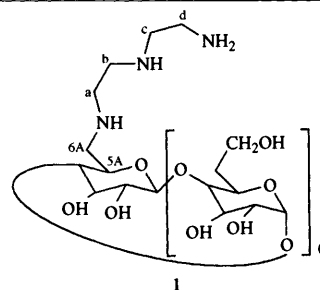


## Articles

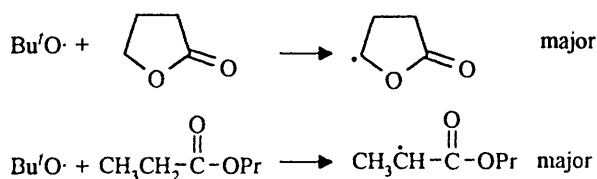
- 1785 **Functionalized  $\beta$ -cyclodextrins: thermodynamic studies and NMR titration of 6-diethylene-triamine derivative**

Vincenzo Cucinotta, Franca D'Alessandro, Giuseppe Impellizzeri, Giuseppe Maccarrone, Enrico Rizzarelli and Graziella Vecchio



- 1789 **Application of EPR spectroscopy to the determination of the rates of reaction and selectivity of attack of the *tert*-butoxyl radical on esters: the interplay of electronic, polar, steric and stereoelectronic factors**

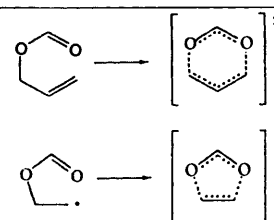
John E. Bennett, Bruce C. Gilbert, Sara Lawrence, Adrian C. Whitwood and Andrew J. Holmes



Factors which control selectivity are explored

- 1797 **Acyloxy-shifts in open and closed shell systems—intramolecular nucleophilic substitution reactions in disguise**

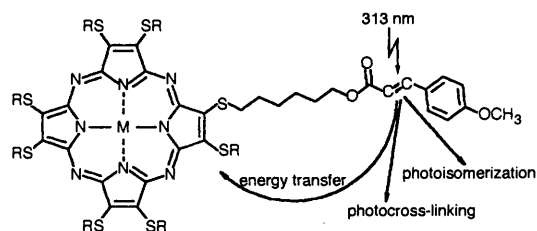
Hendrik Zipse



The analogy between vinyl and methylene groups can be used to connect the world of open and closed shell reactivity

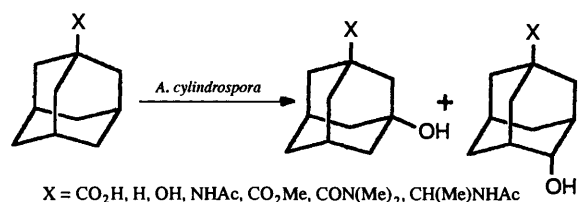
- 1801 **Synthesis and photochemical properties of octacinnamoyl-substituted tetraazaporphyrins**

H. Eichhorn, M. Rutloh, D. Wöhrle and J. Stumpe



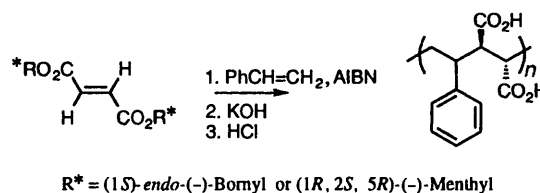
1811 Site selective oxidation of tricyclo-[3.3.1.1<sup>3,7</sup>]decane (adamantane) and some of its derivatives using fungi of the genus *Absidia*

Colin H. Ridyard, Roger A. Whittaker, Stanley D. Higgins, Stanley M. Roberts, Andrew J. Willets, Patrick D. Bailey and Georgina M. Rosair



