stephen F. Newlands and David Reed



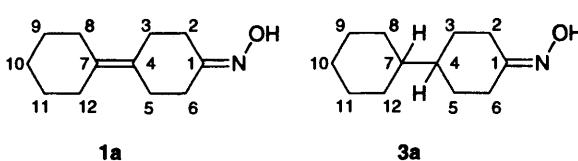
- 2319 Design and synthesis of flavin-conjugated peptides and assembly on a gold electrode**

Seiji Sakamoto, Haruhiko Aoyagi, Naotoshi Nakashima and Hisakazu Mihara



- 2327 Oligo(cyclohexylidene) oximes and derivatives as probe molecules for long-range substituent effects on ^{13}C NMR chemical shifts**

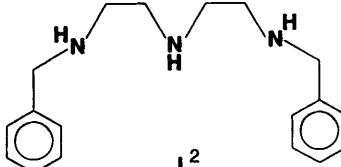
Frans J. Hoogesteger, David M. Grove, Leonardus W. Jenneskens, Theodorus J. M. de Bruin and Bart A. J. Jansen



Long-range substituent effects on ^{13}C NMR chemical shifts

- 2335 Thermodynamic, NMR and photochemical study on the acid-base behaviour of *N,N'*-dibenzylated polyamines and on their interaction with hexacyanocobaltate(III)**

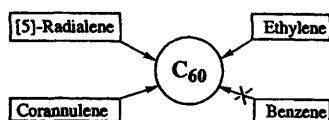
M. Alexandra Bernardo, José A. Guerrero, Enrique García-España, Santiago V. Luis, José M. Llinares, Fernando Pina, José A. Ramírez and Conxa Soriano



Acid-base behaviour of dibenzylated polyamines has been studied by potentiometry, NMR, UV-VIS and steady-state fluorescence emission and adduct formation with hexacyanocobaltate(III) by steady-state fluorescence emission

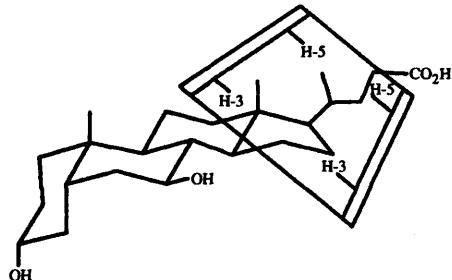
- 2343 Molecular electrostatic potential topographical studies on the structural motifs of C₆₀**

Eluvathingal D. Jemmis, G. Subramanian, G. Narahari Sastry, G. Mehta, Rajendra N. Shirsat and Shridhar R. Gadre



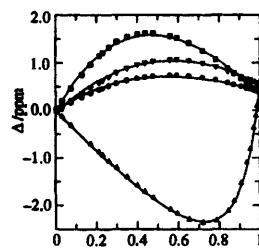
- 2347 One- and two-dimensional NMR study of complexation of ursodeoxycholic acid with β-cyclodextrin**

Adele Mucci, Luisa Schenetti, Maria A. Vandelli, Flavio Forni, Paolo Ventura and Gianfranco Salvioli



- 2351 General approach to measurements of pK_a differences by ¹³C NMR spectroscopy**

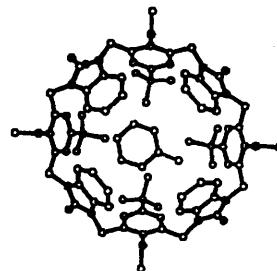
Tonis Pehk, Ene Kiirend, Endel Lippmaa and Ulf Ragnarsson



Relative pK_a values of multi-component mixtures are obtained by using, instead of pH, the degree of protonation of reference compound and plotting it against the chemical shift differences between the reference and investigated compounds

- 2359 Heterocalixarenes featuring the benz-imidazol-2-one subunit. Synthesis and X-ray structural studies of solvent inclusions**

Edwin Weber, Jörg Trepte, Karsten Gloe, Manfred Piel, Mátyás Czugler, Victor Ch. Kravtsov, Yurri A. Simonov, Janusz Lipkowski and Edward V. Ganin



