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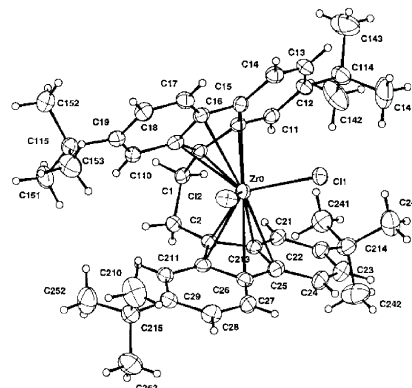
Articles

**A.R. Siedle, Richard A. Newmark,
Brook F. Duerr, Peter C. Leung**

*Journal of Molecular Catalysis A: Chemical 214
(2004) 187*

Synthesis of unsymmetrical *ansa*-fluorenyl
metallocenes

Design and synthesis of unsymmetrical *ansa*-
bis(fluorenyl) ligands and derived metallocenes.
Octene polymerization is accelerated by F and Cl
substituents.

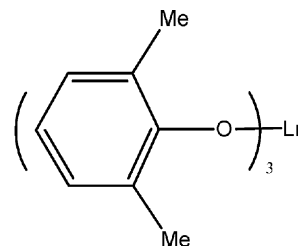


**Lifang Zhang, Zhiquan Shen, Cuiping Yu,
Ling Fan**

*Journal of Molecular Catalysis A: Chemical 214
(2004) 199*

Characteristics and mechanism of L-lactide poly-
merization by lanthanide 2,6-dimethylaryloxide

Single component-rare earth 2,6-dimethylaryloxide (Ln(ODMP)₃) is used as catalyst or initiator for the ring-opening polymerization of L-lactide (LLA). The effects of reaction conditions on the LLA polymerization with Ln(ODMP)₃ have been examined in detail. The polymerization activity of various rare earth 2,6-dimethylaryloxide is in the order: La > Nd > Sm > Gd > Er > Y.



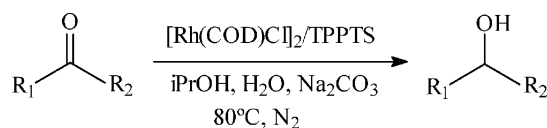
Ln(ODMP)₃: Ln = La, Nd, Sm, Gd, Er, Y

Abdelaziz Nait Ajjou, Jean-Louis Pinet

*Journal of Molecular Catalysis A: Chemical 214
(2004) 203*

The biphasic transfer hydrogenation of aldehydes
and ketones with isopropanol catalyzed by water-
soluble rhodium complexes

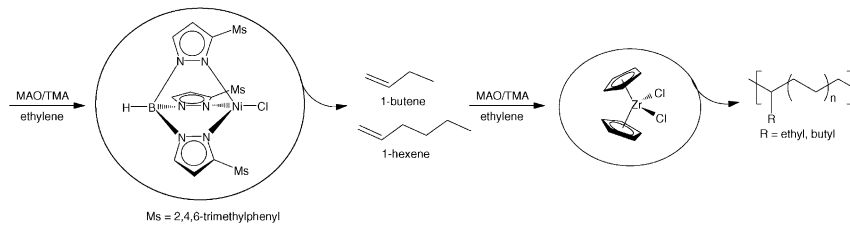
Water-soluble rhodium complex generated in situ from [Rh(COD)Cl]₂ and P(*m*-C₆H₄SO₃Na)₃ (TPPTS) has been found to be a quite effective catalyst for transfer hydrogenation of aldehydes and ketones with isopropanol, under basic conditions. The catalytic system can also be successfully recycled and re-used with only negligible loss of catalytic activity.



**Luciano G. Furlan, Fábio A. Kunrath,
Raquel S. Mauler, Roberto F. de Souza,
Osvaldo L. Casagrande Jr.**

Journal of Molecular Catalysis A: Chemical 214 (2004) 207

Linear low density polyethylene (LLDPE) from ethylene using $\text{Tp}^{\text{Ms}}\text{NiCl}$ (Tp^{Ms} = hydridotris(3-mesitylpyrazol-1-yl)) and Cp_2ZrCl_2 as a tandem catalyst system

