

## Contents

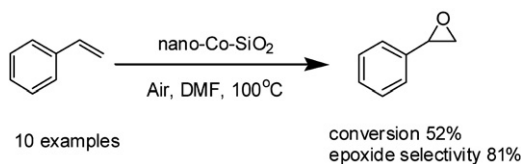
### Articles

**M. Lakshmi Kantam, B. Purna Chandra Rao, R. Sudarshan Reddy, N.S. Sekhar, B. Sreedhar, B.M. Choudary**

Selective aerobic epoxidation of olefins was achieved by using sol–gel prepared Co-SiO<sub>2</sub> nanocomposite catalysts without the use of sacrificial reductant. This catalyst is reused for several cycles with consistent activity.

*Journal of Molecular Catalysis A: Chemical 272 (2007) 1*

Aerobic epoxidation of olefins catalyzed by Co-SiO<sub>2</sub> nanocomposites

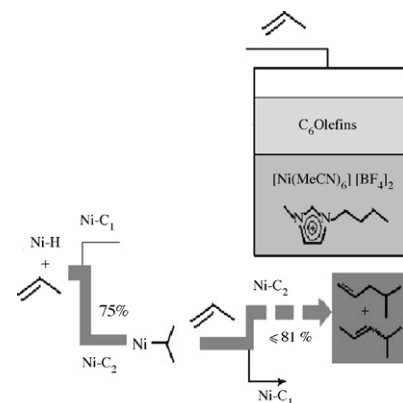


**Roberto Fernando de Souza, Bárbara Caroline Leal, Michèle Oberson de Souza, Daniel Thiele**

The influence of parameters such as pressure, pre-catalyst amount, [Al]/[Ni] molar ratio, stirring rate and temperature on the propylene dimerization with [Ni(MeCN)<sub>6</sub>][BF<sub>4</sub>]<sub>2</sub>/organochloroaluminate IL were studied. The selectivity towards isomerization and dimerization has been evaluated. The mechanism is rationalized based on the amount of each mode of insertion of successive propylene molecules.

*Journal of Molecular Catalysis A: Chemical 272 (2007) 6*

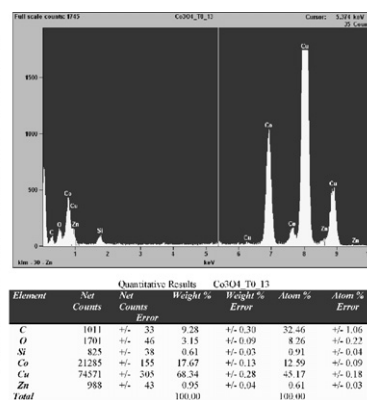
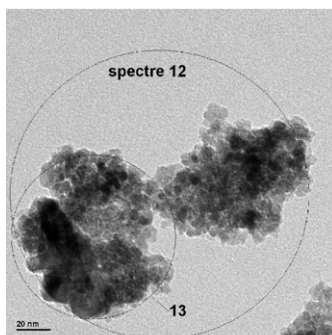
Nickel-catalyzed propylene dimerization in organochloroaluminate ionic liquids: Control of the isomerization reaction



**Yu Zhiyong, M. Bensimon, D. Laub, L. Kiwi-Minsker, W. Jardim, E. Mielczarski, J. Mielczarski, J. Kiwi**

*Journal of Molecular Catalysis A: Chemical 272 (2007) 11*

Accelerated photodegradation (minute range) of the commercial azo-dye Orange II mediated by Co<sub>3</sub>O<sub>4</sub>/Raschig rings in the presence of oxone

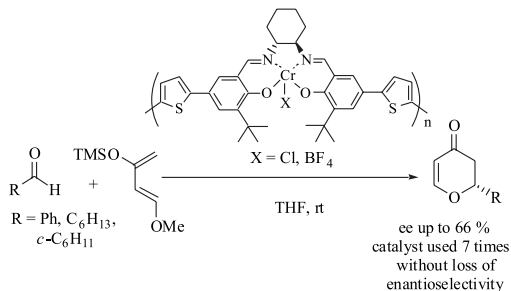


**Mohamed Mellah, Benoît Ansel,  
Frédéric Patureau, Arnaud Voiturier,  
Emmanuelle Schulz**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 20

Electropolymerized Cr–salen complexes for the heterogeneous asymmetric hetero Diels–Alder reaction

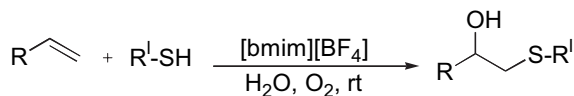
New electropolymerized chiral salen–chromium complexes have been successfully used as heterogeneous catalysts for the asymmetric hetero Diels–Alder reaction. These insoluble catalysts were reused up to six times affording the expected products with unchanged enantioselectivity along the recycling procedure. Promising attempts to use these catalysts in a multi-substrate procedure are described.