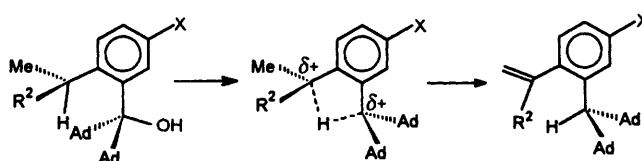
1821 Use of readily available monomers in the synthesis of vinyl copolymers with optical activity arising from the configuration of stereogenic carbon atoms in the main chain

Irene H. Donnelly, Peter Kambouris, Derek C. Nonhebel, Thomas Rohr and David C. Sherrington



1831 1,4-Hydride shifts in *ortho*-alkyl-substituted di(1-adamantyl)benzyl cations: an NMR spectroscopic and X-ray crystallographic study

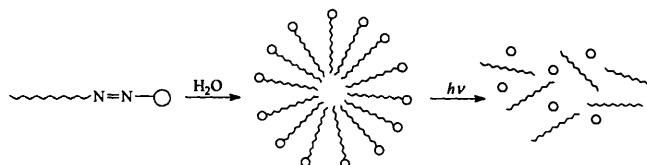
John S. Lomas and Jacqueline Vaissermann



Intramolecular H-shift is faster than intermolecular reaction with TES

1837 Synthesis, characterization and applications of azo-containing photodestructible surfactants

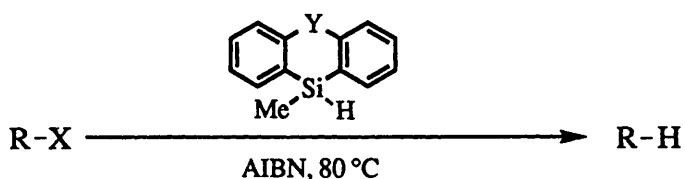
Ian R. Dunkin, Andreas Gittinger, David C. Sherrington and Paul Whittaker



Azo-containing surfactant micelles destroyed by UV light

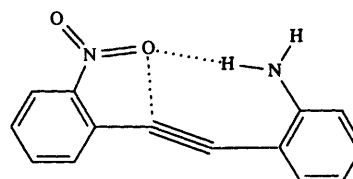
1843 9,10-Dihydro-9-sila-10-heteroanthracenes as new radical-based reducing agents

Makoto Oba, Yoko Kawahara, Ryo Yamada, Hidetaka Mizuta and Kozaburo Nishiyama



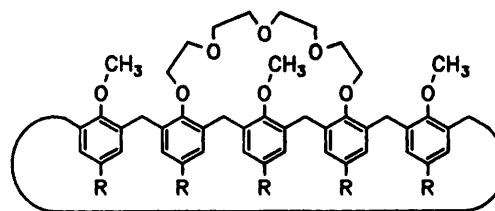
1849 Geometry distorting intramolecular interactions to an alkyne group in 1-(2-amino-phenyl)-2-(2-nitrophenyl)ethyne: a joint experimental-theoretical study

Melanie Pilkington, John D. Wallis, Garry T. Smith and Judith A. K. Howard



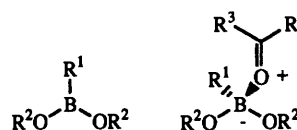
1855 **Crown ether derivatives of calix[5]arenes: synthesis and complexation properties**

Françoise Arnaud-Neu, Ralf Arnecke, Volker Böhmer, Stefano Fanni, James L. M. Gordon, Marie-José Schwing-Weill and Walter Vogt



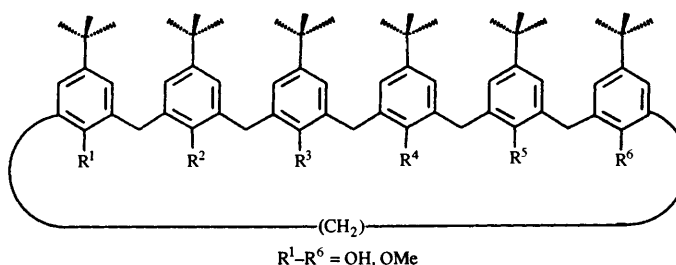
1861 **Force field parameters for the boronate function and their carbonyl complexes and application to modelling boronate esters**