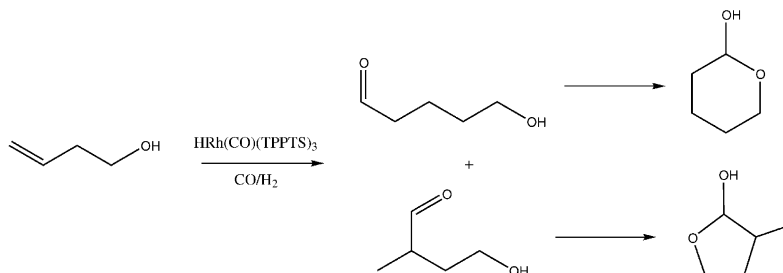


Linear low density polyethylene (LLDPE) with different branching contents were prepared from ethylene, without the addition of α -olefin comonomer, using a combination of catalyst precursors ($\text{Tp}^{\text{Ms}}\text{NiCl}$ (1) and Cp_2ZrCl_2 (2).

**Joseph T. Sullivan, Jennifer Sadula,
Brian E. Hanson, Richard J. Rosso**

Journal of Molecular Catalysis A: Chemical 214 (2004) 213

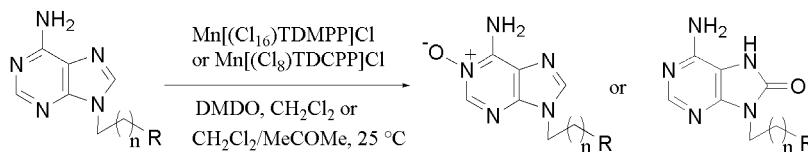
The hydroformylation of 4-penten-1-ol and 3-buten-1-ol in water with $\text{HRh}(\text{CO})(\text{TPPTS})_3$ and the effects of solution ionic strength



**Raffaele Saladino, Veronica Neri,
Claudia Crestini, Pietro Tagliatesta**

Journal of Molecular Catalysis A: Chemical 214 (2004) 219

Oxidation of adenine and adenosine derivatives by dimethyldioxirane (DMDO) using halogenated metalloporphyrins as catalysts

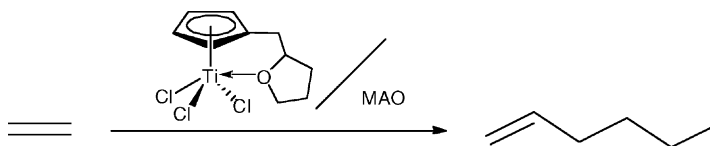


Tianzhi Wu, Yanlong Qian, Jiling Huang

Journal of Molecular Catalysis A: Chemical 214 (2004) 227

Catalytic trimerization of ethylene by half-sandwich titanium complexes bearing a pendant etheral group

Half-sandwich titanium complexes with pendant etheral group, activated by methylalumoxane (MAO), can trimerize ethylene to 1-hexene with considerable activity and high selectivity. Compared with the catalytic behavior of $\text{CpTiCl}_3/\text{MAO}$ and $n\text{-Pr-CpTiCl}_3/\text{MAO}$, we can identify that the pendant etheral group plays an important role in this selective trimerization process.

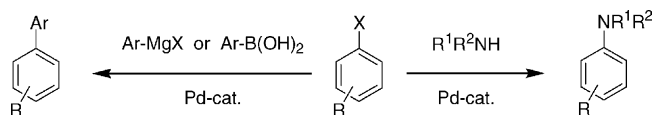


Anja C. Frisch, Alexander Zapf, Oliver Briel, Bernd Kayser, Nadim Shaikh, Matthias Beller

Journal of Molecular Catalysis A: Chemical 214 (2004) 231

Comparison of palladium carbene and palladium phosphine catalysts for catalytic coupling reactions of aryl halides

A comparison of the catalytic performance of different monocarbene-palladium(0) complexes and various so-called in situ palladium phosphine and carbene catalysts in Suzuki, Kumada, and Buchwald–Hartwig amination reactions is presented. In general, phosphine-based catalysts appear to be more efficient for amination and Suzuki reactions of aryl chlorides. On the other hand, the carbene-based palladium catalysts work well in Kumada couplings of various aryl chlorides.



