

## Physical Organic Chemistry



## CONTENTS

vii Editorial

## Keynote Article

**133 Tertiary:secondary:primary C-H bond relative reactivity in the one-electron oxidation of alkylbenzenes. A tool to distinguish electron transfer from hydrogen atom transfer mechanisms**

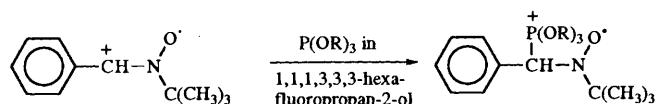
Enrico Baciocchi, Francesca D'Acunzo,  
Carlo Galli and Osvaldo Lanzalunga



## Articles

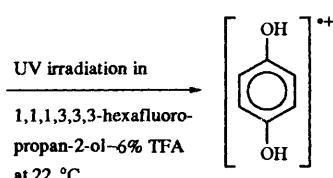
**141 Inverted spin trapping. Part V. 1,1,1,3,3,3-Hexafluoropropan-2-ol as a solvent for the discrimination between proper and inverted spin trapping**

Lennart Eberson, Michael P. Hartshorn and Ola Persson



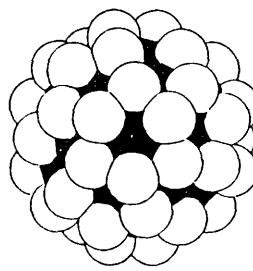
**151 On the existence of quinone radical cations. A study in 1,1,1,3,3,3-hexafluoropropan-2-ol**

Lennart Eberson and Michael P. Hartshorn



**155 Stability and IR spectra of isomers of C<sub>60</sub>F<sub>48</sub>**

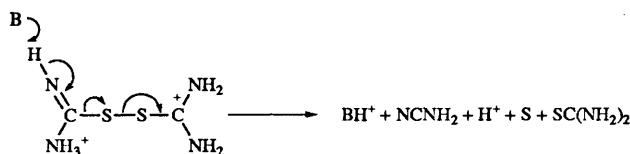
Sarah J. Austin, Patrick W. Fowler, John P. B. Sandall and Francesco Zerbetto



Stability calculations on all isomers of C<sub>60</sub>F<sub>48</sub> compatible with the <sup>19</sup>F NMR spectrum select just two diastereoisomers, one of D<sub>3</sub> and one of S<sub>6</sub> symmetry

**159 Kinetic study of the stability of (NH<sub>2</sub>)<sub>2</sub>CSSC(NH<sub>2</sub>)<sub>2</sub><sup>2+</sup>**

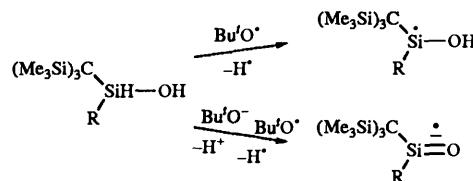
L. Garcia Rio, Carl G. Munkley and Geoffrey Stedman



The general base-catalysed decomposition of (NH<sub>2</sub>)<sub>2</sub>CSSC(NH<sub>2</sub>)<sub>2</sub><sup>2+</sup> involves a reactive tautomer, and also a conjugate base route involving (NH<sub>2</sub>)(NH)CSSC(NH<sub>2</sub>)<sub>2</sub><sup>+</sup>

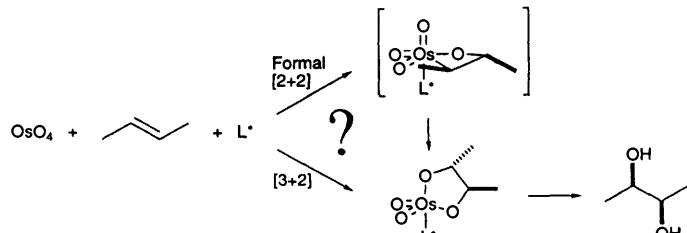
**163 EPR spectra of tris(trimethylsilyl)methyl-hydroxyl radicals, (Me<sub>3</sub>Si)<sub>3</sub>CSi(R)OH<sup>·</sup>, and of tris(trimethylsilyl)methylsilanone radical anions, (Me<sub>3</sub>Si)<sub>3</sub>CSi(R)=O<sup>·-</sup> (R = H, Me, Et, Bu, Ph, F)**

