

## Contents

### Vol. 236, Nos. 1–2

Synthesis, characterization and catalytic studies of bis(chloro)dioxomolybdenum(VI)-chiral diimine complexes S. Gago (Aveiro, Portugal), J.E. Rodríguez-Borges, C. Teixeira (Porto, Portugal), A.M. Santos, J. Zhao (Garching bei München, Germany), M. Pillinger, C.D. Nunes (Aveiro, Portugal), Ž. Petrovski (Aveiro, Portugal and Oeiras, Portugal), T.M. Santos (Aveiro, Portugal), F.E. Kühn (Garching bei München, Germany), C.C. Romão (Oeiras, Portugal) and I.S. Gonçalves (Aveiro, Portugal) . . . . .	1
Mesoporous Cr-MCM-41: An efficient catalyst for selective oxidation of cycloalkanes S. Samanta (Kolkata, India), N.K. Mal (Osaka, Japan) and A. Bhaumik (Kolkata, India) . . . . .	7
Synthesis, structure and catalase-like activity of new dicopper(II) complexes with phenylglyoxylate and benzoate ligands J. Kaizer, R. Csonka, G. Speier (Veszprém, Hungary), M. Giorgi and M. Réglér (Marseille, France) . . . . .	12
Interaction of molybdenum hexacarbonyl with metallic aluminum at high temperatures: Carbide and alloy formation Y. Wang, F. Gao and W.T. Tysse (Milwaukee, WI, USA) . . . . .	18
The asymmetric addition of phenylacetylene to aldehydes catalyzed by L-leucine derived chiral sulfonamide alcohol ligands Z.-j. Han, C.-s. Da, Z.-q. Xu, M. Ni and R. Wang (Lanzhou, China) . . . . .	32
Isbut-Box: A new chiral $C_2$ symmetric bis-oxazoline for catalytic enantioselective synthesis E. da Plama Carreiro, S. Chercheja, A.J. Burke (Évora, Portugal), J.P.P. Ramalho and A.I. Rodrigues (Lisboa, Portugal) . . . . .	38
Uniform carbon-covered titania and its photocatalytic property L. Lin, W. Lin, Y.X. Zhu, B.Y. Zhao, Y.C. Xie, Y. He and Y.F. Zhu (Beijing, China) . . . . .	46
Fundamental analysis of microwave irradiated liquid–liquid phase transfer catalysis (MILL-PTC): Simultaneous measurement of rate and exchange equilibrium constants in selective <i>O</i> -alkylation of <i>p</i> - <i>tert</i> -butylphenol with benzyl chloride G.D. Yadav and P.M. Bisht (Mumbai, India) . . . . .	54
Kinetic study of synthesizing <i>N</i> -butylphthalimide under solid–liquid phase-transfer catalysis conditions M.-L. Wang (Taichung County, Taiwan), W.-H. Chen and F.-S. Wang (Chiayi County, Taiwan) . . . . .	65
Efficient and highly-selective cycloaddition of epoxides with carbonyl compound over Wells–Dawson type heteropolyacids G. Li, B. Wang, J. Wang, Y. Ding, L. Yan (Lanzhou, China) and J. Suo (Lanzhou, China and Chengdu, China) . . . . .	72
Investigations on gold nanoparticles in mesoporous and microporous materials D.B. Akolekar and S.K. Bhargava (Victoria, Australia) . . . . .	77
Synthesis of branched polyethylene from ethylene stock by an interference-free tandem catalysis of $TiCl_4/MgCl_2$ and iron catalyst Z. Zhang, Z. Lu, S. Chen, H. Li, X. Zhang, Y. Lu and Y. Hu (Beijing, PR China) . . . . .	87
The study of a synergetic effect over a H-ZSM-5/ $V_2O_5$ hybrid catalyst on SCR reaction S.M. Jung, O. Demoulin and P. Grange (Louvain-la-Neuve, Belgium) . . . . .	94
Iron-containing MCM-41 catalysts for Baeyer–Villiger oxidation of ketones using molecular oxygen and benzaldehyde T. Kawabata, Y. Ohishi, S. Itsuki, N. Fujisaki (Higashi-Hiroshima, Japan), T. Shishido (Tokyo, Japan), K. Takaki (Higashi-Hiroshima, Japan), Q. Zhang, Y. Wang (Xiamen, China) and K. Takehira (Higashi-Hiroshima, Japan) . . . . .	99
Reduction of carbonyl groups by high-valent rhenium oxides B. Royo and C.C. Romão (Oeiras, Portugal) . . . . .	107
Preparation of triphenylphosphane substituted ethoxycarbonylcarbene-bridged dicobalt carbonyl complexes and their application as catalyst precursors in the carbonylation of ethyl diazoacetate to diethyl malonate R. Tuba, E. Fördös and F. Ungváry (Veszprém, Hungary) . . . . .	113
Preparation, characterization and catalytic activity of polystyrene with pendent perfluoroalkylsulfonylimide groups J. Xiao, Z. Zhang and J. Nie (Hubei, PR China) . . . . .	119
Influence of alcohols on the formation of the nickel complexes active in ethene oligomerization in the catalytic system $Ni(PPh_3)_4/BF_3 \cdot OEt_2$ V.V. Saraev (Irkutsk, Russian Federation), P.B. Kraivskii, S.N. Zelinskiy (Irkutsk, Russian Federation and Amsterdam, The Netherlands), D.A. Matveev, A.I. Vilms, A.V. Rohin (Irkutsk, Russian Federation) and K. Lammertsma (Amsterdam, The Netherlands) . . . . .	125
Bis(2-[ $\alpha$ -hydroxyethyl]benzimidazolato)copper(II) anchored onto chloromethylated polystyrene for the biomimetic oxidative coupling of 2-aminophenol to 2-aminophenoxazine-3-one M.R. Maurya, S. Sikarwar (Roorkee, India), T. Joseph and S.B. Halligudi (Pune, India) . . . . .	132
Copper(II) ion-exchanged montmorillonite as catalyst for the direct addition of N–H bond to CC triple bond T. Joseph, G.V. Shanbhag and S.B. Halligudi (Pune, India) . . . . .	139
Rapid and complete oxidation of acetaldehyde on $TiO_2$ photocatalytic filter supported by photo-induced activated hydroxyapatite H. Nishikawa (Gifu, Japan), S. Kato and T. Ando (Aichi, Japan) . . . . .	145

