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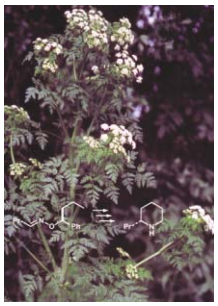

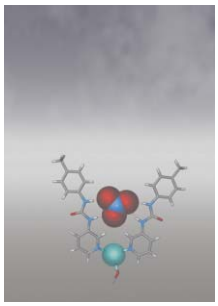

Cover (far left)
Background: Hemlock (*Conium maculatum*) (picture William & Wilma Follette @ USDA-NRCS PLANTS Database / USDA NRCS. 1992. *Western wetland flora: Field office guide to plant species.* West Region, Sacramento, California, USA). *Foreground:* the structures of coniine, one of the hemlock alkaloids, and other compounds that can be obtained from chiral oxime ethers based on (*R*)/(*S*)-*O*-(1-phenylbutyl)hydroxylamine (ROPHy/SOPHy) (pp. 1341–1351).

Inside cover (left)
A silver(I) complex of a simple pyridyl ligand containing a urea derivative templated by nitrate, showing the slight tilt of the nitrate anion (pp. 1352–1353).

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FEATURE ARTICLE

COMMUNICATIONS

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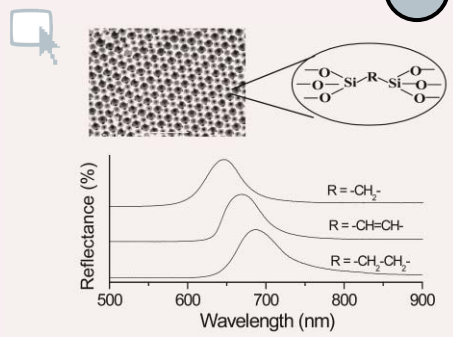
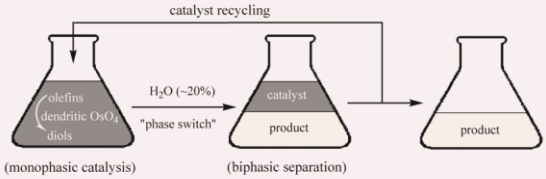


Synthesis, characterization and optical properties of ordered macroporous organosilicas

Zuocheng Zhou, Xiaoying Bao and X. S. Zhao*

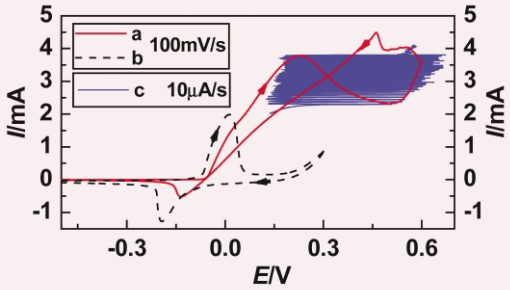
Ordered macroporous organosilica materials have been prepared wherein the organic spacer and pore size may be tuned to allow generation of different phases with different refractive indexes.



Phase selectively soluble dendrimer-bound osmium complex: a highly effective and easily recyclable catalyst for olefin dihydroxylation

Wei-Jun Tang, Nian-Fa Yang,* Bing Yi, Guo-Jun Deng, Yi-Yong Huang and Qing-Hua Fan*

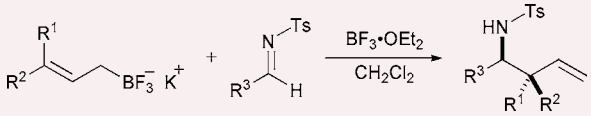
A new switched biphasic catalysis system for highly effective olefin dihydroxylation has been described, in which the dendritic osmium catalyst preferred to dissolve in the non-polar organic layer and could be easily separated from the polar diol products through phase separation induced by addition of water at the end of the reaction.



