



Contents Volume 109

Vol. 109, No. 1

Articles

Chemical and Metal Complex Catalysis

Mechanistic studies of palladium-catalysed carbonylation reactions of nitro compounds to isocyanates, carbamates and ureas [M964]	1
F. Ragaini and S. Cenini (Milano, Italy)	
Wacker oxidation of various olefins in the presence of per(2,6-di-O-methyl)- β -cyclodextrin: mechanistic investigations of a multistep catalysis in a solvent-free two-phase system [M977]	1
E. Monflier, S. Tilloy, E. Blouet, Y. Barbaux (Lens, France) and A. Mortreux (Villeneuve d'Ascq, France)	27
Transesterification of soybean oil catalyzed by alkylguanidines heterogenized on different substituted polystyrenes [M974]	27
U. Schuchardt, R.M. Vargas (Campinas, Brazil) and G. Gelbard (Villeurbanne, France)	37
Asymmetric hydrogenation by ruthenium cluster hydrides containing atropoisomeric diphosphine ligands [M999]	37
U. Matteoli, V. Beghetto and A. Scrivanti (Venezia, Italy)	45

Molecular Aspects of Heterogeneous Catalysis

Vibration frequencies of NCO species as an intermediate for selective reduction of nitrogen monoxide over copper ion-exchanged ZSM-5 [M997]	51
H. Oka, T. Okada (Yamaguchi, Japan) and K. Hori (Fukuoka, Japan)	51
Pt–Sn/Al ₂ O ₃ sol–gel catalysts: catalytic properties [M950]	55
R. Gómez, V. Bertin, T. López, I. Schifter and G. Ferrat (México, Mexico)	55
Epoxidation of cyclohexene by iron and cobalt phthalocyanines. study of the side reactions [M1005]	55
E.M. Gaigneaux, R. Maggi, P. Ruiz and B. Delmon (Louvain-la-Neuve, Belgium)	67
Thiol-oxidation with zeolite encapsulated phthalocyanines: influence of the solid support [M986]	67
F. Thibault-Starzyk (Caen, France), M. Van Puymbroeck, R.F. Parton and P.A. Jacobs (Heverlee, Belgium)	75

Vol. 109, No. 2

Letters

Chemical and Metal Complex Catalysis

A viable route to designable chiral macromolecular supports: implications for supported metal catalysis	
M. Boaro (Suchdol, Czech Republic), B. Corain (L'Aquila, Italy; Padova, Italy), K. Jeřábek (Suchdol, Czech Republic), S. Lora (Legnaro, Italy), G. Palma, M. Palumbo and M. Zecca (Padova, Italy)	L81

Molecular Aspects of Heterogeneous Catalysis

In situ free radical and carbocation reactions between alkylbenzenes promoted by a bentonite clay	
M. Salmón, E. Moreno, E. Angeles, A. Ramírez and G. García de la Mora (México, Mexico)	L85

Articles

Chemical and Metal Complex Catalysis

Reactivity of polyhalogenated and zeolite-encapsulated metalloporphyrins in oxidation with dioxygen P. Battioni (Paris, France), R. Iwanejko (Krakow, Poland), D. Mansuy (Paris, France), T. Mlodnicka, J. Poltowicz (Krakow, Poland) and F. Sanchez (Madrid, Spain)	91
[Mo ₂ (MeCN) ₈] [BF ₄] ₄ and [Mo ₂ (μ-O ₂ CCH ₃) ₂ (MeCN) ₆] [BF ₄] ₂ as catalysts for the cationic polymerization of cyclopentadiene and dicyclopentadiene M. McCann and E. Mac Giolla Coda (Co. Kildare, Ireland)	99
Hydrogenation of organic substrates by isocyanide polymer-bound Rh(PPh ₃) ₃ Cl R. Giannandrea, P. Mastorilli, G. Zaccaria and C.F. Nobile (Bari, Italy)	113
New catalytic system of <i>N,N'</i> -diphenylurea synthesis from nitrobenzene, carbon monoxide and water or aniline V. Macho, M. Králík (Bratislava, Slovak Republic) and F. Halmo (Prievidza, Slovak Republic)	119
Cationic cyclopalladated complexes: new catalyst precursors for the telomerization of butadiene with alcohols M. Camargo, P. Dani, J. Dupont, R.F. De Souza (Porto Alegre, Brazil), M. Pfeffer (Strasbourg, France) and I. Tkatchenko (Villeurbanne, France)	127
Mechanistic studies on the reaction of monopersulfate with a manganese(III) porphyrin in the presence of phenates and benzoates as axial ligands and subsequent epoxidation of olefins in homogeneous solution S. Campestrini, F. Di Furia, P. Ghiotti and F. Novello (Padova, Italy)	133
Preparation characterization and catalytic activity of polymer supported Ru(III) complexes D.R. Patel, M.K. Dalal and R.N. Ram (Baroda, India)	141

