



## Contents

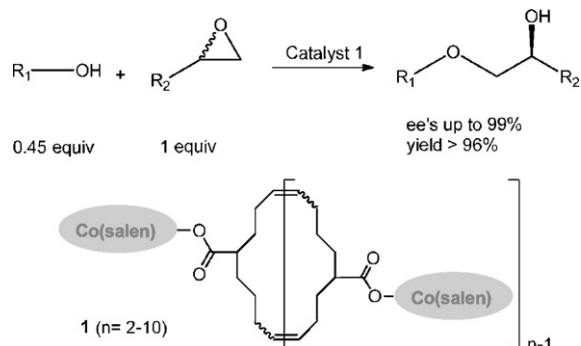
### Articles

**Xunjin Zhu, Krishnan Venkatasubbaiah,  
Marcus Weck, Christopher W. Jones**

*Journal of Molecular Catalysis A: Chemical 329 (2010) 1*

Highly active oligomeric Co(salen) catalysts for the asymmetric synthesis of  $\alpha$ -aryloxy or  $\alpha$ -alkoxy alcohols via kinetic resolution of terminal epoxides

A mixture of Co(salen) macrocycles exhibits excellent catalytic properties in the ring-opening of epoxides using alcohols or phenols, leading to the direct synthesis of optically active  $\alpha$ -aryloxy or  $\alpha$ -alkoxy alcohols.

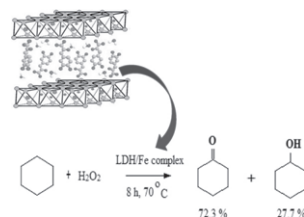


**K.M. Parida, Mitarani Sahoo, Sudarshan Singha**

*Journal of Molecular Catalysis A: Chemical 329 (2010) 7*

Synthesis and characterization of a Fe(III)-Schiff base complex in a Zn-Al LDH host for cyclohexane oxidation

Fe(III)-Schiff base complex intercalated LDH was prepared by ion exchange method and can be used successfully for liquid phase oxidation of cyclohexane (45.5% conversion).

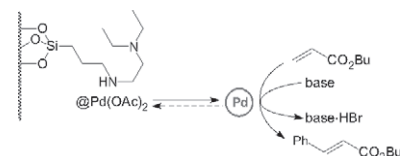


**Jan Demel, Jiří Čejka, Petr Štěpnička**

*Journal of Molecular Catalysis A: Chemical 329 (2010) 13*

Palladium catalysts deposited on silica materials: Comparison of catalysts based on mesoporous and amorphous supports in Heck reaction

Catalytic tests in Heck reaction suggest the catalytic activity of deposited Pd-catalysts to depend mainly on the Pd-to-anchoring group ratio whereas the nature of the support plays only a minor role.

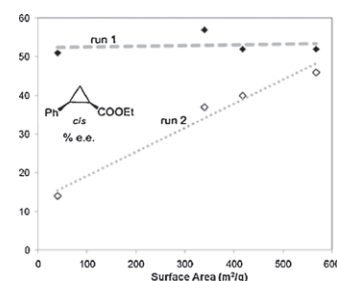


**Fatma Fakhfakh, Leila Baraket,  
Abdelhamid Ghorbel, José M. Fraile,  
Clara I. Herrerías, José A. Mayoral**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 21

Effect of support properties on the performance of silica-supported bis(oxazoline)-copper chiral complexes

Mesoporous silicas prepared by sol-gel in the absence of template can be used to immobilize IndaBox. Surface area is crucial for recovery and reuse of the copper complexes in cyclopropanation.

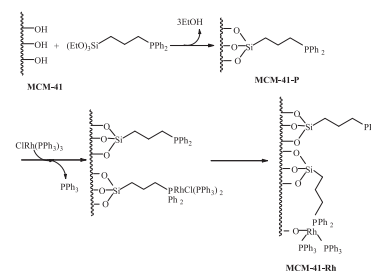


**Jen-Ray Chang, Hsiu-Mei Lin, Sheau-Wen Cheng,  
Chia-Kai Tseng, Der-Lii Tzou, Shin-Guang Shyu**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 27

EXAFS investigation of the morphology of immobilized Rh(PPh<sub>3</sub>)<sub>3</sub>Cl on phosphinated MCM-41

EXAFS analysis shows the immobilized Rh(PPh<sub>3</sub>)<sub>3</sub>Cl on phosphinated MCM-41 bonds to the MCM-41 surface through Rh-O<sub>s</sub> bonding in addition to the Rh-P bonding.