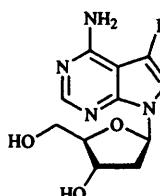
- 2367 Nitroso derivatives of 1,3-dithiol-2-ylidene stabilised by intramolecular oxygen···sulfur interactions: synthesis and X-ray crystal structures**

Martin R. Bryce, Michael A. Chalton, Andrei S. Batsanov, Christian W. Lehmann and Judith A. K. Howard



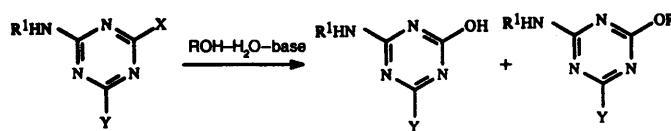
- 2373 The DNA-stabilising nucleoside 7-iodo-2'-deoxytubercidin: its structure in the solid state and in solution**

Frank Seela, Matthias Zulauf, Helmut Rosemeyer and Hans Reuter



The structure of 7-ido-2'-deoxytubercidin is compared with those of 2'-deoxytubercidin and 2'-deoxyadenosine

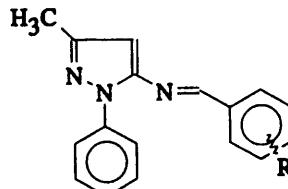
2377 Rate–product correlations for concurrent nucleophilic displacements of halotriazines by hydroxide and alkoxides in water



T. William Bentley, Joanne Ratcliff,
A. Hunter M. Renfrew and John A. Taylor

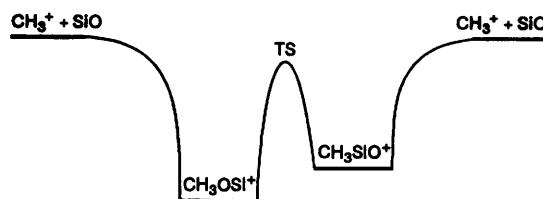
2383 1-Phenyl-3-methyl-5-N-benzylideneamino-pyrazoles. Substituent effects and protonation sites studied by NMR and *ab initio* (6-31G*) MO calculations

Erkki Kolehmainen, Agnieszka Puchała,
Reijo Suontamo, Danuta Rasała and
Robert Łysek



2389 Combined quantum chemical and mass spectrometric study of [Si,C₂H₃,O]⁺ isomers

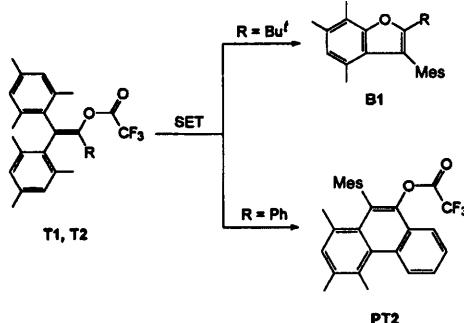
Max C. Holthausen, Detlef Schröder,
Waltraud Zummack, Wolfram Koch and
Helmut Schwarz



Silicon methoxide cation H₃COSi⁺ ($\Delta_f H = 151$ kcal mol⁻¹) represents the global minimum on the potential energy surface of [Si,C₂H₃,O]⁺, followed by the two silaacetyl cations H₃SiCO⁺ ($\Delta_f H = 172$ kcal mol⁻¹) and H₃CSiO⁺ ($\Delta_f H = 180$ kcal mol⁻¹)

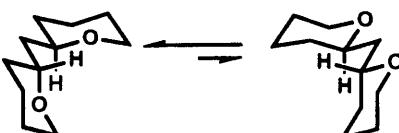
2401 Electroactive protecting groups and reaction units. Part 4. Mesolytic O–CO bond cleavage versus intramolecular cyclization reaction in enol trifluoroacetate cation radicals. A kinetic and mechanistic investigation