Effects of bulky ligands and water in Pd-catalyzed oxidative carbonylation of phenol H. Yasuda, K. Watarai, J.-C. Choi and T. Sakakura (Ibaraki, Japan) .....	149
Computational modeling of ruthenium alkylidene mediated olefin metathesis. A DFT study of reaction pathways for the ring-opening cross-metathesis of norbornene with olefins S. Fomine, J.V. Ortega and M.A. Tlenkopatchev (México, México) .....	156
Synthesis of linear alkyl benzenes over zirconia-supported 12-molybdophosphoric acid catalysts B.M. Devassy (Pune, India), F. Lefebvre (Villeurbanne, France), W. Böhringer, J. Fletcher (Rondebosch, South Africa) and S.B. Halligudi (Pune, India) .....	162
Friedel–Crafts alkylation of aromatics with benzyl alcohols catalyzed by rare earth metal triflates supported on MCM-41 mesoporous silica K. Mantri, K. Komura, Y. Kubota and Y. Sugi (Gifu, Japan) .....	168
O,N,O'-tridentate ligands derived from carbohydrates in the V(IV)-promoted asymmetric oxidation of thioanisole M.E. Cucciolito, R. Del Litto, G. Roviello and F. Ruffo (Naples, Italy) .....	176
Kinetics and mechanism of NO decomposition over $\text{La}_{0.4}\text{Sr}_{0.6}\text{Mn}_{0.8}\text{Ni}_{0.2}\text{O}_3$ perovskite-type oxides J. Zhu (Changchun, PR China and Beijing, PR China), D. Xiao, J. Li, X. Yang and Y. Wu (Changchun, PR China) .....	182
Concerning chemistry, reactivity, and mechanism of transition metal catalysed oxidation of benzylic compounds by means of ozone M. Waser, W.G. Jary, P. Pöchlauer and H. Falk (Linz, Austria) .....	187
DFT—Quantum chemical study of the HZSM-5-cyclohexene interaction pathways A. Cuán, J.M. Martínez-Magadán, I. García-Cruz and M. Galván (Mexico, Mexico) .....	194
Nickel containing Mg-Al hydrotalcite-type anionic clay catalyst for the oxidation of alcohols with molecular oxygen T. Kawabata, Y. Shinozuka, Y. Ohishi (Higashi-Hiroshima, Japan), T. Shishido (Tokyo, Japan), K. Takaki and K. Takehira (Higashi-Hiroshima, Japan) .....	206
Natural HEU type zeolite catalyzed Biginelli reaction for the synthesis of 3,4-dihydropyrimidin-2(1H) one derivatives M. Tajbakhsh (Babolsar, Iran), B. Mohajeri, M.M. Heravi (Tehran, Iran) and A.N. Ahmadi (Babolsar, Iran) .....	216
Ammoximation of cyclohexanone in acetic acid using titanium silicalite-1 catalyst: Activity and reaction pathway T. Sooknoi and V. Chitraruwatkul (Bangkok, Thailand) .....	220
Effect of modifier structure in asymmetric 1-phenylpropane-1,2-dione hydrogenation I. Busygin, E. Toukoniitty, R. Leino and D.Yu. Murzin (Turku-Åbo, Finland) .....	227
Detection of active sites for paraffin cracking on USY zeolite by $^{27}\text{Al}$ MQMAS NMR operated at high magnetic field 16 T N. Katada (Tottori, Japan and Saitama, Japan), S. Nakata, S. Kato (Akita, Japan), K. Kanehashi, K. Saito (Chiba, Japan) and M. Niwa (Tottori, Japan) .....	239
An examination of aluminum chain transfer reaction in $\text{rac-Me}_2\text{Si}[2\text{-Me-4-Naph-Ind}]_2\text{ZrCl}_2/\text{MAO}$ -catalyzed propylene polymerization and synthesis of aluminum-terminated isotactic polypropylene with controlled molecular weight G. Fan and J.-Y. Dong (Beijing, China) .....	246
Synthesis, characterization and catalytic activity of $\text{Nd}_2\text{O}_3$ supported $\text{V}_2\text{O}_5$ catalysts S. Shylesh, T. Radhika, K.S. Rani and S. Sugunan (Cochin, India) .....	253
Kinetics and mechanism of 2,2'-bipyridyl and 1,10-phenanthroline-catalysed chromium(VI) oxidation of D-fructose in aqueous micellar media M. Islam, B. Saha and A.K. Das (West Bengal, India) .....	260
Guide for Authors .....	267
Author index .....	271
Subject index .....	274
Volume contents .....	280