**Ahmed Kamal, D. Rajasekhar Reddy, Rajendar**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 26

Direct one-pot synthesis of  $\beta$ -hydroxysulfides from terminal olefins in a mixture of [bmim][BF<sub>4</sub>] and water in presence of molecular oxygen

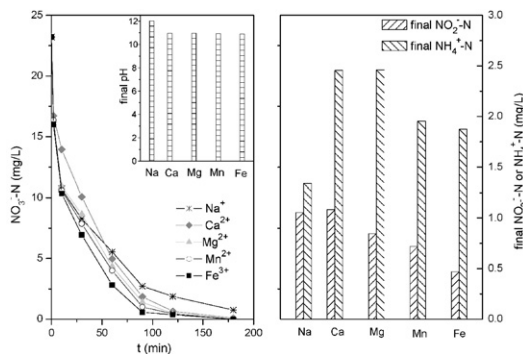


**Ying Wang, Jiuhui Qu, Huijuan Liu**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 31

Effect of liquid property on adsorption and catalytic reduction of nitrate over hydrotalcite-supported Pd–Cu catalyst

The effect of liquid property (T, pH, co-ions) on adsorption and catalytic reduction of nitrate over hydrotalcite-supported Pd–Cu catalyst was investigated in batch experiments.

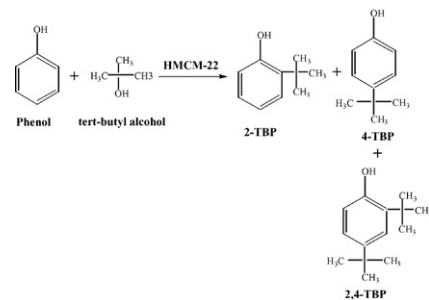


**G. Satish Kumar, S. Saravanamurugan,  
Martin Hartmann, M. Palanichamy,  
V. Murugesan**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 38

Synthesis, characterisation and catalytic performance of HMCM-22 of different silica to alumina ratios

The experimental results revealed that the workable range of Si/Al ratio for the synthesis of MCM-22 is 24–76. The catalytic activity of the materials was examined in the vapour phase *tert*-butylation of phenol using *tert*-butyl alcohol as the alkylating agent. The present investigation reveals the convenience in employing HMCM-22 for the selective production of 4-TBP in the *tert*-butylation of phenol.

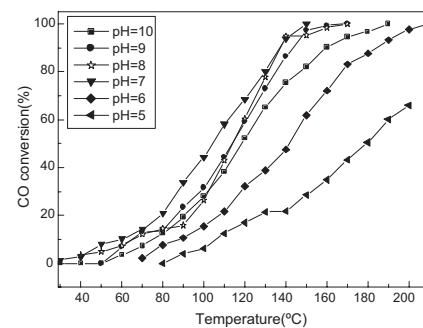


**Shu-Ping Wang, Tong-Ying Zhang,  
Xiao-Ying Wang, Shou-Min Zhang,  
Shu-Rong Wang, Wei-Ping Huang, Shi-Hua Wu**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 45

Synthesis, characterization and catalytic activity of  
Au/Ce<sub>0.8</sub>Zr<sub>0.2</sub>O<sub>2</sub> catalysts for CO oxidation

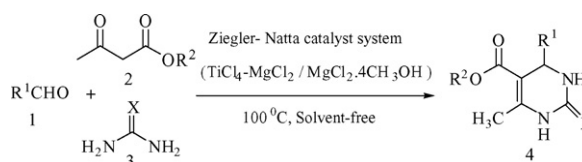
The Au/Ce<sub>0.8</sub>Zr<sub>0.2</sub>O<sub>2</sub> catalysts were prepared via deposition-precipitation method and characterized by XRD, FT-Raman, HRTEM, XPS and TPR techniques. The influence of the pH values, Au loadings, calcination temperature and calcination time on the catalytic activity of the Au/Ce<sub>0.8</sub>Zr<sub>0.2</sub>O<sub>2</sub> catalysts was investigated in the present study.



**Atul Kumar, Ram Awatar Maurya**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 53

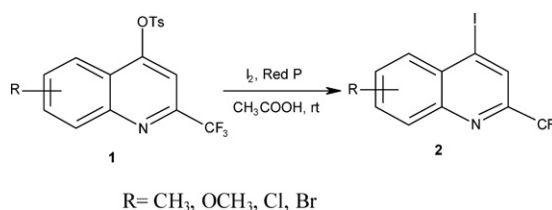
Synthesis of 3,4-dihydropyrimidin-2(1H)-ones  
using Ziegler–Natta catalyst system under solvent  
free conditions



**H.M. Meshram, A.V. Madhavi, B. Eeshwaraiiah,  
P.N. Reddy, Y.V.D. Nageswar Rao, J.S. Yadav**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 57

A practical and convenient method for synthesis of  
substituted 4-iodoquinolines

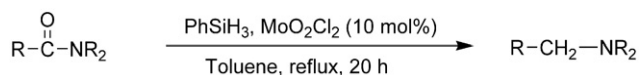


**Ana C. Fernandes, Carlos C. Romão**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 60

Reduction of amides with silanes catalyzed by  
MoO<sub>2</sub>Cl<sub>2</sub>

MoO<sub>2</sub>Cl<sub>2</sub> catalyzes the reduction of amides to the corresponding amines with silanes in moderate to good yields.

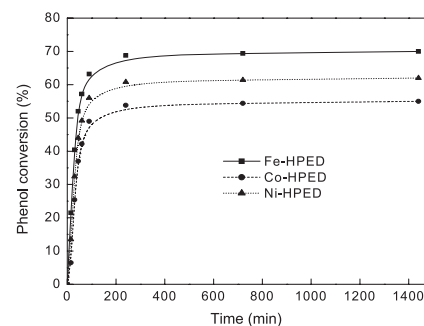


**K.C. Gupta, A.K. Sutar**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 64

Polymer anchored Schiff base complexes of transition metal ions and their catalytic activities in oxidation of phenol

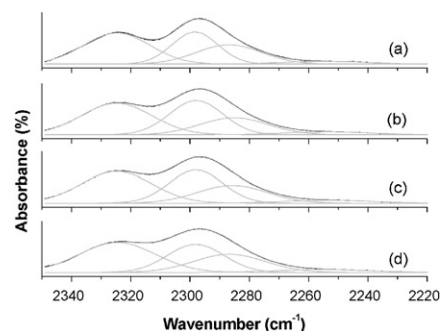
The polymer anchored *N,N'*-bis(*o*-hydroxy acetophenone)ethylenediamine Schiff base complexes of iron(III), cobalt(II) and nickel(II) ions were prepared and characterized for their structures and catalytic activity. The polymer supported iron(III) complexes showed more catalytic activity in oxidation of phenol and selectivity for catechol than free complexes.