Jeffrey J. James and Andrew Whiting



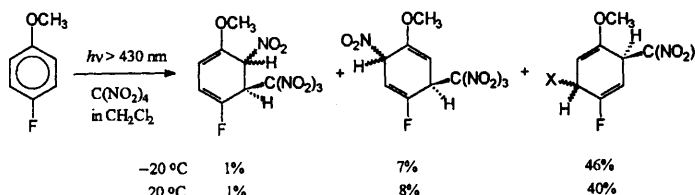
1869 **Spectroscopic studies of hydrogen-bond structures and dynamics of partially methylated *p*-*tert*-butylcalix[6]arenes**

Rob G. Janssen, Willem Verboom, Bert T. G. Lutz, John H. van der Maas, Myrek Maczka, John P. M. van Duynhoven and David N. Reinhoudt



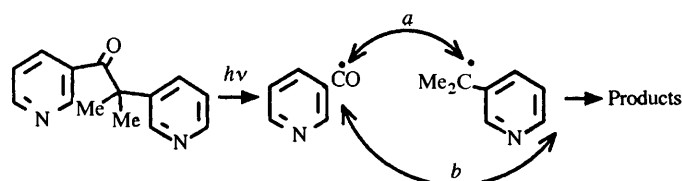
1877 **Photochemical nitration by tetranitromethane. Part 36. Adduct formation in the photochemical reactions of 4-fluoroanisole and 4-fluoro-3-methylanisole**

Craig P. Butts, Lennart Ebersson, Michael P. Hartshorn and Ward T. Robinson



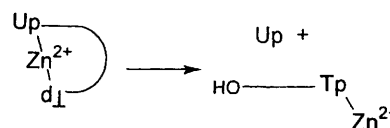
1889 **The photochemistry of metyrapone**

Elisa Fasani, Mariella Mella, Sandra Monti, Salvatore Sortino and Angelo Albini



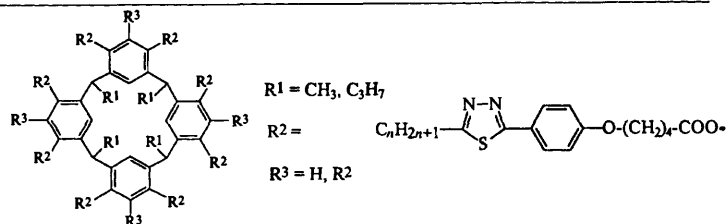
1895 **Acceleration of the Zn<sup>2+</sup>-promoted phosphodiester hydrolysis of oligonucleotides by the 3'-terminal monophosphate group: intrastrand participation over several nucleoside units**

Satu Kuusela, Andrei Guzaev and Harri Lönnberg



1901 **Mesomorphic properties and monolayer behaviour of novel liquid crystalline *exo*-calix[4]arene derivatives**

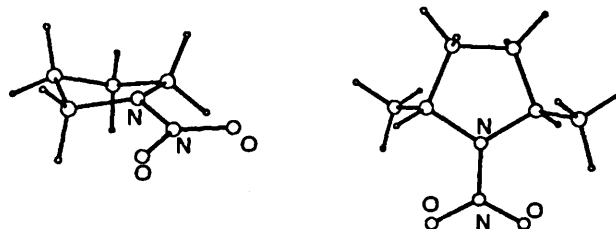
Hansjörg Budig, Siegmar Diele,  
Reinhard Paschke, Dieter Ströhl and  
Carsten Tschierske



Calix[4]arene derivatives incorporating calamitic 2-phenylthia-diazole units can form smectic liquid crystalline phases and monomolecular layers at the air-water interface