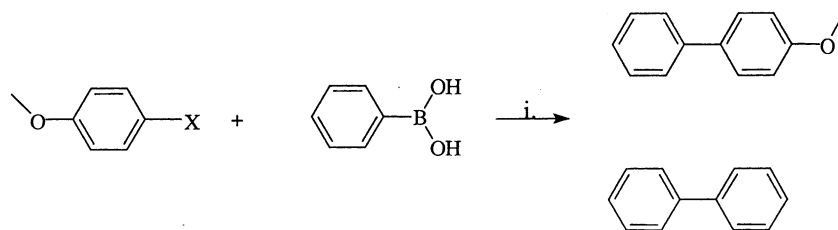
X = Cl, Br; R¹ = H, alkyl; R² = alkyl, aryl

E. Paetzold, I. Jovel, G. Oehme

Journal of Molecular Catalysis A: Chemical 214 (2004) 241

Suzuki reactions in aqueous multi-phase systems promoted by supported detergents

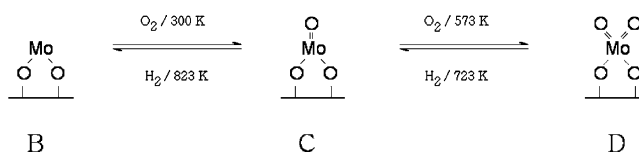
The Suzuki reaction in aqueous multi-phase system could be accelerated in the presence of amphiphilized silica. These supported phase-transfer reagents were recovered by filtration and gave no influence on the phase separation. X = Br or I; i. = toluene/ethanol/water = 1 : 1 : 1 (v/v); PdCl₂[Ph₂P(CH₂)₄SO₃K]₂; amphiphilized silica; Na₂CO₃, 78 °C.



Joaquín L. Brito, Beulah Griffe

Journal of Molecular Catalysis A: Chemical 214 (2004) 249

'Vibrational frequencies of CO adsorbed on silica-supported Mo atoms from density functional calculations': a re-interpretation of results reported by N. López, F. Illas, G. Pacchioni

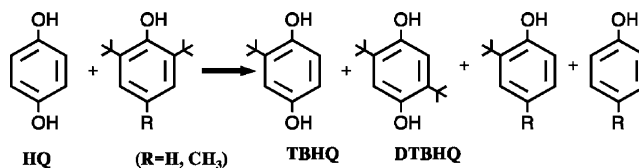


Anil Wali, Jagannath Das, S. Muthukumar Pillai, M. Ravindranathan

Journal of Molecular Catalysis A: Chemical 214 (2004) 253

tert-Butylation of hydroquinone with *tert*-butylphenols catalyzed by H-MCM-41

Trans tert-butylation of HQ with *tert*-butyl phenols in presence of H-MCM-41 catalyst gives TBHQ as major product in a solvent free condition.

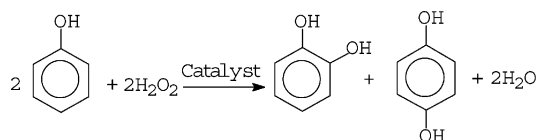


Mannar R. Maurya, Salam J.J. Titinchi, Shri Chand

Journal of Molecular Catalysis A: Chemical 214 (2004) 257

Catalytic activity of chromium(III), iron(III) and bismuth(III) complexes of 1,2-bis(2-hydroxybenzamido)ethane (H₂hybe) encapsulated in zeolite-Y for liquid phase hydroxylation of phenol

Encapsulation of Cr(III), Fe(III) and Bi(III) complexes of 1,2-bis(2-hydroxybenzamido)ethane (H₂hybe) in zeolite-Y and their catalytic activity towards the liquid phase hydroxylation of phenol are reported.

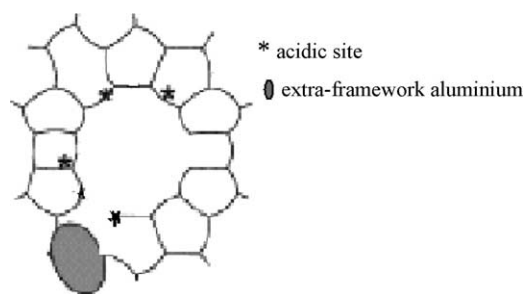


R. Dimitrova, G. Gunduz, L. Dimitrov, T. Tsoncheva, S. Yialmaz, E.A. Urquieta-Gonzalez

Journal of Molecular Catalysis A: Chemical 214 (2004) 265

Acidic sites in beta zeolites in dependence of the preparation methods

Beta zeolites synthesised and calcined by different methods are examined. The process of calcination induced formation of structural framework defects and an appearance of mesoporosity in beta zeolite samples. Mesopores, formed by interparticle void spaces, could be created. The nature and strength of the formed acidic sites depend on their localization in the micro- or macropores and on its environment.