Transition of oscillatory mechanism for methanol electro-oxidation on nano-structured nickel hydroxide film (NNHF) electrode

Wei Huang, Zelin Li,* Youdi Peng and Zhenjiang Niu

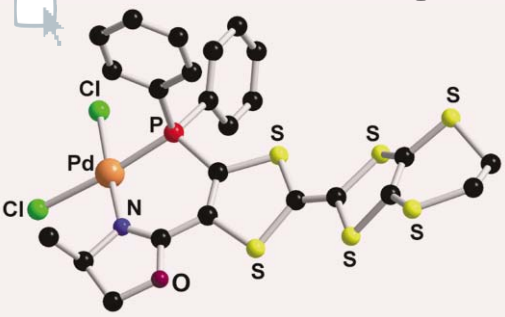
Instead of CO_{ad} formation and removal as on Pt electrodes, coupling of charge transfer with diffusion and convection mass transfer accounts for the oscillation found in the methanol electro-oxidation on the NNHF electrode.



Allylation and highly diastereoselective *syn* or *anti* crotylation of *N*-toluenesulfonylimines using potassium allyl- and crotyltrifluoroborates

Sze-Wan Li and Robert A. Batey*

Air and moisture stable potassium allyl- and crotyltrifluoroborates undergo addition to *N*-sulfonyl and *N*-sulfinyl aldimines in the presence of Lewis acids, to provide the corresponding homoallylic amines in high yields and excellent diastereoselectivity.

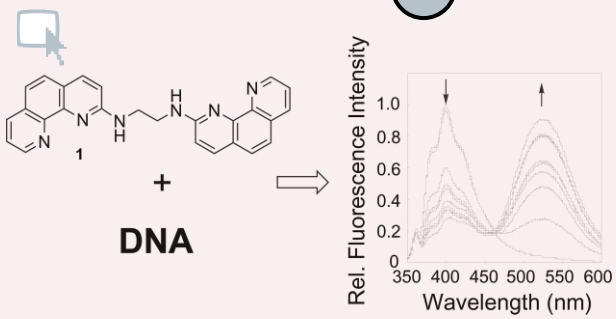


Tetrathiafulvalene based phosphino-oxazolines: a new family of redox active chiral ligands

Céline Réthoré, Marc Fourmigué* and Narcis Avarvari*

Electroactive chiral ethylenedithio-tetrathiafulvalene-oxazolines (EDT-TTF-OX) and -phosphinooxazolines (EDT-TTF-PHOX) have been synthesized and characterized, together with the racemic palladium complex (EDT-TTF-PHOX)$PdCl_2$.

1386

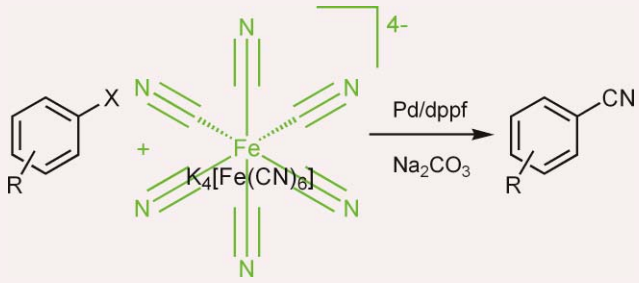


Bis(phenanthroline)-ethylenediamine conjugate displays excimer fluorescence upon binding with DNA

Keigo Hayashi, Hitoshi Akutsu, Hiroaki Ozaki and Hiroaki Sawai*

1,2-Bis(1,10-phenanthrolin-2-yl)ethylenediamine **1** displays a unique excimer fluorescence at 528 nm by binding with DNA, while its monomer fluorescence at 400 nm shows a decrease upon binding with DNA. **1** works as a groove-binder to DNA.

1388

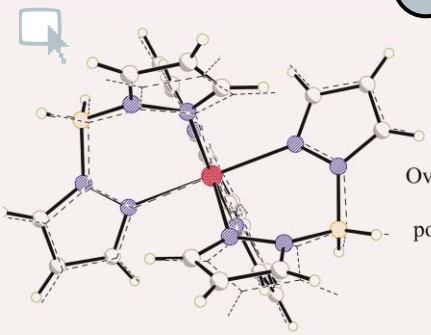


Potassium hexacyanoferrate(II)—a new cyanating agent for the palladium-catalyzed cyanation of aryl halides

Thomas Schareina, Alexander Zapf and Matthias Beller*

The use of potassium hexacyanoferrate(II) as a cyanating agent for the general synthesis of benzonitriles is described. Under optimized reaction conditions good yields of the desired products and unprecedented catalyst productivities have been achieved.