Michael Schmittel and Holger Trenkle



2407 Flexible molecules with defined shape. Part 3. Conformational analysis of bis(tetrahydropyran-2-yl)methanes

Reinhard W. Hoffmann, B. Colin Kahrs,
Jan Schiffer and Jörg Fleischhauer



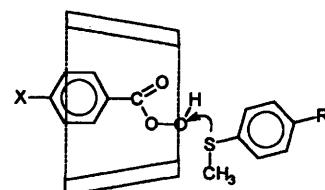
The bis(tetrahydropyranyl)methane system is biconformational with a strong preference for the O,O-proximal conformer. This preference can be further enhanced by suitably placed methyl substituents

2415 The interaction of α -cyclodextrin with aliphatic, aromatic and inorganic peracids, the corresponding parent acids and their respective anions



D. Martin Davies and Michael E. Deary

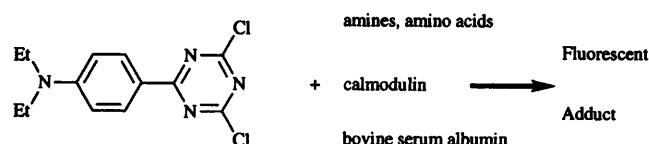
2423 Effect of α -cyclodextrin on the oxidation of aryl alkyl sulfides by peracids



D. Martin Davies and Michael E. Deary

2431 Triazinylaniline derivatives as fluorescence probes. Part 4. Kinetics and selectivity in the reactions of *N,N*-diethyl-4-(dichloro-1,3,5-triazinyl)aniline with amines, amino acids and proteins relevant to fluorescence labelling

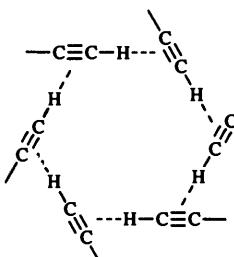
David J. Cowley



Hydrophobic interactions strongly influence the reaction kinetics and the positional selectivity of coupling to the amino group(s) in the substrate

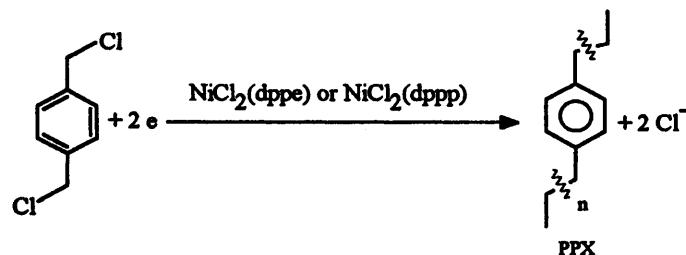
2441 Weak hydrogen bonding. Part 5. Experimental evidence for the long-range nature of $C\equiv C-H \cdots \pi$ interactions: crystallographic and spectroscopic studies of three terminal alkynes

Thomas Steiner, Matthias Tamm, Alexander Grzegorzewski, Niels Schulte, Nora Veldman, Antoine M. M. Schreurs, Jan A. Kanters, Jan Kroon, John van der Maas and Bert Lutz



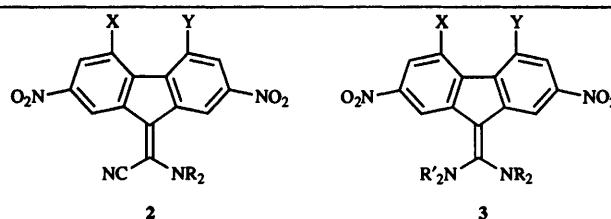
2447 Mechanistic and synthetic aspects of a novel route to poly-*p*-xylylene (PPX) *via* nickel complex catalysed electropolymerisation of 1,4-bis(chloromethyl)benzene

Christian Amatore, Florence Gaubert, Anny Jutand and James H. P. Utley



2453 Electron acceptors of the fluorene series. Part 5. Intramolecular charge transfer in nitro-substituted 9-(aminomethylene)fluorenes

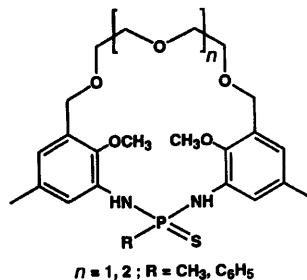
Igor F. Perepichka, Anatolii F. Popov, Tatyana V. Orekhova, Martin R. Bryce, Alexander N. Vdovichenko, Andrei S. Batsanov, Leonid M. Goldenberg, Judith A. K. Howard, Nikolai I. Sokolov and (in part) Joanne L. Megson