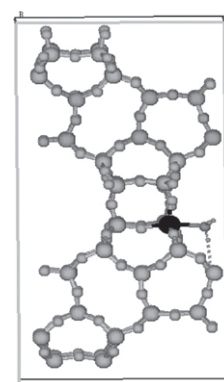


**Bhakti S. Kulkarni, Sailaja Krishnamurty,  
Sourav Pal**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 36

Probing Lewis acidity and reactivity of Sn- and Ti-beta zeolite using industrially important moieties: A periodic density functional study

The Lewis acidic nature and reactivity of two industrially important catalysts, Sn- and Ti-beta zeolite, are analyzed using a unique combination of structural parameters, energetics and reactivity descriptors.

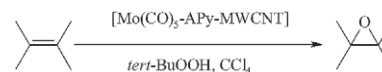


**Majid Moghadam, Shahram Tangestaninejad,  
Valiollah Mirkhani, Iraj Mohammadpoor-Baltork,  
Arsalan Mirjafari, Naghmeh Sadat Mirbagheri**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 44

Multi-wall carbon nanotubes supported molybdenum hexacarbonyl: An efficient and highly reusable catalyst for epoxidation of alkenes with *tert*-butyl hydroperoxide

The investigation of catalytic activity of Mo(CO)<sub>6</sub> supported on multi-wall carbon nanotubes modified with 4-aminopyridine in the alkene epoxidation with *tert*-BuOOH in CCl<sub>4</sub> as solvent is reported.

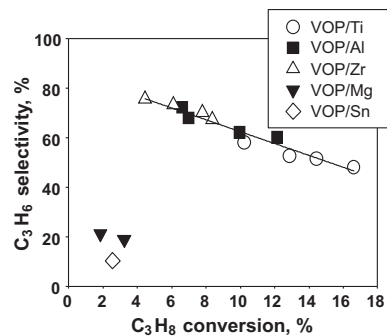


**M.P. Casaletto, G. Landi, L. Lisi, P. Patrono, F. Pinzari**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 50

Effect of the support on the catalytic properties of vanadyl phosphate in the oxidative dehydrogenation of propane

Propane oxidative dehydrogenation has been studied on several supported vanadyl orthophosphate catalysts. TiO<sub>2</sub>-supported sample showed the best performance related to high active phase dispersion.

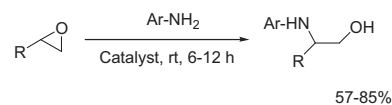


**Mathew W.C. Robinson, A. Matthew Davies, Ian Mabbett, Thomas E. Davies, David C. Apperley, Stuart H. Taylor, Andrew E. Graham**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 57

Synthesis of nanoporous aluminosilicate materials and their application as highly selective heterogeneous catalysts for the synthesis of β-amino alcohols

The ability of nanoporous aluminosilicate materials, synthesized using an evaporation-induced self-assembly (EISA) approach, to function as catalysts for the formation of β-amino alcohols from aromatic amines and epoxides is described.

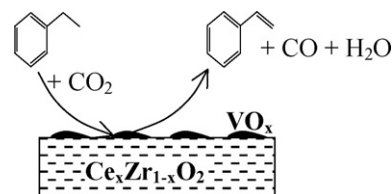


**Chan Wang, Wei-Bin Fan, Zhao-Tie Liu, Jian Lu, Zhong-Wen Liu, Zhang-Feng Qin, Jian-Guo Wang**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 64

The dehydrogenation of ethylbenzene with CO<sub>2</sub> over V<sub>2</sub>O<sub>5</sub>/Ce<sub>x</sub>Zr<sub>1-x</sub>O<sub>2</sub> prepared with different methods

The high-surface-area Ce<sub>x</sub>Zr<sub>1-x</sub>O<sub>2</sub> solid solutions (max. ~130 m<sup>2</sup>/g) were prepared with different methods, and the V<sub>2</sub>O<sub>5</sub>/Ce<sub>x</sub>Zr<sub>1-x</sub>O<sub>2</sub> showed high activity and selectivity for the dehydrogenation of ethylbenzene in the presence of CO<sub>2</sub>.