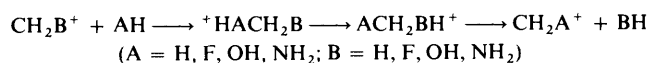
1907 **Conformation and circular dichroism of some *N*-nitropyrrolidines**

Gennadii V. Shustov, Masood Parvez and  
Arvi Rauk



1915 **Nucleophilic addition/elimination on substituted methyl cations. Analysis of factors that affect thermochemistry and barrier heights**

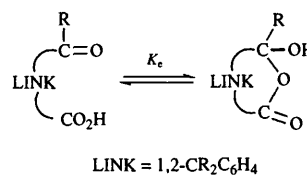
Einar Uggerud



A balance between the p-donor capabilities of the groups A and B determine both well depths and barrier heights in the above reactions

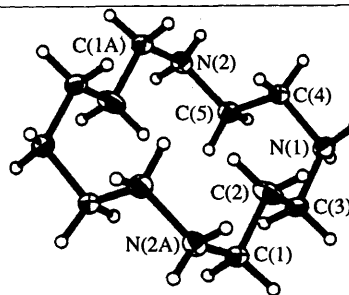
1921 **Ring-chain tautomerism. Part 8. Substituted 2-(2-oxopropyl) and 2-(2-oxo-2-phenylethyl)-benzoic and 2-(2-acetyl and 2-benzoylphenyl)-acetic acids**

Keith Bowden and Jane M. Byrne



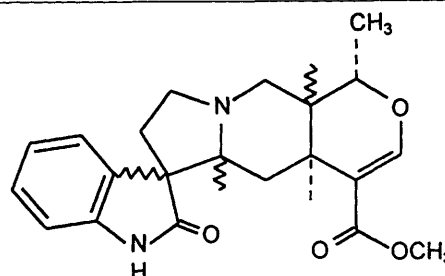
1925 **The unusual protonation constants of cyclam. A potentiometric, crystallographic and molecular mechanics study**

Robert D. Hancock, Ramunas J. Motekaitis,  
Jeremiah Mashishi, Ignacy Cukrowski, Joseph  
H. Reibenspies and Arthur E. Martell



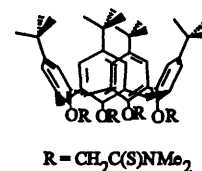
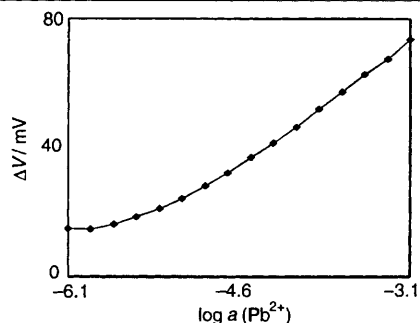
1931 **Analysis of the kinetics of isomerization of spiro oxindole alkaloids**

Gerhard Laus, Dagmar Brössner, Gilbert  
Senn and Klaus Wurst



## 1937 Polysiloxane based CHEMFETs for the detection of heavy metal ions

Ronny J. W. Lugtenberg, Martijn M. G. Antonisse, Richard J. M. Egberink, Johan F. J. Engbersen and David N. Reinhoudt

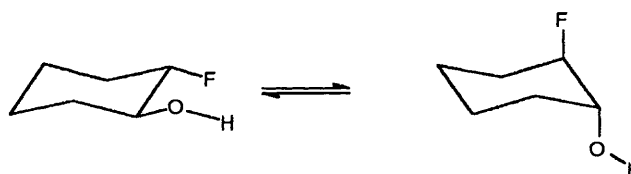
1943 Nitration of dimethoxybenzenes, mesitylene and toluene with nitric acid and mixed acid studied by <sup>15</sup>N-CIDNP

Manfred Lehnig

Free radical processes exclusively occur during nitration of *o*-dimethoxybenzene and are side-reactions during nitration of mesitylene and toluene