**Piaoping Yang, Yongchen Shang, Jianfeng Yu, Jun Wang, Milin Zhang, Tonghao Wu**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 75

One-step synthesis of methyl isobutyl ketone from acetone over Pd/MCM-22 zeolites

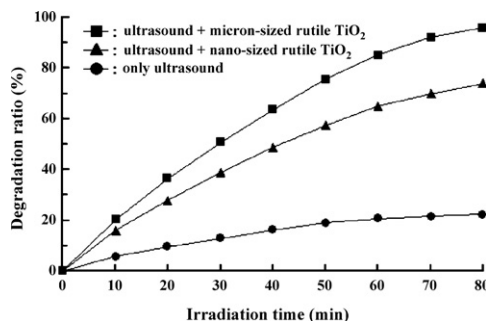
Pd/MCM-22 catalysts were prepared by ion-exchange method. The catalysts showed high catalytic activity, reaching a conversion of 34.0% and a selectivity of 86.9% to MIBK. The results also indicated that a proper balance between metallic and acidic sites was necessary for obtaining high catalytic activity.

**Jun Wang, Wei Sun, Zhaohong Zhang, Xiangdong Zhang, Ronghe Li, Teng Ma, Peng Zhang, Ying Li**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 84

Sonocatalytic degradation of methyl parathion in the presence of micron-sized and nano-sized rutile titanium dioxide catalysts and comparison of their sonocatalytic abilities

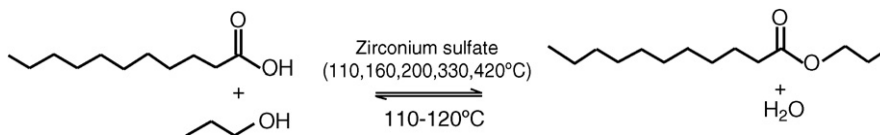
The methyl parathion in aqueous solution can be degraded rapidly under ultrasonic irradiation in the presence of rutile TiO<sub>2</sub> powder. Moreover, the sonocatalytic activity of micron-sized rutile TiO<sub>2</sub> particles was obviously higher than that of nano-sized rutile TiO<sub>2</sub> particles.

**Joon Ching Juan, Jingchang Zhang, Yajie Jiang, Weiliang Cao, Mohd Ambar Yarmo**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 91

The zirconium sulfate microcrystal structure in relation to their activity in the esterification

Zirconium sulfate (ZS) varying in crystalline phase from hydrate to anhydrous was prepared at different treatment temperature. The relationship between microcrystal structure at different treatment temperature and activity in esterification was evaluated. The reaction was poisoned by the exchange of surface protons on ZS with Cs<sup>+</sup>. It is demonstrated that the catalytic activity of ZS was affected by thermal treatment due to changes in crystalline water.

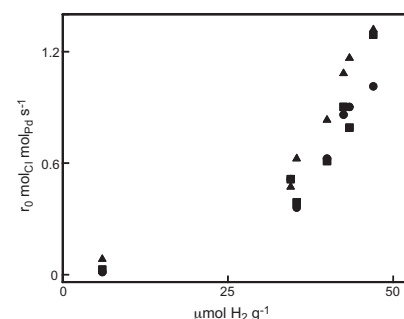


**Satyakrishna Jujuri, Errun Ding,  
Sheldon G. Shore, Mark A. Keane**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 96

A characterization of Ln-Pd/SiO<sub>2</sub> (Ln=La, Ce, Sm, Eu, Gd and Yb): Correlation of surface chemistry with hydrogenolysis activity

Gas phase hydrodechlorination has been investigated over Pd/SiO<sub>2</sub> and a series of Ln-Pd/SiO<sub>2</sub> prepared from the organometallic precursor  $\{(DMF)_{10}Ln_2[Pd(CN)_4]_3\}_\infty$  where Ln = La, Ce, Sm, Eu, Gd and Yb. A promotional effect due to the inclusion of Ln is observed and attributed to a surface Pd/Ln synergism resulting in an enhancement of surface reactive hydrogen (see figure) and a more effective C-Cl bond activation.

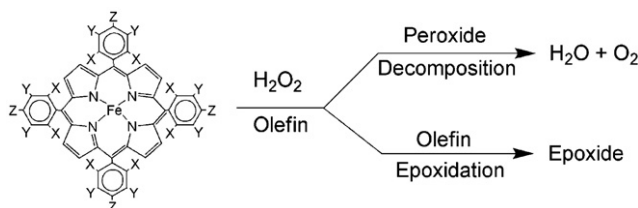


**Ned A. Stephenson, Alexis T. Bell**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 108

Effects of porphyrin composition on the activity and selectivity of the iron(III) porphyrin catalysts for the epoxidation of cyclooctene by hydrogen peroxide

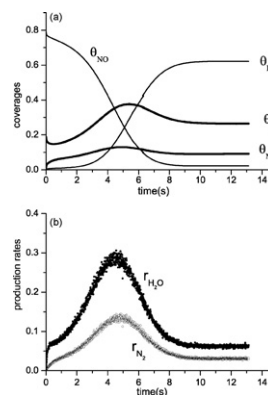
The effect of the nature of phenyl-substituents on the mechanism and individual rate parameters has been determined. The combined effects of individual rate parameters are then used to explain the observed reactivity and selectivity. Overall, the most electronegative porphyrin catalyst, iron(III) [tetrakis(pentafluorophenyl)] porphyrin, was the most reactive and most selective.



