

## Contents Vol. 98

### *Chemical and Metal Complex Catalysis*

- Formation of compound I of horseradish peroxidase in AOT reverse micelles as studied by pulse radiolysis and stopped-flow methods [M694]
- L. Gębicka, J.L. Gębicki and J. Pawlak (Łódź, Poland) ..... L1
- Reduction of ketones by dihydrogen or hydrogen transfer catalysed by a ruthenium complex of the hydridotris(3,5-dimethyl)pyrazolyl borate ligand [M704]
- C. Vicente, G.B. Shul'pin, B. Moreno, S. Sabo-Etienne and B. Chaudret (Toulouse, France) ..... L5
- Ozone decomposition and CO oxidation on CeO<sub>2</sub> [M636]
- A. Naydenov, R. Stoyanova and D. Mehandjiev (Sofia, Bulgaria) ..... 9
- A theoretical study of Ziegler–Natta olefin polymerization on the TiCl<sub>3</sub> crystalline surface [M661]
- A. Shiga (Tsukuba, Japan), H. Kawamura-Kuribayashi and T. Sasaki (Chiba, Japan) ..... 15
- Oxidative coupling of methane over natural manganese oxide [M655]
- L.M. Ioffe, T. Lopez, Y.G. Borodko and R. Gomez (Mexico D.F., Mexico) ..... 25
- Effect of the synthesis conditions on the crystallinity and surface acidity of SAPO-11 [M663]
- M. Alfonzo, J. Goldwasser, C.M. López, F.J. Machado, M. Matjushin, B. Méndez and M.M. Ramírez de Agudelo (Caracas, Venezuela) ..... 35
- Catalytic properties of low-valent europium introduced into Y-zeolite [M664]
- T. Baba, S. Hikita, Y. Ono (Tokyo, Japan), T. Yoshida, T. Tanaka and S. Yoshida (Kyoto, Japan) ..... 49
- Base catalysis on zeolites in the formaldehyde–dimethylamine transformations [M668]
- V.N. Romannikov (Novosibirsk, Russia) ..... 57

### *Molecular Aspects of Heterogeneous Catalysis*

- The effect of different ZnO precursors on the catalytic decomposition of ethanol [M676]
- S.A. Halawy and M.A. Mohamed (Qena, Egypt) ..... L63

### *Chemical and Metal Complex Catalysis*

- Rhodium catalysed hydroformylation of higher alkenes using amphiphilic ligands [M673]
- A. Buhling, P.C.J. Kamer and P.W.N.M. Van Leeuwen (Amsterdam, Netherlands) ..... 69

### *Molecular Aspects of Heterogeneous Catalysis*

- Catalytic and structural properties of ruthenium bimetallic catalysts: kinetics of hydrogenolysis of lower alkanes on variously pretreated Ru/Al<sub>2</sub>O<sub>3</sub> catalysts [M667]
- G.C. Bond and J.C. Slaa (Uxbridge, UK) ..... 81
- Benzylation of aromatics on ion-exchanged clays [M675]
- T. Cseri, S. Békássy, F. Figueras and S. Rizner (Budapest, Hungary) ..... 101
- The influence of dissolved metal ions on the photocatalytic degradation of phenol in aqueous TiO<sub>2</sub> suspensions [M672]
- V. Brezová, A. Blažková, E. Borošová, M. Čeppan and R. Fiala (Bratislava, Slovak Republic) ..... 109

### *Chemical and Metal Complex Catalysis*

- Surface active phosphines for catalysis under two-phase reaction conditions. P(menthyl)[(CH<sub>2</sub>)<sub>8</sub>C<sub>6</sub>H<sub>4</sub>-*p*-SO<sub>3</sub>Na]<sub>2</sub> and the hydroformylation of styrene [M671]

T. Bartik, H. Ding, B. Bartik and B.E. Hanson (Blacksburg, VA, USA) .....	117
Linear low density polyethylene: catalyst system effect on polymer microstructure [M684]	
G. Balbontin, I. Camurati, T. Dall'Occo (Ferrara, Italy) and R.C. Zeigler (Elkton, MD, USA) .....	123
Active sites concentration in ethylene homo- and co-polymerization with 1-hexene using the highly active $\text{TiCl}_4/\text{MgH}_2\text{-AlEt}_3$ catalyst system [M683]	
I.A. Jaber (Calgary, Alberta, Canada) and G. Fink (Mülheim a.d. Ruhr, Germany) .....	135
Ruthenium(II) 2-(phenylazo)pyridine complexes as epoxidation catalysts [M685]	
G.A. Barf and R.A. Sheldon (Delft, Netherlands) .....	143
<b>Molecular Aspects of Heterogeneous Catalysis</b>	
Quantum-chemical investigation of the geometric structure of the Lewis acid sites of the $\alpha\text{-Al}_2\text{O}_3$ faces (0001), (11 $\bar{2}$ 0), (22 $\bar{4}$ 0) [M662]	
L.G. Gorb, N.N. Ilchenko and V.V. Goncharuk (Kiev, Ukraine) .....	147
Colloidal rhodium catalyzed photo transfer hydrogenation of 1,5-cyclooctadiene [M670]	
T. Hanaoka, Y. Kubota, K. Takeuchi, T. Matsuzaki and Y. Sugi (Ibaraki, Japan) .....	157
<b>Biochemical Catalysis</b>	
Selective oxidation: stabilisation by multipoint attachment of ferredoxin $\text{NADP}^+$ reductase, an interesting cofactor recycling enzyme [M678]	
M. Teresa Bes, C. Gomez-Moreno (Zaragoza, Spain), J.M. Guisan and R. Fernandez-Lafuente (Madrid, Spain) .....	161
A systematic analysis of the variables that control a highly stereoselective resolution of racemic non-steroidal antiinflammatory drugs using immobilized lipase from <i>Candida cylindracea</i> [M680]	
J.M. Moreno and J.V. Sinisterra (Madrid, Spain) .....	171
Author index (Vol. 98) .....	185
Subject index (Vol. 98) .....	187