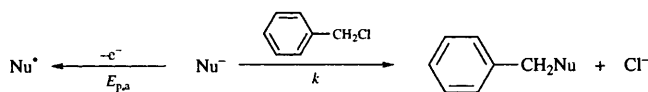
1949 Conformational analysis. Part 28. OH...F hydrogen bonding and the conformation of *trans*-2-fluorocyclohexanol

Raymond J. Abraham, Timothy A. D. Smith and W. Anthony Thomas



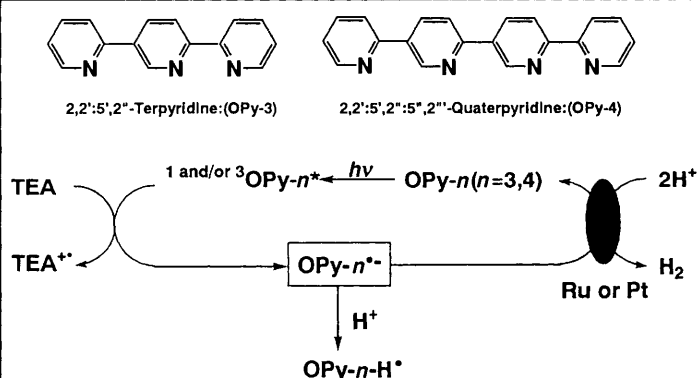
## 1957 Oxidation potential as a measure of the reactivity of anionic nucleophiles. Behaviour of different classes of nucleophiles

Murat E. Niyazymbetov, Zhou Rongfeng and Dennis H. Evans



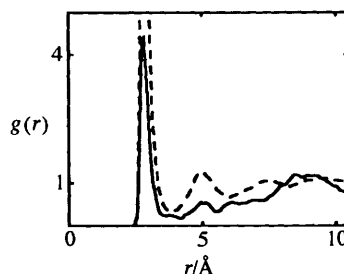
## 1963 Synthesis of 2,2':5',2''-terpyridine and 2,2':5',2'':5'',2'''-quaterpyridine and their photocatalysis of the reduction of water

Shozo Yanagida, Tomoyuki Ogata, Yasuhiro Kuwana, Yuji Wada, Kei Murakoshi, Akito Ishida, Setsuo Takamuku, Mitsuhiro Kusaba and Nobuaki Nakashima



- 1971 **Interactions between metal cations and the ionophore lasalocid. Part 14. Structure of lasalocid–alkali metal cation complex salts in methanol from NMR spectroscopy and computational experiments**

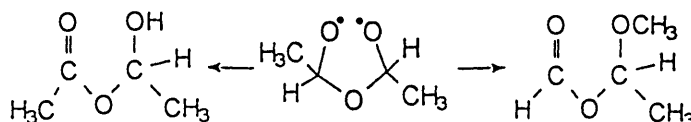
Patrice Malfreyt, Rachid Lyazghi, Gérard Dauphin, Yves Pascal and Jean Juillard



$\text{Rb}^+ \cdots \text{O}$  (methanol) radial distribution functions for the cation free (---) and in its lasalocid complex salt (—)

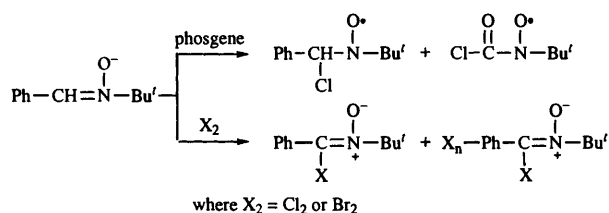
- 1981 **Laser-photosensitized homogeneous decomposition of 3,5-dimethyl-1,2,4-trioxolane: the evidence for intermediacy of products of rearrangement**