**Luis Vicente, Francisco Vidal Caballero**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 118

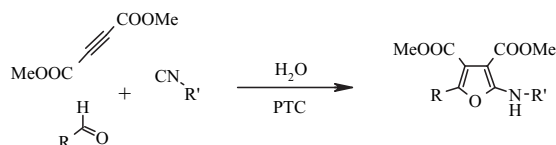
Modeling of surface explosion of NO+H<sub>2</sub> reaction on Pt(100): Mean-field analysis and dynamic Monte Carlo simulations



**J.S. Yadav, B.V. Subba Reddy, S. Shubashree,  
K. Sadashiv, D. Krishna Rao**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 128

Organic synthesis in water: Green protocol for the synthesis of 2-amino furan derivatives

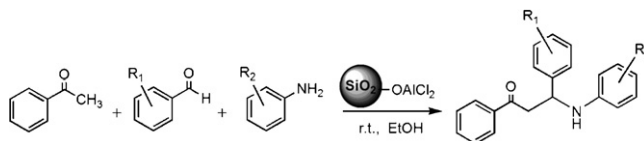


**Zheng Li, Xuelin Ma, Jing Liu, Xu Feng,  
Guoqiang Tian, Anguo Zhu**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 132

Silica-supported aluminum chloride: A recyclable and reusable catalyst for one-pot three-component Mannich-type reactions

Silica supported aluminum chloride was used as an efficient, recyclable and reusable catalyst for the one-pot Mannich-type reactions of acetophenone with aromatic aldehydes and aromatic amines. This protocol has advantages of high yield, mild condition, no environmental pollution, and simple work-up procedure.

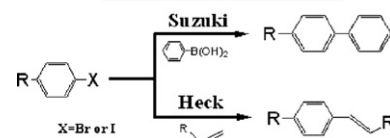
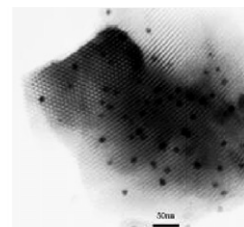


**Peng Han, Xiaomei Wang, Xuepeng Qiu,  
Xiangling Ji, Lianxun Gao**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 136

One-step synthesis of palladium/SBA-15 nanocomposites and its catalytic application

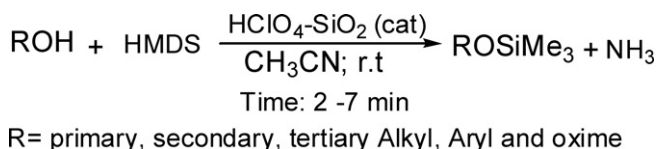
We present a facile one-step method to prepare palladium/SBA-15 nanocomposites via sol-gel route in the presence of surfactant P123 as structure-directed agent. However, the loading amount of palladium nanoparticles in SBA-15 is tunable with varied amount of palladium salts. The resulting nanocomposites exhibit a high catalytic activity and recycling effect for both the Suzuki and Heck coupling reactions.



**Hamid Reza Shaterian, Fahimeh Shahrekipoor,  
Majid Ghashang**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 142

Silica supported perchloric acid ( $\text{HClO}_4\text{-SiO}_2$ ): A highly efficient and reusable catalyst for the protection of hydroxyl groups using HMDS under mild and ambient conditions

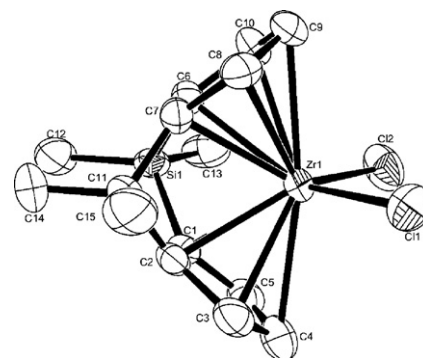


**Kiyohiko Yokota, Masami Watanabe,  
Takuji Okamoto, Nobuhiro Yabunouchi,  
Yukio Shimane, Nobuhide Ishihara**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 152

Novel dimethylsilylene isopropylidene doubly bridged metallocenes: Syntheses, identifications, and activities for olefin polymerizations

Novel doubly bridged metallocene complexes ( $\text{Me}_2\text{Si}(\text{Me}_2\text{C})(\text{C}_5\text{H}_3)_2\text{MCl}_2$  ( $\text{M} = \text{Ti}(\mathbf{4})$ ,  $\text{Zr}(\mathbf{8})$ ), were synthesized by reactions of the corresponding ligand dilithium salt with  $\text{MCl}_4$ . The structures were determined by X-ray analysis. As was expected, each of them showed the smallest bite-angle ( $\mathbf{4}$ :  $120^\circ$ ;  $\mathbf{8}$ :  $114^\circ$ ) in the bis(cyclopentadienyl) type of Ti or Zr complexes. Copolymerizations of ethylene/1-octene were carried out using these metallocenes in the presence of cocatalyst. These complexes show high incorporation abilities.