Alwyn G. Davies, Colin Eaborn, Paul D. Lickiss and Anthony G. Neville



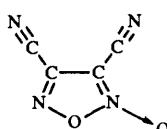
**171 Kinetic constraints on possible reaction pathways for osmium-catalysed asymmetric dihydroxylation**

Per-Ola Norrby and Kevin P. Gable



**179 Geometric and electronic structure of dicyanofuroxan by experiment and theory**

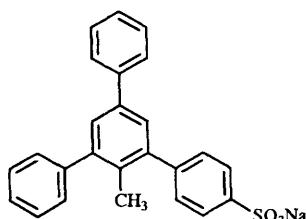
Tibor Pasinszki, George Ferguson and Nicholas P. C. Westwood



A crystallographic study, together with gas-phase photoelectron and IR spectroscopy, permits comparison with *ab initio* calculations (HF, MP2 and DFT) for electronic and geometric structure

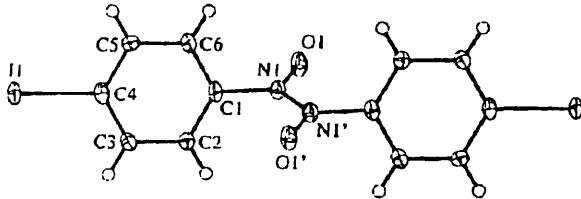
**187 Synthesis and studies on surface and self-assembly properties of polyphenylsulfonates in aqueous solution. Part 2. Sodium 2'-methyl-5'-phenyl-1,1':3',1'-terphenyl-4-sulfonate**

Jan Czapkiewicz and Piotr Milart



**191 4-Iodonitrosobenzene. Structural and spectroscopic studies of the monomeric solid and of previously unreported dimers**

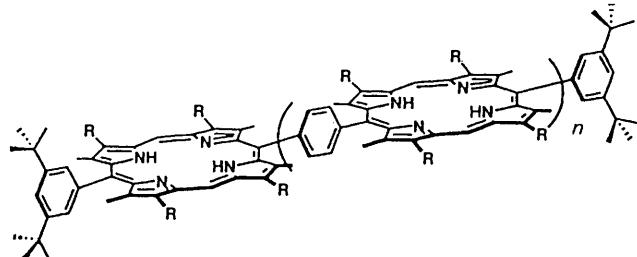
Daniel A. Fletcher, Brian G. Gowenlock, Keith G. Orrell, Vladimir Šik, David E. Hibbs, Michael B. Hursthouse and K. M. Abdul Malik



4-Iodonitrosobenzene has been isolated as the (*E*)-azodioxy dimer for the first time

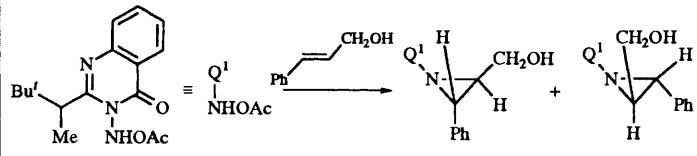
**199 Synthesis of 1,4-phenylene-bridged linear porphyrin arrays**

Atsuhiro Osuka, Nobuhiro Tanabe, Satoshi Nakajima and Kazuhiro Maruyama



**205 3-Acetoxyaminoquinazolin-4(3*H*)-ones as aziridinating agents: relative rate of inversion at the exocyclic nitrogen**

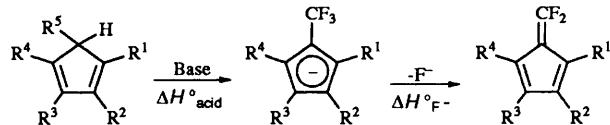
Robert S. Atkinson and Paul J. Williams



The pyramidal exocyclic nitrogen in *e.g.* 3 inverts slowly on the NMR time-scale but fast on the time scale of the aziridination

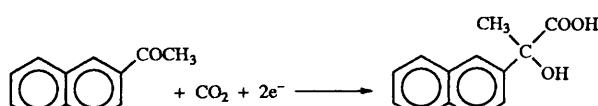
**213 Gas-phase generation of trifluoromethyl cyclopentadienides**

Michael C. Baschky, John R. Sowa, Jr., the late Paul G. Gassman and Steven R. Kass