1390



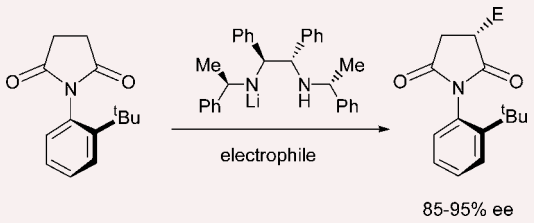
Overlay of the two high spin polymorphs of **2**.

Thermal and light induced polymorphism in iron(II) spin crossover compounds

Amber L. Thompson, Andrés E. Goeta,* José A. Real,* Ana Galet and M. Carmen Muñoz

The crystal structures of the thermal and light induced spin states of $\{Fe[H_2B(pz)_2]_2L\}$ ($[H_2B(pz)_2]^-$ = dihydrobis(pyrazolyl)borate, L = 2,2′-bipyridine (**1**), bipy and 1,10-phenanthroline, phen (**2**)), demonstrate that **2** exhibits "thermal and light induced polymorphism," while **1** does not.

1392

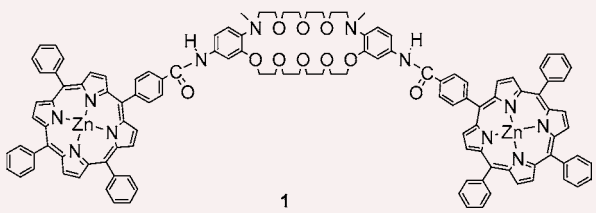


A novel asymmetric route to succinimides and derived compounds: synthesis of the lignan lactone (+)-hinokinin

D. Jonathan Bennett, Paula L. Pickering and Nigel S. Simpkins*

A novel approach to chiral succinimides and derived compounds has been developed that involves chiral lithium amide desymmetrisation of an *N-ortho-tert*-butylphenyl succinimide to generate a putative atropisomeric intermediate enolate, alkylation of which enables access to the lignan lactone (+)-hinokinin.

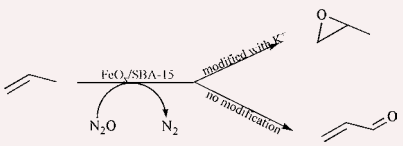
1394



Effective cation-assisted chirality induction using a dibenzo-diaza-30-crown-10 with bis(zinc(II) porphyrin) units

Yuji Kubo,* Yusuke Ishii, Toshiharu Yoshizawa and Sumio Tokita

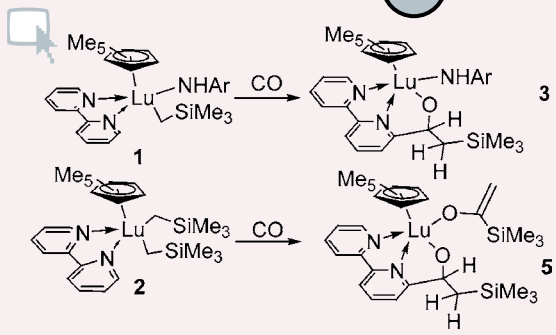
The first rationalized diaza crown ether-bis(porphyrin) conjugate with a large ring-based conformation flexibility has been synthesized, showing an effective K^+-assisted chirality induction.



Iron-catalysed propylene epoxidation by nitrous oxide: dramatic shift of allylic oxidation to epoxidation by the modification with alkali metal salts

Xiaoxing Wang, Qinghong Zhang, Qian Guo, Yinchuan Lou, Lüjuan Yang and Ye Wang*

The modification of FeO_x/SBA-15 with K^+ dramatically shifted the allylic oxidation of C_3H_6 to epoxidation by N_2O



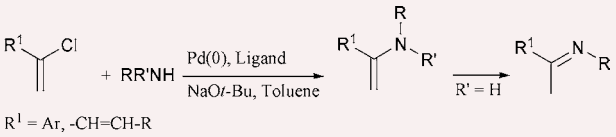
C–H activation of a 2,2′-bipyridine ligand within (mono)pentamethylcyclopentadienyl lutetium complexes

Thomas M. Cameron,* John C. Gordon, Brian L. Scott and William Tumas

We report the activation of a 2,2′-bipyridine ligand within a class of (mono)cyclopentadienyl lanthanide complexes when reacted with carbon monoxide.