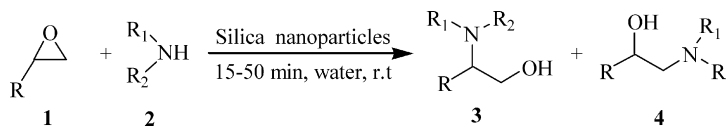


**B. Sreedhar, P. Radhika, B. Neelima, Neha Hebalkar**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 159

Regioselective ring opening of epoxides with amines using monodispersed silica nanoparticles in water

Monodispersed silica nanoparticles were synthesized and used as catalyst for the regioselective synthesis of  $\beta$ -amino alcohols in water via nucleophilic ring opening of epoxides with amines under ambient conditions in shorter reaction times. The use of water as 'green' solvent allows easy recycling of the catalyst with consistent activity.

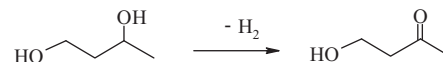


**Satoshi Sato, Ryoji Takahashi, Hiromitsu Fukuda, Kanichiro Inui**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 164

Dehydrogenation of 1,3-butanediol over Cu-based catalyst

Vapor-phase dehydrogenation of 1,3-butanediol to 4-hydroxy-2-butanone was examined over copper catalysts modified with ZnO, ZrO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, and MgO. Pure Cu and Cu/ZnO efficiently catalyzed the formation of 4-hydroxy-2-butanone in the dehydrogenation of 1,3-butanediol. Addition of Al<sub>2</sub>O<sub>3</sub>, ZrO<sub>2</sub> and MgO to the copper catalyst decreases the selectivity to 4-hydroxy-2-butanone because of the formation of butanone.

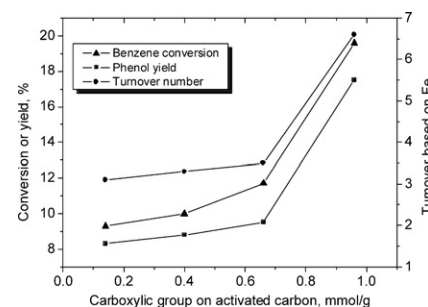


**Yongke Zhong, Guiying Li, Liangfang Zhu, Yun Yan, Gang Wu, Changwei Hu**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 169

Low temperature hydroxylation of benzene to phenol by hydrogen peroxide over Fe/activated carbon catalyst

A series of Fe-based catalysts were prepared, characterized by Boehm titration and XPS, and employed to the hydroxylation of benzene to phenol with hydrogen peroxide under moderate conditions. The surface carboxylic groups on activated carbon were mainly responsible for the ferric species to be anchored, and for the synergistic effect between activated carbon and supported ferric species.

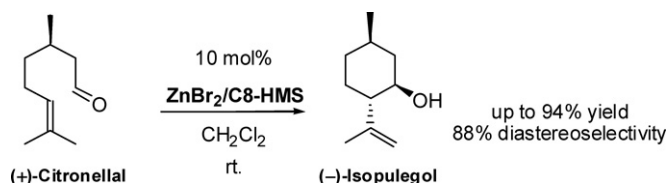


**Shohei Imachi, Kisho Owada, Makoto Onaka**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 174

Intramolecular carbonyl-ene reaction of citronellal to isopulegol over ZnBr<sub>2</sub>-loading mesoporous silica catalysts

The preparation of ZnBr<sub>2</sub>-loading mesoporous catalysts and their application to the intramolecular carbonyl-ene reaction of (+)-citronellal to (-)-isopulegol were studied. Among a series of mesoporous supports, C8-HMS, which was synthesized from Si(OEt)<sub>4</sub> via a sol-gel process in the presence of octylamine as a templating agent, was found to be an optimal support to load ZnBr<sub>2</sub> without damage of inherent mesoporosity of the support. The ZnBr<sub>2</sub> loaded on C8-HMS showed higher catalytic activity and diastereoselectivity than ZnBr<sub>2</sub> on other supports, namely HMS, MCM-41, mesoporous alumina, and Al-HMS.

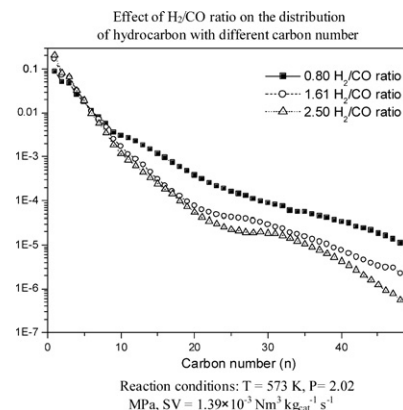


**Ying Liu, Bo-Tao Teng, Xiao-Hui Guo, Ying Li, Jie Chang, Lei Tian, Xu Hao, Yu Wang, Hong-Wei Xiang, Yuan-Yuan Xu, Yong-Wang Li**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 182

Effect of reaction conditions on the catalytic performance of Fe-Mn catalyst for Fischer-Tropsch synthesis

The  $H_2/CO$  ratio in the reaction atmosphere plays a very important role in FTS reactions, which influences the selectivity of products directly. The higher  $H_2/CO$  ratio is preferential for chain termination to produce light hydrocarbons while lower  $H_2/CO$  ratio is preferential for the chain growth and the production of heavy hydrocarbons.

