



ELSEVIER

Journal of Molecular Catalysis A: Chemical 96 (1995) 345–347



## Contents Volume 96

### **Chemical and Metal Complex Catalysis**

- Eyring transition-state theory and kinetics in catalysis [M630]  
J.J. Rooney ..... L1

### **Heterogeneous Catalysis**

- Characterization of MoO<sub>3</sub>/TiO<sub>2</sub> catalysts by <sup>1</sup>H magic-angle-spinning NMR spectroscopy [M605]  
K.V.R. Chary, V. Vijayakumar, P. Kanta Rao, A.V. Nosov and V.M. Mastikhin ..... L5
- Epoxidation of cyclohexene catalyzed by copper(II) complexes under Mukaiyama's conditions [M614]  
B. Corain, A. Tessari and M. Zecca ..... L9

### **Biochemical Catalysis**

- Abnormal effect of mercury ions on bilirubin oxidase activity [M631]  
Y. Seki, M. Takeguchi, S. Murao, T. Shin and I. Okura ..... L11

### **Chemical and Metal Complex Catalysis**

- Cobalt catalysed carbonylation of reactive chlorides into esters by methyl formate without carbon monoxide and methanol added [M625]  
F. Ramirez-Vega, P. Laurent, J.-C. Clément and H.d. Abbayes ..... 15
- Selective formation of *cis*-PhCH=CH(SiEt<sub>3</sub>) by reaction of PhC≡CH with the stoichiometric amount of HSiEt<sub>3</sub>, in the presence of ruthenium catalysts [M622]  
M.A. Esteruelas, A.M. López, L.A. Oro and J.I. Tolosa ..... 21
- Hydroformylation of acrolein acetal [M623]  
H. Gao and Y. Ohgomori ..... 25
- Single crystals of isopolyoxometallate(VI) salts as catalysts for the ring-opening polymerization of norbornene [M620]  
M. McCann, D. McDonnell and B.L. Goodall ..... 31

### **Heterogeneous Catalysis**

- Catalytic and structural properties of ruthenium bimetallic catalysts: kinetics of 2,2,3,3-tetramethylbutane hydrogenolysis [M604]  
B. Coq, E. Crabb and F. Figuéras ..... 35
- Chemistry of dicobalt octacarbonyl on zinc oxide. Homonuclear ion-pairing surface species related to catalytic activity in ethylene hydroformylation [M626]  
J. Llorca, N. Homs, J. Sales and P.R.d.I. Piscina ..... 49
- Characterization and aniline alkylation activity of vanadia and silica-supported vanadia catalysts [M616]  
S. Narayanan and B. Prabhu Prasad ..... 57
- Catalytic and structural properties of ruthenium monometallic and bimetallic catalysts: characterization by EXAFS and XRD [M598]  
M.C. Sanchez Sierra, J.G. Ruiz, M. Grazia Proietti and J. Blasco ..... 65

### **Biochemical Catalysis**

- Lamb pregastric lipase catalysed hydrolysis of 1,2,3-tri[*cis*]-9-octadecenoyl] glycerol: temperature, pH and solvent isotope effects [M611]  
C.J. O'Connor, A.D. MacKenzie, R.H. Barton and P.A.G. Butler ..... 77