Lavrenti Khachatryan, Radek Fajgar, Yehuda Haas and Josef Pola



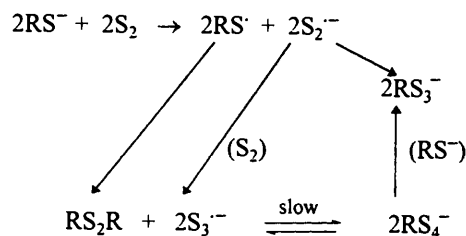
- 1985 **EPR and mass spectroscopic identification of radical adducts produced spontaneously from reactions of phosgene, chlorine gas and bromine with *C*-phenyl *N*-*tert*-butyl nitrene (PBN)**

Hong Sang, Edward G. Janzen, Coit M. DuBose, Edwin J. Geels and J. Lee Poyer



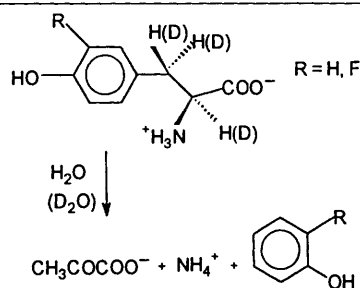
- 1993 **Formation and scission of the sulfur–sulfur bond: a new approach to reactions between sulfur/polysulfide ions and thiolate ions/disulfides in *N,N*-dimethylacetamide**

Gérard Bosser, Meriem Anouti and Jacky Paris



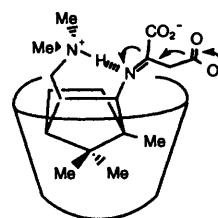
- 2001 **Mechanism of catalysis by tyrosine phenol lyase from *Erwinia herbicola*. Multiple kinetic isotope effects for the reactions with adequate substrates**

Nikolai G. Faleev, Svetlana N. Spirina, Tatyana V. Demidkina and Robert S. Phillips



- 2005 **Inclusion effects of cyclodextrins on the catalytic activity of 3-*endo*-dimethyl-aminomethyl-1,7,7-trimethylnorbornan-2-*endo*-amine for the decarboxylation of oxalacetate**

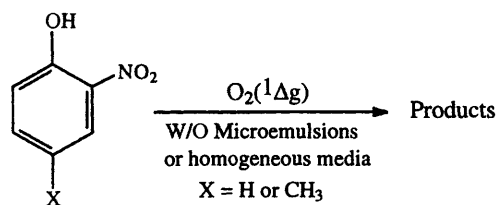
Kenji Ogino, Hideki Azuma, Hiroki Tamiya and Waichiro Tagaki



The title diamine has a high catalytic activity for the decarboxylation of oxalacetate by inclusion into the  $\beta$ -CD cavity

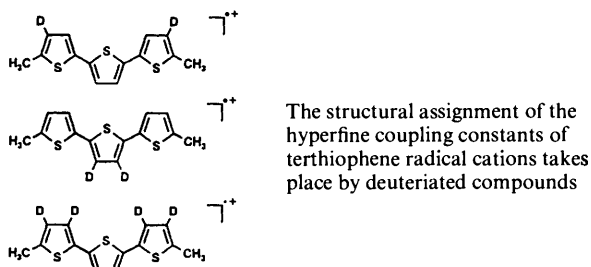
2009 **Singlet molecular oxygen-mediated photooxidation of nitrophenolic compounds in water-in-oil microemulsions. A kinetic study**

Claudio D. Borsarelli, Edgardo N. Durantini and Norman A. Garcia



2015 **EPR investigations of  $\beta$ -deuteriated 5,5"-dimethyl-2,2':5',2"-terthiophenes**

Gün̄nar Engelmann, Reinhard Stȫber, Gerhard Kōßmehl, Werner Jugelt and Hans-Peter Welzel



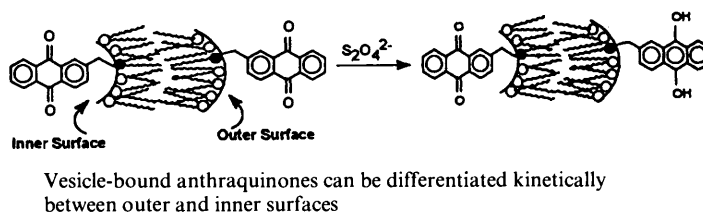
2021 **Dialkylaminopyridine catalysed esterolysis of *p*-nitrophenyl alkanoates in different cationic microemulsions**