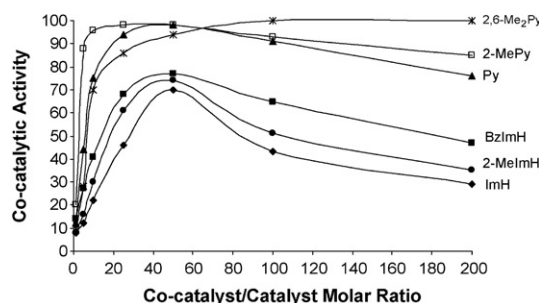


**Daryoush Mohajer, Leila Sadeghian**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 191

Co-catalytic effects of nitrogen donors on the epoxidation of cyclooctene with tetra-*n*-butylammonium hydrogen monopersulfate in the presence of manganese(III)tetraarylporphyrins: A comparative study

“Hindered” 2,6-Me<sub>2</sub>Py and 2-MePy demonstrated co-catalytic activities better than imidazoles at all co-catalyst/catalyst ratios (10–200) in the presence of MnTPFP(OAc), contrasting their behavior with MnTPP(OAc).

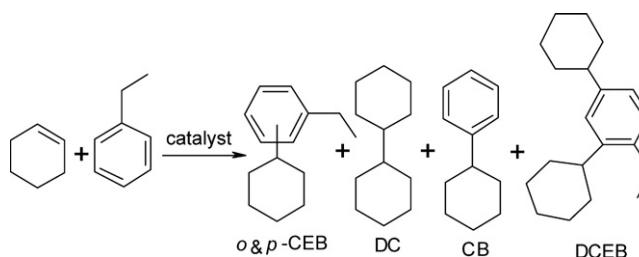


**R. Anuradha, M. Palanichamy, V. Murugesan**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 198

Pore size independent regioselective cyclohexylation of ethylbenzene

Vapour phase cyclohexylation of ethylbenzene with cyclohexene was carried out over HY, H $\beta$ , Al-MCM-41 and Al-MCM-48 catalysts. Al-MCM-41 catalyst is suggested to be the best for this reaction. In addition to high conversion obtained with these catalysts, absence of isomerisation of *ortho* and *para* isomers to *meta* isomer is also an important result observed in this reaction.

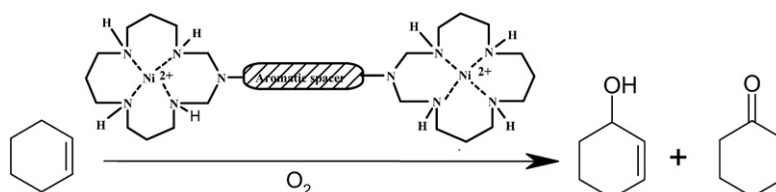


**Masoud Salavati-Niasari**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 207

16-Membered pentaaza bis(macrocyclic) nickel(II) complexes containing aromatic nitrogen–nitrogen linkers,  $\{[Ni([16]aneN_5)]_2R\}(ClO_4)_4$ : Synthesis, characterization and catalytic oxidation of cyclohexene with molecular oxygen

New square-planar bis(macrocyclic)dinickel(II) complexes containing phenylene bridges between 16-membered pentaaza macrocyclic subunits have been synthesized *via* in situ one pot template condensation reaction of aromatic nitrogen–nitrogen linker ( $R = 1,4$ -phenylenediamine; benzidine; 4,4'-diaminodiphenylmethane; 4,4'-diaminodiphenylether; 4,4'-diaminodiphenylsulfon), formaldehyde, bis(1,3-diaminopropane) nickel(II) perchlorate and 1,3-dibromopropane in a 1:4:2:2 molar ratio results in the formation of new series of binuclear nickel(II) complexes. These complexes have been found to be effective catalysts for the selective oxidation of cyclohexene to 2-cyclohexene-1-one and 2-cyclohexene-2-ol with molecular oxygen as the oxidant.



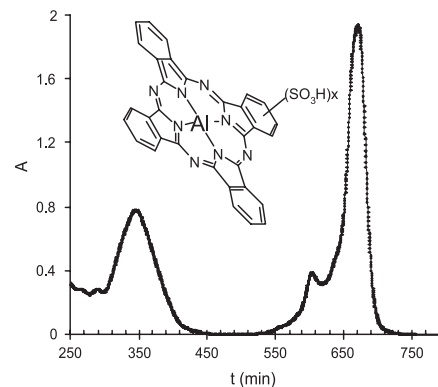


**P. Kluson, M. Drobek, T. Strasak, J. Krysa, M. Karaskova, J. Rakusan**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 213

Sulphonated phthalocyanines as effective oxidation photocatalysts for visible and UV light regions

Attention was paid to the synthesis, chemical modification (sulphonation), characterisation and practical catalytic utilisation of metal free phthalocyanine and a series of phthalocyanines (PHCs) with Zn, Al, Si, Co, Ni, Cu and Ti central atoms in a model oxidation of 4-chlorophenol under illumination with visible and UV light.



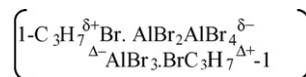
**H.S.A. Douwes**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 220

The kinetics of the aluminium bromide catalyzed isomerization of 1-propyl bromide II

The kinetics of the aluminium bromide catalyzed isomerization of 1-propyl bromide involves the monomeric and dimeric complexes of the alkyl bromide with aluminium bromide,  $(1-C_3H_7Br \cdot AlBr_3)$  and  $(1-C_3H_7Br)_2 \cdot Al_2Br_6$ , and the antiparallel dipole pair of the dimeric complexes.