The effect of chemical modification of zinc myoglobin on the photoinduced electron transfer with methyl viologen [M608] S. Aono, A. Ohtaka and I. Okura .....	87
<b>Chemical and Metal Complex Catalysis</b>	
Reactions of $W(CCM_3)(OCMe_3)_3$ with terminal alkynes: metathesis and polymerization [M580] A. Mortreux, F. Petit, M. Petit and T. Szymanska-Buzar .....	95
Selective reductive dimerization of phenylacetaldehyde to 2,4-diphenylbutanal catalysed by novel dirhodium complexes [M627] M. Fontaine, A. Demonceau, R. Messere, A.F. Noels, E. Peris and P. Lahuerta .....	107
Komplexkatalytische Isomerisierung von 4-Methyl-1-penten. Kinetische Untersuchungen. [M621] M. Mitkova, K. Kurtev, S. Ganey and R. Taube .....	111
Enantioselective catalytic epoxidation of styrenes by iodosylbenzene using chiral ruthenium(II) Schiff base complexes [M610] R.I. Kureshy, N.H. Khan and S.H.R. Abdi .....	117
Use of NMR techniques for studying deactivation of zeolites by coking [M606] J.L. Bonardet, M.C. Barrage and J. Fraissard .....	123
<b>Heterogeneous Catalysis</b>	
Propane conversion on Cu-MFI zeolites [M613] V.I. Kanazirev and G.L. Price .....	145
Probing Ru–Pd/SiO <sub>2</sub> catalysts by gas phase <i>o</i> -xylene hydrogenation [M617] G. Córdoba, J.L.G. Fierro, A. López-Gaona, N. Martín and M. Viniestra .....	155
Catalytic and structural properties of ruthenium bimetallic catalysts: effects of pretreatment on the behaviour of various Ru/Al <sub>2</sub> O <sub>3</sub> catalysts in alkane hydrogenolysis [M602] G.C. Bond and J.C. Slaa .....	163
Effect of particle size upon catalytic and electronic properties of supported Ag catalysts: combined catalytic, <sup>109</sup> Ag NMR and quantum chemistry studies [M595] V.M. Mastikhin, S.N. Goncharova, V.M. Tapilin, V.V. Terskikh and B.S. Balzhinimaev .....	175
<b>Chemical and Metal Complex Catalysis</b>	
The influence of cyclopentadienyl ring substituent steric and electronic effects on the ethylene- $\alpha$ -olefin copolymerisation behaviour of (CpR) <sub>2</sub> ZrCl <sub>2</sub> /ethylalumoxane catalysts [M629] P.C. Möhring and N.J. Coville .....	181
Regioselective palladium(II) catalyzed hydroesterification of alkynes and alkynols using formate esters [M624] B. El Ali and H. Alper .....	197
Organometallic nickel catalysts anchored on polymeric matrices in the oligomerization and/or polymerization of olefins. Part II. Effect and role of the components of the catalytic system [M628] G. Braca, A.M. Raspolli Galletti, M. Di Girolamo, G. Sbrana, R. Silla and P. Ferrarini .....	203
An improved catalytic homologation method for converting C <sub>n</sub> alkyl groups into C <sub>n+1</sub> groups from C <sub>n</sub> formates [M619] G. Jenner .....	215
Further studies of the Pt(II) catalyzed hydromethoxycarbonylation of 1-alkynes [M607] A. Scrivanti, G. Menchi and U. Matteoli .....	223
<b>Heterogeneous Catalysis</b>	
Homogeneous catalysis by osmium complexes. A review [M615] R.A. Sánchez-Delgado, M. Rosales, M.A. Esteruelas and L.A. Oro .....	231
Structure–activity relationship in zeolites [M634] F. Ramôa Ribeiro, F. Alvarez, C. Henriques, F. Lemos, J.M. Lopes and M.F. Ribeiro .....	245
The CO-oxidation on Pd-rich surfaces of PdCu(110): hysteresis in reaction rates [M618] M.S. Mousa, A. Hammoudeh, J. Loboda-Cackovic and J.H. Block .....	271
The electronic states and Lewis acidity of surface aluminum atoms in $\gamma$ -Al <sub>2</sub> O <sub>3</sub> model cluster: An <i>ab initio</i> MO study [M635] H. Tachikawa and T. Tsuchida .....	277

Studies of the mechanism of thiophene hydrodesulfurization: $^2\text{H}$ NMR and mass spectral analysis of 1,3-butadiene produced in the deuterodesulfurization (DDS) of thiophene over $\text{PbMo}_6\text{S}_8$ catalyst [M601] J.W. Benson, G.L. Schrader and R.J. Angelici .....	283
Selectivity in hydrodehalogenation of polychloro- and polybromobenzenes under multiphase conditions [M612] C.A. Marques, O. Rogozhnikova, M. Selva and P. Tundo .....	301
<b>Biochemical Catalysis</b>	
Pyridiniumporphyrin covalently bound to polystyrene: an efficient model of cytochrome P-450 reactivity [M609] P. Anzenbacher, Jr. and V. Král .....	311
Hydrolysis of ( <i>R,S</i> )-2-aryl propionic esters by pure lipase B from <i>Candida cylindracea</i> [M632] M.J. Hernáiz, J.M. Sánchez-Montero and J.V. Sinisterra .....	317
Effect of Hg(II) on hydrogenase activity from <i>Desulfovibrio vulgaris</i> (Miyazaki) [M633] T. Kamachi, S. Uno, T. Hiraishi and I. Okura .....	329
<b>Author Index</b> (Vol. 96) .....	335
<b>Subject Index</b> (Vol. 96) .....	339
<b>Contents</b> (Vol. 96) .....	345