

JOURNAL OF THE CHEMICAL SOCIETY

Perkin Transactions 2

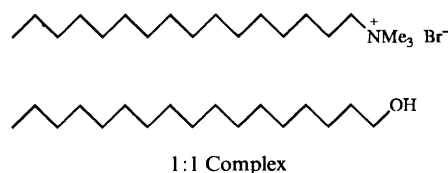
Physical Organic Chemistry

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Perkin Communications

- 1571 **Molecular aggregation of alkyltrimethylammonium bromide and alcohol. Discrimination of primary and secondary alcohols**

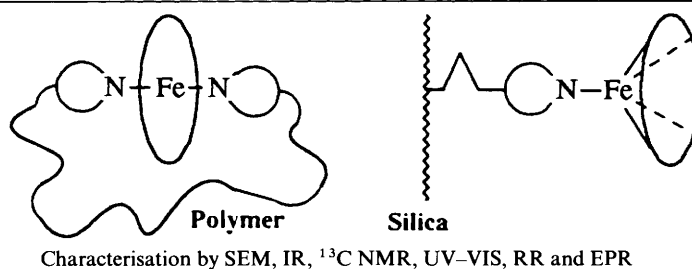
Koichi Tanaka, Kenichi Tamura and Fumio Toda



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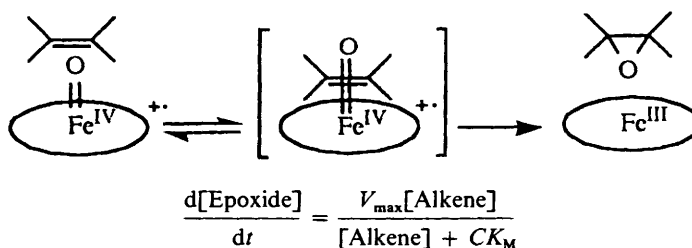
- 1573 **Characterisation of iron tetraarylporphyrins co-ordinatively bound to solid supports**

Paul R. Cooke, Claire Gilmartin, Gary W. Gray and John R. Lindsay Smith



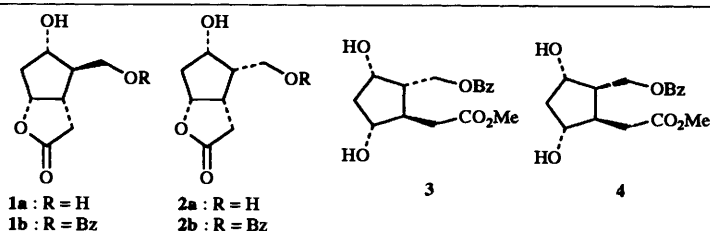
- 1579 **Kinetic study of the epoxidation of alkenes by iodosylbenzene catalysed by iron(III) tetra(4-N-methylpyridyl)porphyrin in methanol**

Paul Inchley and John R. Lindsay Smith



1589 **Synthesis and determination of *cis* or *trans* isoprostane precursors by a ^1H NMR NOE study**

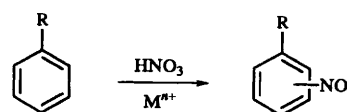
Benoît Rondot, Thierry Durand, Jean-Pierre Vidal, Jean-Pierre Girard and Jean-Claude Rossi



The homonuclear ^1H NOE experiment allows us to determine and confirm all the relative configurations of chiral centres of derivatives 1–4 synthesized by radical cyclization

1595 **Nitration of alkylbenzenes catalysed by mercury(II), thallium(III) and lead(IV)**

Michael W. Greenop and C. Barry Thomas



Rate and isomer ratio

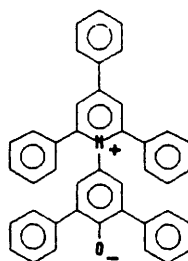
1601 **A reassessment of the isoinversion relationship**

Karl J. Hale and John H. Ridd

For reactions with similar inversion temperatures, the isoinversion relationship is a logical necessity not an empirical rule

1607 **Solute–solvent and solvent–solvent interactions in binary solvent mixtures. Part 1. A comparison of several preferential solvation models for describing $E_T(30)$ polarity of dipolar hydrogen bond acceptor–cosolvent mixtures**

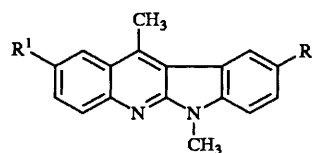
Martí Rosés, Clara Ràfols, José Ortega and Elisabeth Bosch