Intramolecular charge-transfer in compounds **2** and **3** has been studied in solution (NMR and UV-VIS spectroscopy, and cyclic voltammetry) and in the solid state, by an X-ray crystal structure analysis of a derivative of **2**

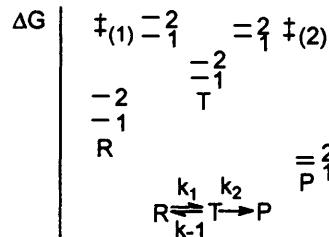
2471 Synthesis and molecular structure of new phosphorous-crown compounds containing the thiophosphoryl group

Jean-Paul Declercq, Pascale Delangle, Jean-Pierre Dutasta, Luc Van Oostenryck, Pascal Simon and Bernard Tinant



2479 The *gem*-dimethyl effect on reactivities in cyclizations through tetrahedral intermediates. Cyclization of methyl-substituted methyl amides of 5-(*p*-nitrophenyl)hydantoic acids

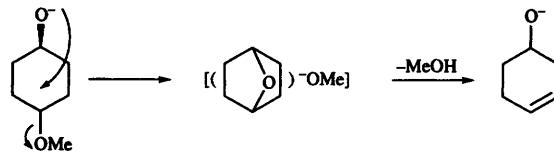
Asen H. Koedjikov, Iva B. Blagoeva, Ivan G. Pajarlieff and Anthony J. Kirby



The different accelerations observed with the various cyclization pathways can be rationalised in terms of a gradually decreasing *gem*-dimethyl effect

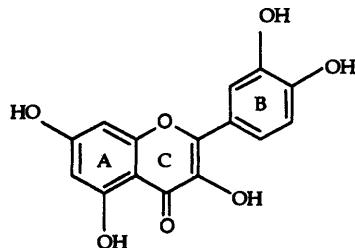
2489 The mechanism of methanol loss from the ($M - H^-$) ions of *cis*- and *trans*-4-methoxycyclohexanol. The application of experiment and theory in concert

Suresh Dua, Mark A. Buntine, Mark J. Raftery, Peter C. H. Eichinger and John H. Bowie



2497 Reduction potentials of flavonoid and model phenoxy radicals. Which ring in flavonoids is responsible for antioxidant activity?

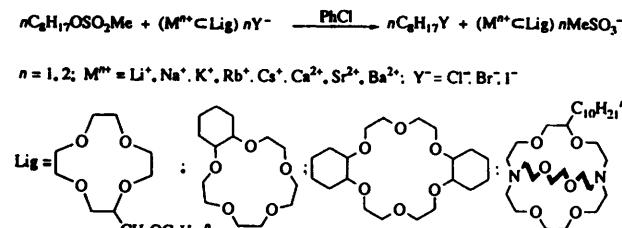
Slobodan V. Jovanovic, Steen Steenken, Yukihiko Hara and Michael G. Simic



Which ring (A, B or C) in complex polyphenols is responsible for their antioxidant activity?

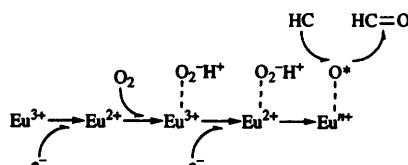
2505 Cation participation in nucleophilic substitution reactions promoted by complexes of polyether ligands with alkali and alkaline-earth metal salts

Alessandro Gobbi, Dario Landini, Angelamaria Maia and Michele Penso



2511 Reactivity of active oxygen species generated in the EuCl_3 catalytic system for monooxygenation of hydrocarbons

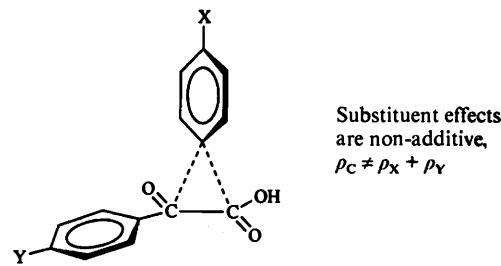
Ichiro Yamanaka, Katsumi Nakagaki, Takashi Akimoto and Kiyoshi Otsuka