**217 Influence of magnesium(II) ions on cathodic reactions in aprotic solvents—carboxylation of methyl aryl ketones**

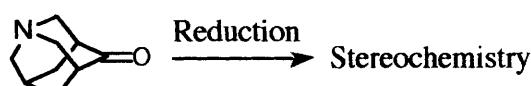
Derek Pletcher and Louise Slevin



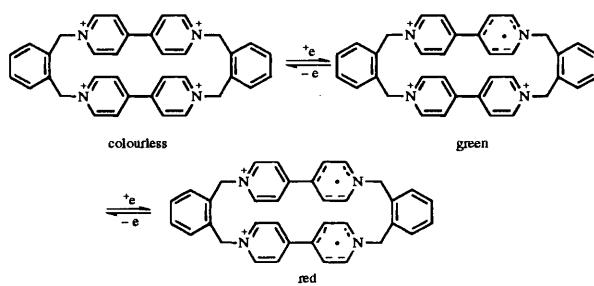
The role of a Mg anode?

**221 Role of the nitrogen atom in the complex metal hydride reduction of unhindered  $\gamma$ -aza-cyclohexanones**

Yasuhisa Senda, Masayuki Morita and Hiroki Itoh



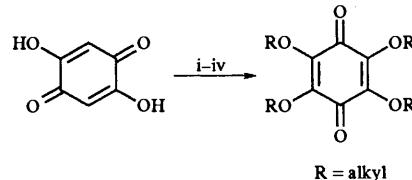
**225 Photochromism of double-bridged viologens in a polar polymer matrix**



Xuehui Sun and Yu-kun Yang

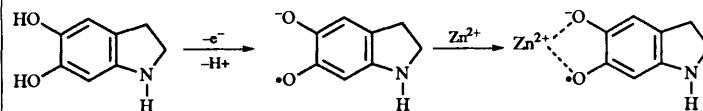
**229 2,3,5,6-Tetraalkoxy-1,4-benzoquinones and structurally related tetraalkoxy benzene derivatives: synthesis, properties and solid state packing motifs**

Erik M. D. Keegstra, Bart-Hendrik Huisman, Elizabeth M. Paardekooper, Frans J. Hoogesteger, Jan W. Zwicker, Leonardus W. Jenneskens, Huub Kooijman, Arie Schouten, Nora Veldman and Anthony L. Spek



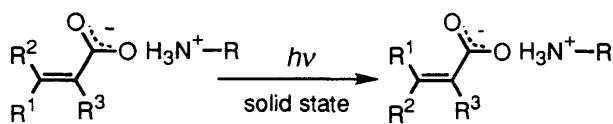
**241 One-electron oxidation of 5,6-dihydroxy-2,3-dihydroindole: the influence of Zn<sup>2+</sup>**

Akeel T. Al-Kazwini, Peter O'Neill, Gerald E. Adams, Robert B. Cundall, Jean Maignan and Alex Junino



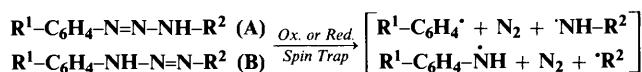
**247 Photoisomerization of ammonium  $\alpha,\beta$ -unsaturated carboxylates in the solid state: effect of the hydrogen-bond network on the reactivity**

Kazushi Kinbara, Akiyoshi Kai, Yasunari Maekawa, Yukihiko Hashimoto, Shoji Naruse, Masaki Hasegawa and Kazuhiko Saigo



**255 Redox-initiated radical decomposition of triazenes and their platinum complexes studied by cyclic voltammetry and EPR spectroscopy**

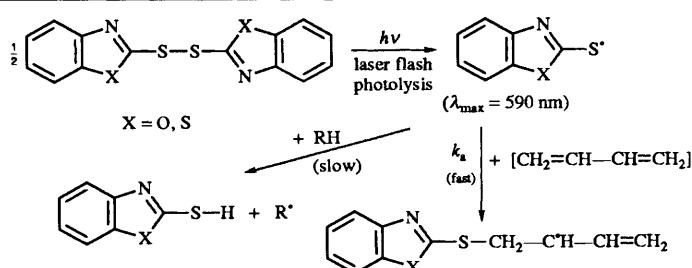
Peter Rapta, Ladislav Omelka, Andrej Staško, Jochen Dauth, Bernward Deubzer and Johann Weis