Hydrogen bonding in binary mixtures of HBD and HBA/non-HBD solvents produces polar complexes with $E_T(30)$ values higher than those of the pure solvents

1617 **^1H and ^{13}C NMR studies of 6,11-dimethyl-6*H*-indolo[2,3-*b*]quinoline and some of its derivatives**

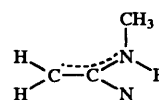
Krystyna Kamińska-Trela, Lidia Kania, Jerzy Sitkowski and Łukasz Kaczmarek



6*H*-Indolo[2,3-*b*]quinolines undergo self-association in CDCl_3 solution; this is revealed in ^1H and ^{13}C NMR spectra

1625 **n,π -Conjugation in *N*-methylvinylamine. A photoelectron spectroscopic study**

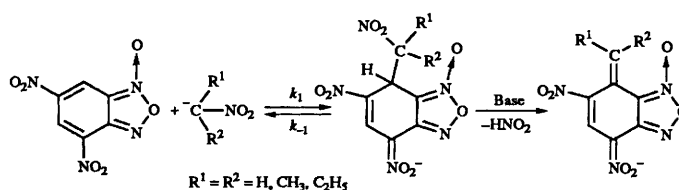
Jiye Fang, Cher Whee Sim, Chup Yew Mok, Hsing Hua Huang and Igor Novak



Photoelectron spectroscopic data show that the methyl substituent has the effect of reducing the degree of n,π -conjugation

1629 **Interaction of nitroalkane anions with superelectrophilic 4,6-dinitrobenzofuroxan: σ -adduct formation and vicarious heteroaromatic substitution of hydrogen**

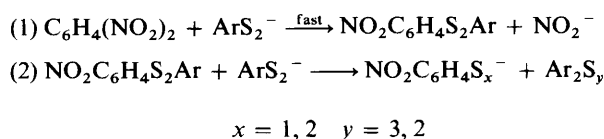
Francois Terrier, Régis Goumont, Marie-José Pouet and Jean-Claude Hallé



Rate and equilibrium data for nitroalkane anion addition to DNBF are reported together with the finding that the resulting σ -adducts suffer a facile base-catalysed β -elimination of the exocyclic NO_2 group

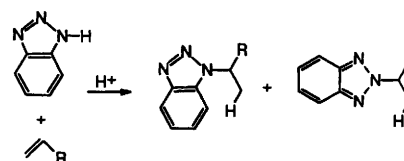
1639 **Displacement of aromatic nitro groups by anionic sulfur nucleophiles: reactivity of aryl disulfide and thiolate ions towards dinitrobenzenes in *N,N*-dimethylacetamide**

Julie Robert, Meriem Anouti, Gérard Bossier, Jean-Luc Parrain and Jacky Paris



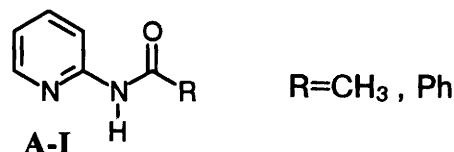
1645 **The first examples of the addition of heterocyclic NH to unactivated olefins**

Alan R. Katritzky, Isolde B. Puschmann, Christian V. Stevens and Adam P. Wells



1651 **An NMR study of the tautomerism of 2-acylaminopyridines**

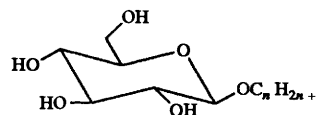
Alan R. Katritzky and Ion Ghiviriga



N-(Pyridin-2-yl)acylamides were shown by SIMPLE NMR spectroscopy to exist in solution as the tautomer-rotamer A-I

1655 **Properties of alkyl β -D-glucoside and alkyl β -D-maltoside micelles**

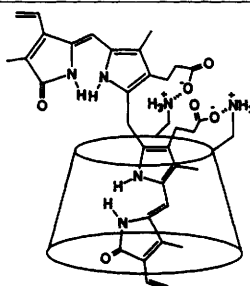
Koji Kano and Taizo Ishimura



The micelles formed by alkyl β -D-glucosides provide a less polar and more fluid microenvironment compared with the micelles of alkyl β -D-maltosides

1661 **Conformational enantiomerism of bilirubin and pamoic acid induced by protonated aminocyclodextrins**

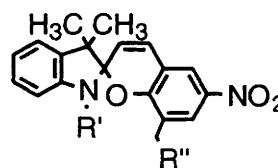
Koji Kano, Shinji Arimoto and Taizo Ishimura