Monooxygenation of hydrocarbons (HC) with O_2 by $\text{EuCl}_3\text{-Zn-MeCO}_2\text{H}$ catalytic system was investigated for nature of the active oxygen species (O^*)

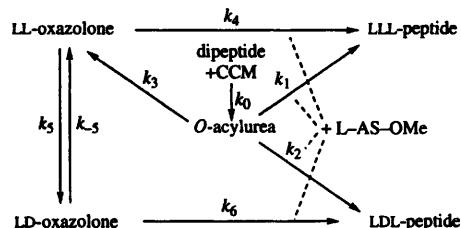
2519 Theoretical studies on the base-catalysed rearrangement of 4,4'-disubstituted benzils in the gas phase and aqueous solution

Ikchoon Lee, Doyoung Lee, Jin Kak Lee, Chang Kon Kim and Bon-Su Lee



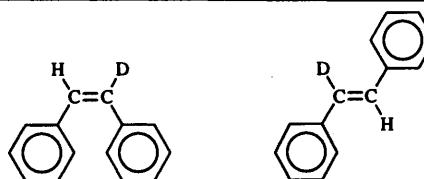
2525 Quantitative description of epimerization pathways using the carbodiimide method in the synthesis of peptides

Carola Griehl, Alfred Kolbe and Susanne Merkel



2531 Conformational dependence of deuterium-induced isotope effects on the olefinic one-bond ^{13}C - ^1H and three-bond ^1H - ^2H coupling constants in *cis*- and *trans*-stilbene

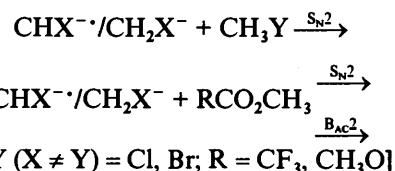
Predrag Novak, Zlatko Meić and Heinz Sterk



Intrinsic deuterium-induced isotope effects on the olefinic coupling constants in *cis*- and *trans*-stilbene are dependent on the conformation and the overall geometry of the molecule

2537 Reactivity of mono-halogen carbene radical anions ($\text{CHX}^{\cdot-}$; X = F, Cl and Br) and the corresponding carbanions (CH_2X^- ; X = Cl and Br) in the gas phase

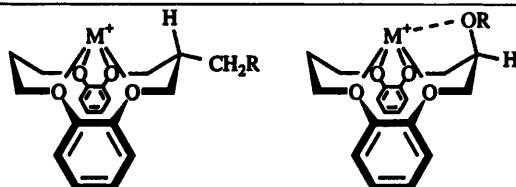
Monique Born, Steen Ingemann and Nico M. M. Nibbering



Reactivity order is $\text{CHX}^{\cdot-} < \text{CH}_2\text{X}^-$ in both processes

2549 NMR studies on the Li^+ and Na^+ complexes of dibenzo-14-crown-4 lariat ethers

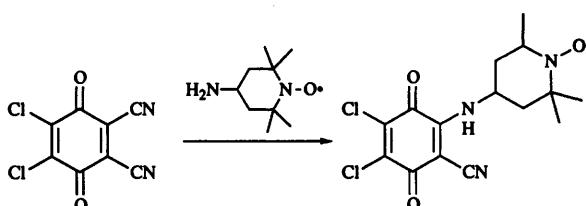
Zhihong Chen, Peter J. Moehs and Richard A. Sachleben



Sidearms attached by a carbon linkage prefer a pseudo-equatorial position, precluding intramolecular interactions with a coordinated cation. Sidearms attached by an ether linkage prefer a pseudo-axial position, allowing intramolecular interaction between the ether oxygen and the complexed cation