Molecular Aspects of Heterogeneous Catalysis

HZSM-5 catalyzed cyclodehydration of diethylene glycol and its derivatives A. Wali, S.M. Pillai, S. Unnikrishnan and S. Satish (Baroda, India)	149
¹³ C MAS NMR mechanistic study of benzene alkylation with propane over Ga-modified H-ZSM-5 catalyst I.I. Ivanova (Namur, Belgium), N. Blom (Lyngby, Denmark) and E.G. Derouane (Namur, Belgium)	157
Transition metal complexes of diazenes. Part XXXVII. Heterogeneous Rh(I) catalysis: synthesis of N-anilino-2,3-diphenylindole from azobenzene and diphenylacetylene S. Westernacher (Erlangen, Germany), J. Blümel (Garching, Germany) and H. Kisch (Erlangen, Germany)	169
Modified zeolites as catalysts in the Friedel-Crafts acylation K. Gaare and D. Akporiaye (Oslo, Norway)	177

Vol. 109, No. 3

Articles

Chemical and Metal Complex Catalysis

Factors which affect the catalytic activity of iron(III) meso tetrakis(2,6-dichlorophenyl)porphyrin chloride in homogeneous system [M990] Y. Iamamoto, M.D. Assis (Ribeirão Preto, Brazil), K.J. Ciuffi, H.C. Sacco, L. Iwamoto, A.J.B. Melo (Ribeirão Preto, Brazil; Araraquara, Brazil), O.R. Nascimento (São Carlos, Brazil) and C.M.C. Prado (Ribeirão Preto, Brazil)	189
β-Cyclodextrin and its derivatives directed axial attack of hydride ion in the reduction of (<i>R</i>)-(+) -pulegone and (2 <i>S,5R</i>)(-) -menthone [M994] R. Ravichandran and S. Divakar (Mysore, India)	201
Liquid phase methanol hydrocarbonylation with homogeneous and heterogeneous Rh and Ru catalysts [M1001] M.E. Halttunen, M.K. Niemelä, A.O.I. Krause and A.I. Vuori (Espoo, Finland)	209
Ru ₃ (CO) ₁₂ /1,10-phenanthroline-catalyzed hydroformylation of α-olefins [M973] T.-a. Mitsudo, N. Suzuki, T. Kondo and Y. Watanabe (Kyoto, Japan)	219

Molecular Aspects of Heterogeneous Catalysis

H ₂ interaction with S atoms of a MoS ₂ modelled catalytic site: electronic density analysis for S-H formation [M996] A. Sierraalta and F. Ruette (Caracas, Venezuela)	227
ZrO ₂ -SiO ₂ mixed oxides: surface aspects, photophysical properties and photoreactivity for 4-nitrophenol oxidation in aqueous phase [M969] J.A. Navío, G. Colón, M. Macías, P.J. Sánchez-Soto (Sevilla, Spain), V. Augugliaro and L. Palmisano (Palermo, Italy)	239

Characterization and dehydrogenation activity of Cu/Al ₂ O ₃ catalysts prepared by electroless plating technique [M971] H.-F. Chang, M.A. Saleque, W.-S. Hsu and W.-H. Lin (Taichung, Taiwan, Changhua).	249
Catalytic hydrogenation in the liquid phase. Part 1. Hydrogenation of isoprene catalysed by palladium, palladium–gold and palladium–silver catalysts [M987] G.C. Bond and A.F. Rawle (Uxbridge, UK).	261
The mechanism of conversion of hydrocarbons on sulfated metal oxides. Part II. Reaction of benzene on sulfated zirconia [M975] A. Ghenciu and D. Fărcașiu (Pittsburgh, PA, USA).	273
Author index	285
Subject index	287
Contents Volume 109	293