The conformational enantiomerism of the dianion of (4*Z*,15*Z*)-bilirubin IX α induced by protonated heptakis-(6-amino-6-deoxy)- β -cyclodextrin occurs through electrostatic interaction between the host and the guest and simultaneous inclusion of the guest into the chiral host cavity

1667 **Photochromic behaviour of surfactant spiro-[2*H*-1-benzopyran-2,2'-[2,3]-dihydroindole]s (spiropyrans) adsorbed into clay interlayers**

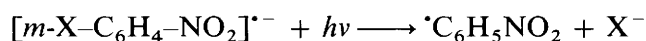
Katsuhiko Takagi, Toshio Kurematsu and Yasuhiko Sawaki



SP10⁺22 (R' = C₁₀H₂₀N⁺C₅H₅Br⁻; R'' = OCOC₂₁H₄₃) in montmorillonite was photochemically interconvertible

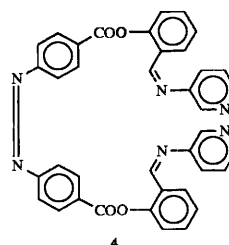
1673 **Photoelectrochemical reduction of meta-halonitrobenzenes and related species**

Richard G. Compton, Robert A. W. Dryfe, John C. Eklund, Stephen D. Page, Judy Hirst, Lembit Nei, George W. J. Fleet, Kenneth Y. Hsia, Donald Bethell and Louise J. Martingale



1679 **Characterization of simple photoresponsive systems and their applications to metal ion transport**

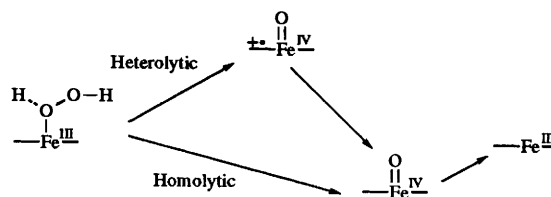
Sardar Ameerunisha and Panthappally S. Zacharias



Azobenzenes 1–5 show *E*–*Z* isomerization; compounds 1 and 4 show enhanced transport of Cu^{II} ions on irradiation across a liquid membrane phase

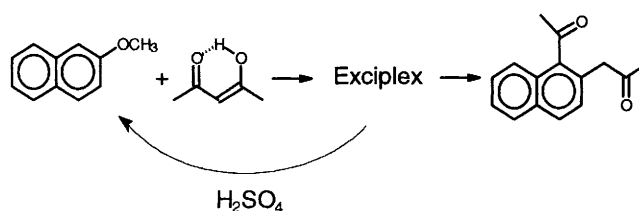
1683 **Dioxygen bond scission and haem degradation in haemproteins: a kinetic study of chemical model systems using ferrimyoglobin and haem-peptide: non-haempeptide complexes as catalysts for 'peroxidasic' reduction of hydrogen peroxide**

Paul A. Adams and Judith Louw



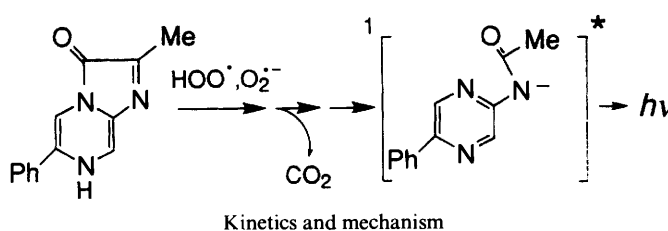
1691 **The photocycloaddition of methoxynaphthalenes with acetylacetone and acid-catalysed retardation: reactions of non-fluorescent exciplexes**

Yuan L. Chow, Gonzalo E. Buono-Core, Li-Ming Zhang and Carl I. Johansson



1699 **Chemiluminescence of *Cipridina* luciferin analogues. Part 2. Kinetic studies on the reaction of 2-methyl-6-phenylimidazo[1,2-*a*]-pyrazin-3(7*H*)-one (CLA) with superoxide: hydroperoxyl radical is an actual active species used to initiate the reaction**

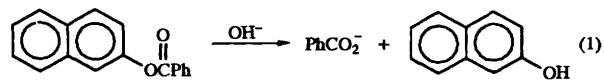
Katsuhisa Akutsu, Hiromitsu Nakajima, Takekatsu Katoh, Seiki Kino and Ken Fujimori



1707 Quantitative treatment of micellar effects upon nucleophilic substitution

Hamad A. Al-Lohedan

A model accounting for both coulombic and specific interactions of ions with aqueous micelles is applied to a variety of nucleophilic substitutions, *e.g.* reaction (1)



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