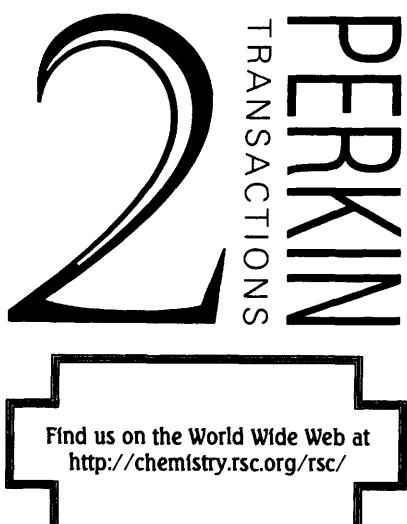
2555 Preparation and properties of 4-amino-TEMPO-substituted benzoquinone derivatives and related charge-transfer complexes

Shin'ichi Nakatsuji, Nobutaka Akashi, Kazuya Suzuki, Toshiaki Enoki and Hiroyuki Anzai



AUTHOR INDEX

- Akashi, Nobutaka, 2555
 Akimoto, Takashi, 2511
 Alarcón, Sergio H., 2293
 Amatore, Christian, 2447
 Anzai, Hiroyuki, 2555
 Aoyagi, Haruhiko, 2319
 Bagryantsev, Vladimir F., 2275
 Batsanov, Andrei S., 2367, 2453
 Baxter, Nicholas J., 2245
 Bencini, Andrea, 2297
 Bentley, T. William, 2377
 Bernardo, M. Alexandra, 2335
 Blagoëva, Iva B., 2479
 Boltalina, Olga V., 2275
 Born, Monique, 2537
 Bowie, John H., 2489
 Boyd, Alan S. F., 2271
 Brown, Peter J. N., 2303
 BrunEAU, Pierre, 2263
 Bryce, Martin R., 2367, 2453
 Buncel, Erwin, 2241
 Buntine, Mark A., 2489
 Cadogan, J. I. G., 2303, 2309
 Cameron, Donald K., 2309
 Cameron, Mailer, 2271
 Chalton, Michael A., 2367
 Chen, Zhihong, 2549
 Clementis, György, 2279
 Colthurst, Matthew J., 2285
 Cowley, David J., 2431
 Czugler, Mátyás, 2359
 Davies, D. Martin, 2415, 2423
 de Bruin, Theodorus J. M., 2327
 Deary, Michael E., 2415, 2423
 Declercq, Jean-Paul, 2471
 Delangle, Pascale, 2471
 Dua, Suresh, 2489
 Dutasta, Jean-Pierre, 2471
 Eichinger, Peter C. H., 2489
 Elford, Patrick E., 2247
 Enoki, Toshiaki, 2555
 Fleischhauer, Jörg, 2407
 Forni, Flavio, 2347
 Fusi, Vieri, 2297
 Gadre, Shridhar R., 2343
 Ganin, Edward V., 2359
 García-España, Enrique, 2335
 Gaubert, Florence, 2447
 Giorgi, Claudia, 2297
 Gloe, Karsten, 2359
- Gobbi, Alessandro, 2505
 Goldenberg, Leonid M., 2453
 Gosney, Ian, 2303, 2309
 Goumont, Régis, 2241
 Gowenlock, Brian G., 2271
 Griehl, Carola, 2525
 Grove, David M., 2327
 Grzegorzewski, Alexander, 2441
 Guerrero, José A., 2335
 Hall, C. Dennis, 2279
 Hara, Yukihiko, 2497
 Harris, Robin K., 2293
 Hoffmann, Reinhard W., 2407
 Holthausen, Max C., 2389
 Hoogesteger, Frans J., 2327
 Howard, Judith A. K., 2367,
 2453
 Ingemann, Steen, 2537
 Jansen, Bart A. J., 2327
 Jászay, Zsuzsa M., 2279
 Jemmis, Eluvathingal D., 2343
 Jenneskens, Leonardus W.,
 2327
 Johnstone, Alexander, 2303
 Jovanovic, Slobodan V., 2497
 Jutand, Anny, 2447
 Kahrs, B. Colin, 2407
 Kanfers, Jan A., 2441
 Kiirend, Ene, 2351
 Kim, Chang Kon, 2519
 Kirby, Anthony J., 2479
 Koch, Wolfram, 2389
 Koedjikov, Asem H., 2479
 Kolbe, Alfred, 2525
 Kolehmainen, Erkki, 2383
 Kravtsov, Victor Ch., 2359
 Kroon, Jan, 2441
 Landini, Dario, 2505
 Laws, Andrew P., 2245
 Lee, Bon-Su, 2519
 Lee, Doyoung, 2519
 Lee, Ikchoon, 2519
 Lee, Jin Kak, 2519
 Lehmann, Christian W., 2367