Santanu Bhattacharya and Karnam Snehalatha

Increase in ester hydrophobicity leads to greater resistance in their hydrolysis by dialkylaminopyridine in microemulsions

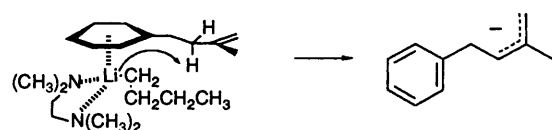
2027 **Synthesis, redox and electrochemical properties of new anthraquinone-attached micelle- and vesicle-forming cationic amphiphiles**

Santanu Bhattacharya and Marappan Subramanian



2035 **Dianions of 4-phenylbut-1-ene. Evidence for complex-induced proximity effects in the double metallation of hydrocarbons**

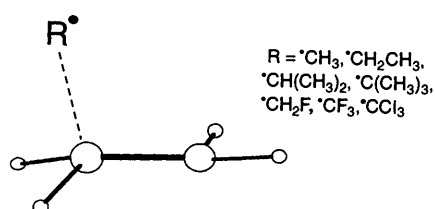
Nancy S. Mills and C. Channing Ruud



CIPE promotes allylic proton abstraction rather than benzylic proton abstraction

2041 **Theoretical study of the addition of alkyl and halogenoalkyl radicals to the ethylene double bond: a comparison between Hartree–Fock, perturbation theory and density functional theory**

Andrea Bottoni



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### Submission of chemical structure diagrams

The range of file formats accepted by the Royal Society of Chemistry now includes ISIS/Draw (exported as .tgf) as well as ChemDraw and ChemWindow (exported as .chm). Authors should supply structure diagrams on disk in one of these formats if at all possible.

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



## Forthcoming Articles in *Perkin Transactions 2*

Kinetics and mechanism of the basic hydrolysis of nitrosoureas  
**S. Amado, L. García-Río, J.R. Leis and A. Ríos**

Theoretical studies on long-range substituent effects in the reduction of 7-norbornanones  
**G.M. Keserü, Z. Kovári and G. Náray-Szabó**

Conformational study of six-membered phosphones. *cis*- and *trans*-3-Methoxycarbonyl-2-methoxy-2-oxo-1,2-oxaphosphorinane  
**M.K. Tasz, O.P. Rodriguez, S.E. Cremer, M.S. Hussain and M.-ul-Haque**

Oxidation of 2,3-dimethylindole by peroxophosphates  
**R. Ghanem, C. Carmona, M.A. Muñoz, P. Guardado and M. Balón**

Paramagnetic intermediates in the photolysis of 2-methylpropanoyltripropylstannane studied by means of multinuclear CIDNP  
**A.I. Kruppa, M.B. Taraban, S.A. Svarovsky and T.V. Leshina**

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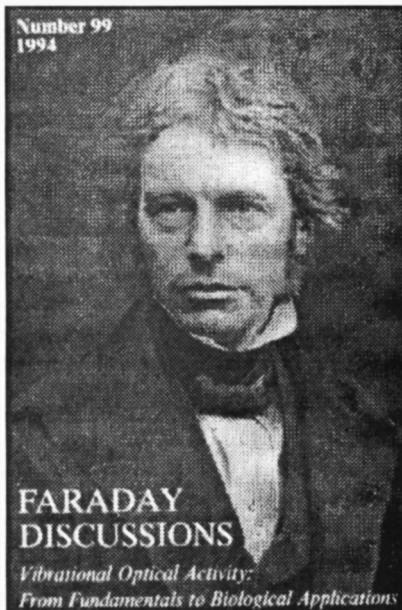
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