The initial rate analysis of the isomerization process now shows that parallel mixed dipole pairs of the monomeric and dimeric complexes,  $(1-C_3H_7Br \cdot AlBr_2^{\delta+} \cdot AlBr_4^{\delta-}) \cdot (1-C_3H_7^{\delta+} Br \cdot AlBr_3^{\delta-})$  and  $(1-C_3H_7^{\delta+} Br \cdot AlBr_3^{\delta-}) \cdot (1-C_3H_7Br \cdot AlBr_2^{\delta+} \cdot AlBr_4^{\delta-})$ , could also take part in the isomerization process. The kinetics of the process is investigated and the conclusion is that the isomerization does not require the mixed parallel dipole pairs for the reaction.

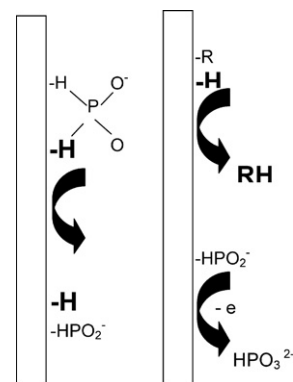


**Maria Cristina F. Oliveira**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 225

On the study of the catalytic transfer hydrogenation reaction: The hydrogenation of 3-buten-1-ol on a Pd-black film

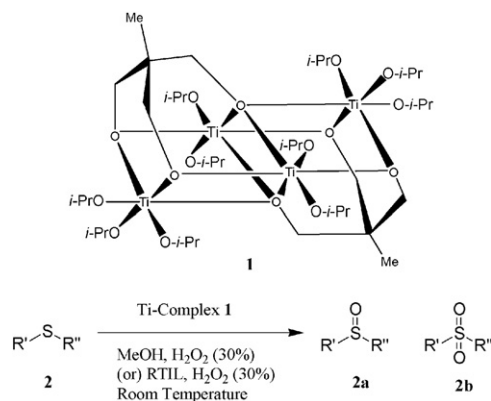
The catalytic transfer hydrogenation relies on the *in situ* formation of atomic hydrogen from a hydrogen donor, and its transfer to an organic or inorganic acceptor, through the use of an appropriate catalyst. A comprehensive investigation on the catalytic transfer hydrogenation using the hypophosphite ion as the hydrogen donor was carried out on a Pd-black film.



**Ch. Venkat Reddy, John G. Verkade**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 233

An advantageous tetrameric titanium alkoxide/ionic liquid as a recyclable catalyst system for the selective oxidation of sulfides to sulfones

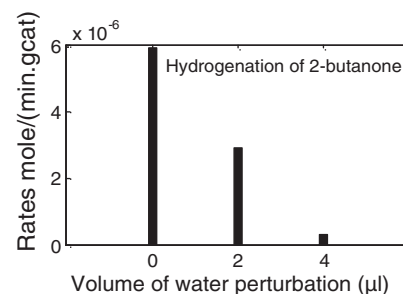


**Feng Gao, Ruijiang Li, Marc Garland**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 241

An on-line FTIR study of the liquid-phase hydrogenation of 2-butanone over Pt/Al<sub>2</sub>O<sub>3</sub> in *d*<sub>8</sub>-toluene. The importance of anhydrous conditions

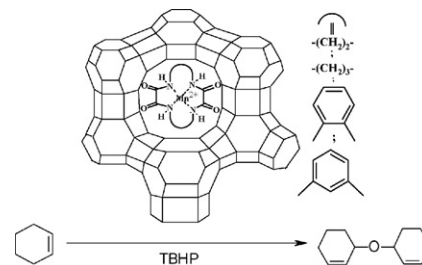
Liquid-phase heterogeneous catalytic hydrogenation of 2-butanone over Pt/Al<sub>2</sub>O<sub>3</sub> was performed in anhydrous *d*<sub>8</sub>-toluene with on-line FTIR measurements and further perturbations of water. The hydrogenation rates of both 2-butanone and the solvent *d*<sub>8</sub>-toluene were strongly affected by the presence of water and unusual spectral changes were observed.

**Masoud Salavati-Niasari**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 249

Selective oxidation of cyclohexene to di-2-cyclohexenylether by host (nanocavity of zeolite-Y)/guest (manganese(II) complexes with 12- and 14-membered tetraazacyclic macrocyclic complexes) nanocomposite materials (HGNM)

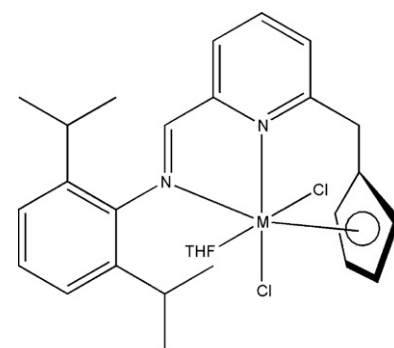
Manganese(II) complexes of [12]aneN<sub>4</sub>: 1,4,7,10-tetraazacyclododecane-2,3,8,9-tetraone; [14]aneN<sub>4</sub>: 1,4,8,11-tetraazacyclotetradecane-2,3,9,10-tetraone; Bzo<sub>2</sub>[12]aneN<sub>4</sub>: dibenzo-1,4,7,10-tetraazacyclododecane-2,3,8,9-tetraone; Bzo<sub>2</sub>[14]aneN<sub>4</sub>: dibenzo-1,4,8,11-tetraazacyclotetradecane-2,3,9,10-tetraone have been encapsulated in the nanoporous of zeolite-Y by the in situ one pot template condensation reaction. Mn(II) complexes with azamacrocyclic ligand were entrapped in the nanocavity of zeolite-Y by a two-step process in the liquid phase: (i) adsorption of [bis(diamine)manganese(II)]; [Mn(N-N)<sub>2</sub>]-NaY; in the supercages of the zeolite, and (ii) in situ condensation of the manganese(II) precursor complex with diethyloxalate. These complexes (neat and HGNM) were used for oxidation of cyclohexene with *tert*-butylhydroperoxide (TBHP) as oxidant in different solvents. Di-2-cyclohexenylether was identified as main product.