 Lipkowski, Janusz, 2359
 Lippmaa, Endel, 2351
 Llinares, José M., 2335
 Luis, Santiago V., 2335
 Lutz, Bert, 2441
 Lysek, Robert, 2383
 Maia, Angelamaria, 2505
- Megson, Joanne L., 2453
 Mehta, G., 2343
 Meić, Zlatko, 2531
 Merkel, Susanne, 2525
 Micheloni, Mauro, 2297
 Mihara, Hisakazu, 2319
 Millar, John R. A., 2309
 Moehs, Peter J., 2549
 Mucci, Adele, 2347
 Nakagaki, Katsumi, 2511
 Nakashima, Naotoshi, 2319
 Nakatsuji, Shin'ichi, 2555
 Nanni, Matilde, 2285
 Nardi, Nicoletta, 2297
 Newlands, Stephen F., 2309
 Nibbering, Nico M. M., 2537
 Nordon, Alison, 2293
 Novak, Predrag, 2531
 Olivieri, Alejandro C., 2293
 Orekhova, Tatyana V., 2453
 Otsuka, Kiyoshi, 2511
 Page, Michael I., 2245
 Paton, R. Michael, 2303
 Pehk, Tonis, 2351
 Penso, Michele, 2505
 Perepichka, Igor F., 2453
 Petneházy, Imre, 2279
 Piel, Manfred, 2359
 Pina, Fernando, 2335
 Pojarlieff, Ivan G., 2479
 Popov, Anatolii F., 2453
 Puchała, Agnieszka, 2383
 Raftery, Mark J., 2489
 Ragnarsson, Ulf, 2351
 Ramírez, José A., 2335
 Rasała, Danuta, 2383
 Ratcliff, Joanne, 2377
 Reed, David, 2309
 Renfrew, A. Hunter M.,
 2377
 Reuter, Hans, 2373
 Rigoreau, Laurent, 2245
 Roberts, Brian P., 2247
 Rosemeyer, Helmut, 2373
 Sachleben, Richard A., 2549
 Sakamoto, Seiji, 2319
 Salvioli, Gianfranco, 2347
 Sastry, G. Narahari, 2343
 Schenetti, Luisa, 2347
 Schiesser, Carl H., 2257
 Schiffer, Jan, 2407
- Schmittel, Michael, 2401
 Schreurs, Antoine M. M.,
 2441
 Schröder, Detlef, 2389
 Schulte, Niels, 2441
 Schwarz, Helmut, 2389
 Seela, Frank, 2373
 Sepulcri, Patricia, 2241
 Seredenko, Viktor A., 2275
 Shirsat, Rajendra N., 2343
 Sidorov, Lev N., 2275
 Simic, Michael G., 2497
 Simon, Pascal, 2471
 Simonov, Yurri A., 2359
 Sokolov, Nikolai I., 2453
 Soriano, Conxa, 2335
 Steenken, Steen, 2497
 Steiner, Thomas, 2441
 Sterk, Heinz, 2531
 Street, Joan M., 2275
 Styles, Michelle L., 2257
 Subramanian, G., 2343
 Suontamo, Reijo, 2383
 Suzuki, Kazuya, 2555
 Tamm, Matthias, 2441
 Taylor, John A., 2377
 Taylor, Peter J., 2263
 Taylor, Roger, 2275
 Terrier, François, 2241
 Tinant, Bernard, 2471
 Töke, László, 2279
 Trenkle, Holger, 2401
 Trepte, Jörg, 2359
 Utley, James H. P., 2447
 Valtancoli, Barbara, 2297
 van der Maas, John, 2441
 Van Oostenryck, Luc, 2471
 Vandelli, Maria A., 2347
 Vdovichenko, Alexander N.,
 2453
 Veldman, Nora, 2441
 Ventura, Paolo, 2347
 Weber, Edwin, 2359
 Wild, Lisa M., 2257
 Wilkinson, Anthony J., 2263
 Williams, Andrew, 2285
 Wilson, Norman H., 2303
 Yamanaka, Ichiro, 2511
 Zapolskii, Adolf S., 2275
 Zulauf, Matthias, 2373
 Zummack, Waltraud, 2389