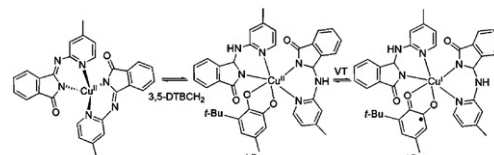


**József Kaizer, Tamás Csay, Gábor Speier, Michel Giorgi**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 71

Dual activation process in a copper(II)oxoisindoline-catalyzed catechol oxidation

Monomeric copper(II) complex Cu(3'MePyOIND)<sub>2</sub> was isolated, characterized, and found to be suitable catalysts for the catalytic oxidation of 3,5-di-*tert*-butylcatechol to 3,5-di-*tert*-butyl-1,2-benzoquinone (catecholase activity) with dioxygen at ambient condition in good yields. The title complex shows dual effects, acts as an acid–base and also as a redox catalyst during the oxidation reaction.

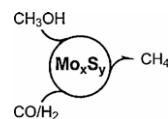


**Yan-Yan Chen, Xunhua Zhao, Xiao-Dong Wen,  
Xue-Rong Shi, Mei Dong, Jianguo Wang,  
Haijun Jiao**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 77

Mechanistic aspect of ethanol synthesis from methanol under CO hydrogenation condition on  $\text{MoS}_x$  cluster model catalysts

On  $\text{Mo}_{20}\text{S}_{43}$  and  $\text{Mo}_{20}\text{S}_{36}$  model catalysts,  $\text{CH}_3\text{OH}$  formation from methanol with synthesis gas is much more favorable kinetically and thermodynamically than ethanol formation, deduced from DFT computations.

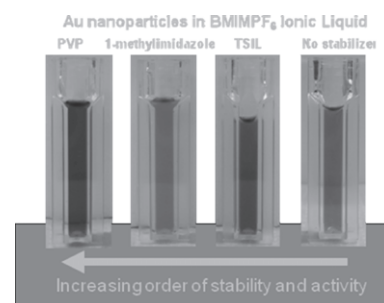


**Priyabrat Dash, Sarah M. Miller, Robert W.J. Scott**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 86

Stabilizing nanoparticle catalysts in imidazolium-based ionic liquids: A comparative study

A comparative study of the stability and long-term catalytic activity of Au and bimetallic PdAu nanoparticles in imidazolium-based ionic liquids via four different stabilization methods.

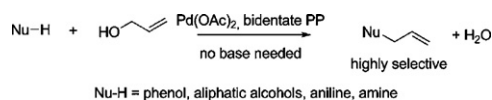


**Jimmy A. van Rijn, Angela den Dunnen,  
Elisabeth Bouwman, Eite Drent**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 96

Palladium–diphosphine complexes as catalysts for allylations with allyl alcohol

Pd-based catalysts with bidentate phosphine ligands are active catalysts in the allylation of nucleophilic substrates with allyl alcohol. No stoichiometric amounts of additives are needed to activate the substrates.



**Xiaofan Cheng, Baoshan Wu, Yong Yang,  
Hongwei Xiang, Yongwang Li**

*Journal of Molecular Catalysis A: Chemical* 329 (2010) 103

Fischer–Tropsch synthesis in polyethylene glycol with amorphous iron nanocatalysts prepared by chemical reduction in various solvents

Amorphous iron nanocatalysts were prepared by chemical reduction and dispersed in polyethylene glycol for Fischer–Tropsch synthesis. The preparation medium affected the physicochemical properties of these catalysts, accordingly varying their activities.