**Gino Paolucci, Alessandra Zanella, Marco Bortoluzzi, Silvana Sostero, Pasquale Longo, Mariagrazia Napoli**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 258

New constrained geometry catalysts-type yttrium, samarium and neodymium derivatives in olefin polymerization

A straightforward synthetic methodology to prepare *ansa*-monocyclopentadienyl-imino-pyridine dichloro metal derivatives of the type MCl<sub>2</sub>(THF) {M = Y, Sm, Nd} has been developed. In this paper, the syntheses and characterizations of both the ligand and the complexes are reported, together with the results of some catalytic tests towards ethene and butadiene polymerization.



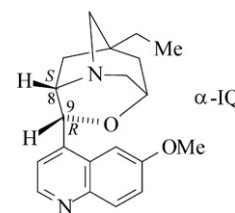
M = Y, Sm, Nd

**Katalin Balázsik, Tamás A. Martinek, Imre Bucsi, György Szöllösi, Gabriella Fogassy, Mihály Bartók, George A. Olah**

*Journal of Molecular Catalysis A: Chemical* 272 (2007) 265

A new rigid cinchona modified ( $\alpha$ -IQ) platinum catalyst for the enantioselective hydrogenation of activated ketones: Data to the origin of enantioselection

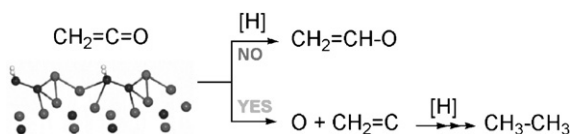
The results revealed that the orientational angle of the N-lone pair in the quinuclidine moiety relative to the quinoline plain has a strong effect on the enantioselection.



**Dong-Bo Cao, Sheng-Guang Wang,  
Yong-Wang Li, Jianguo Wang, Haijun Jiao**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 275

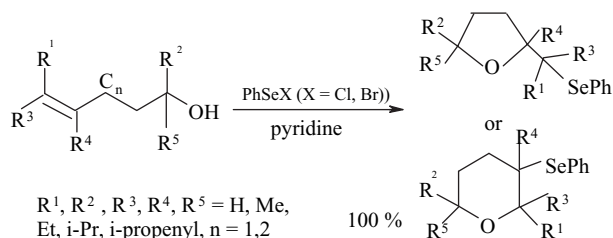
What is the product of ketene hydrogenation on  $\text{Fe}_5\text{C}_2(001)$ : Oxygenates or hydrocarbons?



**Zorica M. Bugarčić, Biljana M. Mojsilović,  
Vera M. Divac**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 288

Facile pyridine-catalyzed phenylselenoetherification of alkenols

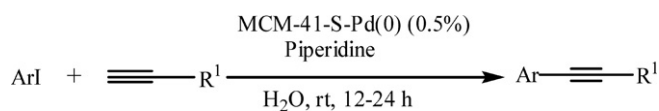


**Mingzhong Cai, Qiuhua Xu, Junchao Sha**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 293

Copper-free Sonogashira coupling reaction catalyzed by MCM-41-supported thioether palladium(0) complex in water under aerobic conditions

MCM-41-supported thioether palladium(0) complex is a highly active catalyst for the copper-free Sonogashira coupling of aryl iodides with terminal alkynes in water at room temperature under aerobic conditions. This phosphine-free heterogeneous palladium catalyst can be easily recovered from the products and reused many times without loss of activity.

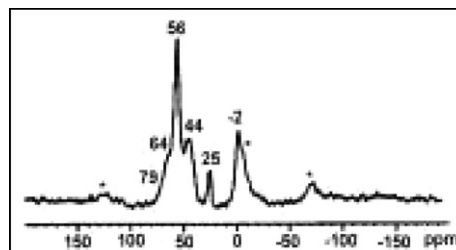


**L.M.O.C. Merat, R.A.S. San Gil, S.R. Guerra,  
L.C. Dieguez, S. Caldarelli, J.G. Eon, F. Ziarelli,  
Hélène Pizzala**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 298

A spectroscopic probe for combined acid and redox properties in acid catalysts

Trimethylphosphine, which is a NMR probe to assess the type and force of a catalyst acid site, can as well provide an estimate of redox capabilities in these solids by a single set of experiments. A qualitative oxidizing scale was evaluated by the facility, with which a given solid produces TMPO from TMP.  $\gamma\text{-Al}_2\text{O}_3$ , zeolite HY and K10, KSF and Zr-pillared acid clays were evaluated.



**Svetlana Ivanova, Véronique Pitchon,  
Corinne Petit**

*Journal of Molecular Catalysis A: Chemical* 272  
(2007) 306

Corrigendum to “Application of the direct exchange  
method in the preparation of gold catalysts supported  
on different oxide materials” [J. Mol. Catal. A:  
Chem. 256 (1–2) (2006) 278–283]

---