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

Forthcoming Articles in *Perkin Transactions 2*

Structural requirements of non-peptide neurotensin receptor antagonists
L. Quéré, R. Boigegrain, F. Jeanjean, D. Gully, G. Evrard and F. Durant

NMR study of 9,9'-(alkane- α,ω -diyl)diadenine
T. Itahara

Simultaneous electrophile–nucleophile Cl[−]π interactions stabilizing solid state inclusions: a new tool for supramolecular crystal engineering
I. Csöregi, E. Weber, T. Hens, M. Czugler

The effect of topologically controlled coulombic interactions on the regioselectivity of the reductive cleavage of alkyl phenyl ethers
U. Azzena, F. Casado, P. Fois, I. Gallardo, L. Pisano, J. Marquet and G. Melloni

Charged cyclophanes with extended conjugation: the effect of the cyclophane hub on the charge distribution
E. Shabtai, M. Rabinovitz, B. König, B. Knieriem and A. de Meijere

¹³C NMR spectroscopic comparison of sterically stabilized *meta*- and *para*-substituted *o*-tolyl(adamant-1-yl)methyl cations with conjugatively stabilized benzyl cations
J.S. Lomas

Lithiation of diethyl trichloromethyl phosphonate and the transformations of the α -lithiated derivative
W. Perlikowska, A.M. Modro, T.A. Modro, M.J. Mphahlele

The first examples of persistent dimethyldihydropyrenium cations: reversal of ring current effects
K.K. Laali, S. Bolvig, T.J. Raeker and R.H. Mitchell

The influence of common cation BH⁺ on the products of reactions between C-acids and strong guanidine bases in acetonitrile solvent
W. Gałezowski, M. Stańczyk, I. Grześkowiak and A. Jarczewski

Conformational behaviour of hydroxamic acids: *ab initio* and structural studies
D.A. Brown, R.A. Coogan, N.J. Fitzpatrick, W.K. Glass, D.E. Abukshima, L. Shiels, M. Ahlgrén, K. Smolander, T.T. Pakkanen, M. Peräkylä

Reactions of phosphine with hexacyclo[6.6.0.0^{2,6}.0^{3,13}.0^{4,11}.0^{5,9}]tetradecan-10-one derivatives
T.J. Chow, L.-P. Li, V.Y.R. Lee, K.-J. Lin and C.-Y. Chen

Conformational variability in short acyclic peptides. Stabilization of multiple β-turn structures in organic solvents
S.K. Awasthi, S. Raghothama and P. Balaram

On the mechanism of succinyl transfer from aryl enolsuccinates to enolates of arylketones: addition–elimination vs. alkoxide-assisted retro-ene reaction
W.V. Murray, I.J. Turchi and J.C. Bussolari

Hexa Schiff-base cryptands: solution thermodynamic and X-ray crystallographic studies of main group, transition and heavy metal ions complexes
R. Abidi, F. Arnaud-Neu, M.G.B. Drew, S. Lahély, D. Marrs, J. Nelson and M.-J. Schwing-Weill

Aryl substituent effects on the thermal interconversion of cyclobutenediones and 1,2-bisketenes
R. Liu and T.T. Tidwell

Structural and vibrational analysis of indole by density functional and hybrid Hartree–Fock/density functional methods
S.E. Walden and R.A. Wheeler

Catalysis of the enolization of indan-2-one by cyclodextrins in aqueous solution
O.S. Tee and R.A. Donga

X-Ray and quantum chemical studies of strained phenanthrenes
S. Grimme, I. Pischel, M. Nieger and F. Vögtle