Radical products identified as spin trap adducts

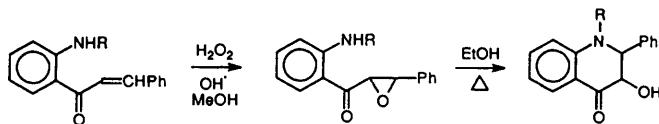
**263 Laser flash photolysis study of bis(1,3-benzoxazol-2-yl) disulfide and bis(1,3-benzothiazol-2-yl) disulfide; reactivities of benzoxazol-2-ylsulfanyl and benzothiazol-2-ylsulfanyl radicals**

Maksudul M. Alam, Hideo Konami, Akira Watanabe and Osamu Ito



**269 Ring closing and photooxidation in nitrogen analogues of 3-hydroxyflavone**

Feng Gao, Kurtis F. Johnson and Joseph B. Schlenoff



Nitrogen analogues support an epoxide intermediate in the AFO reaction

## AUTHOR INDEX

- Adams, Gerald E., 241  
Al-Kazwini, Akeel T., 241  
Alam, Maksudur M., 263  
Atkinson, Robert S., 205  
Austin, Sarah J., 155  
Baciocchi, Enrico, 133  
Baschky, Michael C., 213  
Cundall, Robert B., 241  
Czapkiewicz, Jan, 187  
D'Acunzo, Francesca, 133  
Dauth, Jochen, 255  
Davies, Alwyn G., 163  
Deubzer, Bernward, 255  
Eaborn, Colin, 163  
Eberson, Lennart, 141, 151  
Ferguson, George, 179  
Fletcher, Daniel A., 191  
Fowler, Patrick W., 155  
Gable, Kevin P., 171  
Galli, Carlo, 133  
Gao, Feng, 269  
Gassman, Paul G., 213  
Gowenlock, Brian G., 191  
Hartshorn, Michael P., 141, 151  
Hasegawa, Masaki, 247  
Hashimoto, Yukihiko, 247  
Hibbs, David E., 191  
Hoogesteger, Frans J., 229  
Huisman, Bart-Hendrik, 229  
Hursthouse, Michael B., 191  
Ito, Osamu, 263  
Itoh, Hiroki, 221  
Jenneskens, Leonardus W., 229  
Johnson, Kurtis F., 269  
Junino, Alex, 241  
Kai, Akiyoshi, 247  
Kass, Steven R., 213  
Keegstra, Erik M. D., 229  
Kinbara, Kazushi, 247  
Konami, Hideo, 263  
Kooijman, Huub, 229  
Lanzalunga, Osvaldo, 133  
Lickiss, Paul D., 163  
Maekawa, Yasunari, 247  
Maignan, Jean, 241  
Malik, K. M. Abdul, 191  
Maruyama, Kazuhiro, 199  
Milart, Piotr, 187  
Morita, Masayuki, 221  
Munkley, Carl G., 159  
Nakajima, Satoshi, 199  
Naruse, Shoji, 247  
Neville, Anthony G., 163  
Norrby, Per-Ola, 171  
O'Neill, Peter, 241  
Omelka, Ladislav, 255  
Orrell, Keith G., 191  
Osuka, Atsuhiro, 199  
Paardekooper, Elizabeth M., 229  
Pasinszki, Tibor, 179  
Persson, Ola, 141  
Pletcher, Derek, 217  
Rapta, Peter, 255  
Rio, L. Garcia, 159  
Saigo, Kazuhiko, 247  
Sandall, John P. B., 155  
Schlenoff, Joseph B., 269  
Schouten, Arie, 229  
Senda, Yasuhisa, 221  
Šík, Vladimir, 191  
Slevin, Louise, 217  
Sowa, John R. Jr., 213  
Spek, Anthony L., 229  
Staško, Andrej, 255  
Stedman, Geoffrey, 159  
Sun, Xuehui, 225  
Tanabe, Nobuhiro, 199  
Veldman, Nora, 229  
Watanabe, Akira, 263  
Weis, Johann, 255  
Westwood, Nicholas P. C., 179  
Williams, Paul J., 205  
Yang, Yu-kun, 225  
Zerbetto, Francesco, 155  
Zwikker, Jan W., 229

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NOTE: An asterisk in the heading of each paper indicates the author who is  
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