Palladium catalyzed amination of vinyl chlorides: a new entry to imines, enamines and 2-amino-1,3-butadienes

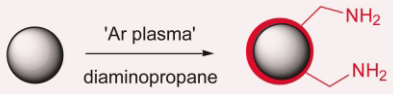
José Barluenga,* M. Alejandro Fernández, Fernando Aznar and Carlos Valdés



Vinyl chlorides are used in palladium catalyzed cross-coupling reactions with amines to give rise to enamines, imines and 2-amino-1,3-butadienes with very high yields and chemoselectivity.

Plasmachemical surface functionalised beads: versatile tailored supports for polymer assisted organic synthesis

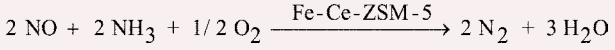
Jas Pal Badyal, Audrey M. Cameron, Neil R. Cameron, Diane M. Coe, Richard Cox, Benjamin G. Davis,* Leslie J. Oates, Gisle Oye, Christos Spanos and Patrick G. Steel*



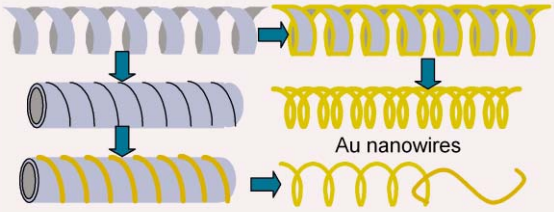
Plasmachemical surface modification of porous polystyrene beads with allylamine or diaminopropane provides reactive amine functionality exclusively at accessible surface sites, allowing faster reactions than classically prepared materials.

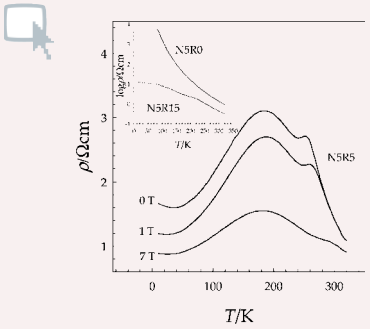
Fe–Ce–ZSM-5 a new catalyst of outstanding properties in the selective catalytic reduction of NO with NH_3

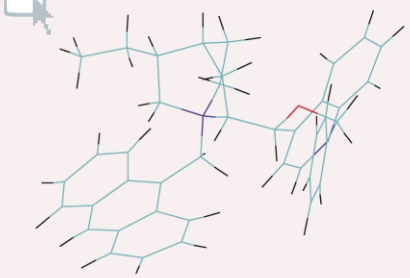
G. Carja, G. Delahay,* C. Signorile and B. Coq

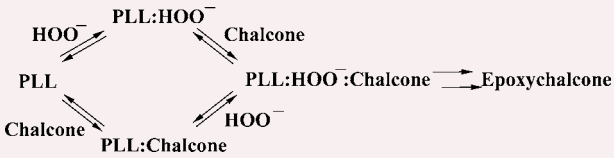


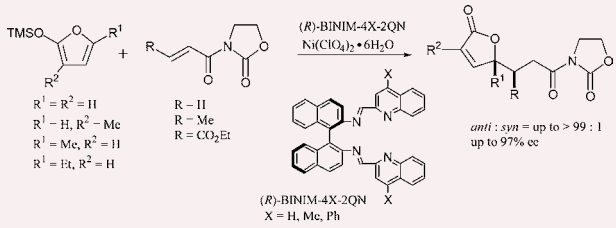
A Fe–Ce–ZSM-5 catalyst elaborated from a new synthesis route exhibits very high NO conversion (75–100%) in the selective catalytic reduction of NO by NH_3 in a wide temperature window (523–823 K), even in the presence of H_2O and SO_2.











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