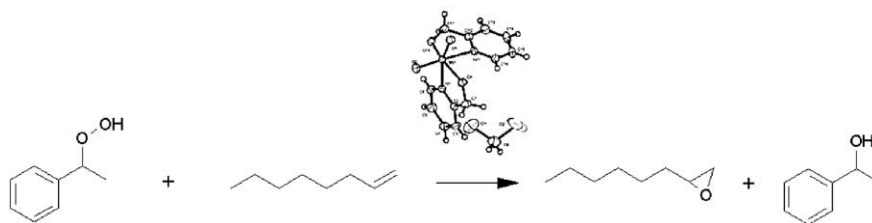


R. Martos-Calvente, V.A. de la Peña O'Shea, J.M. Campos-Martin, J.L.G. Fierro, E. Gutiérrez-Puebla

Journal of Molecular Catalysis A: Chemical 214 (2004) 269

Synthesis of bis[N,O-{2'-pyridyl-methanol}]dioxomolybdenum(VI) epoxidation catalyst and novel crystal structure derived from X-ray diffraction and DFT calculations

The bis[N,O-{2'-pyridyl-methanol}]dioxomolybdenum(VI) was synthesized and its structure determined by XRD and DFT calculations. This complex showed slightly better performance than MoO₂(a-cac)₂ in the oct-1-ene epoxidation with ethylbenzene hydroperoxide.

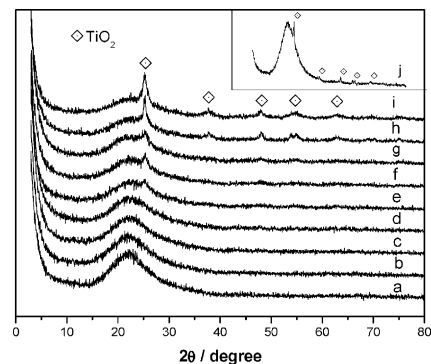


Shengping Wang, Xinbin Ma, Hongli Guo, Jinlong Gong, Xia Yang, Genhui Xu

Journal of Molecular Catalysis A: Chemical 214 (2004) 273

Characterization and catalytic activity of TiO₂/SiO₂ for transesterification of dimethyl oxalate with phenol

Below 8% Ti loading, the Ti(IV) species was highly dispersed on silica surface, which was closely related with the activity of TiO₂/SiO₂ catalysts for the transesterification of dimethyl oxalate with phenol.

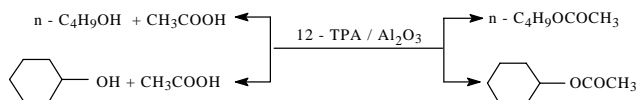


Pankaj Sharma, Samir Vyas, Anjali Patel

Journal of Molecular Catalysis A: Chemical 214 (2004) 281

Heteropolyacid supported onto neutral alumina: characterization and esterification of 1° and 2° alcohol

A series of the solid acid catalyst containing 20–70% HPA, 12-tungstophosphoricacid (12-TPA), supported onto neutral alumina was synthesized, calcinated and characterized by chemical stability, ion exchange capacity, various spectroscopic techniques and surface area measurement. The calcinated catalysts were further characterized by DRS, total acidity and particle size distribution. The catalytic activity of all these catalysts was evaluated by esterification of *n*-butanol with various acids and cyclohexanol with acetic acid. Based on the above experimental findings, catalyst performance was optimized.



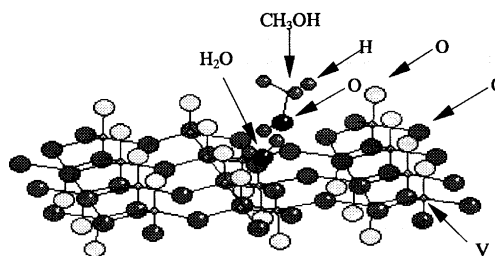
Luis A. Gambaro

Journal of Molecular Catalysis A: Chemical 214 (2004) 287

Methanol adsorption–oxidation over V₂O₅—a mass spectrometry study

The methanol adsorption–oxidation over V₂O₅ was monitored by mass spectrometry of desorbed molecules.

Conclusions drawn from study were that methanol molecules replace some of the water molecules adsorbed and interact with those exhibiting higher adsorption energy and may suggest that methanol is linked to the solid through water molecules.



Xinle Zhu, Xiaogang Feng, Chunwei Yuan, Xiaomei Cao, Jinheng Li

Journal of Molecular Catalysis A: Chemical 214 (2004) 293

Photocatalytic degradation of pesticide pyridaben in suspension of TiO₂: identification of intermediates and degradation pathways

