

## Contents Vol. 97

### *Chemical and Metal Complex Catalysis*

- Effects of sodium dodecyl sulphate concentration on the autooxidation of 3,5-di-*tert*-butylcatechol in solutions of hydrated transition metal ions [M638]  
Y.Y. Lim, H.Y. Fong and L.H. Tan (Kuala Lumpur, Malaysia) ..... L1

### *Biochemical Catalysis*

- On the molecular weight of bilirubin oxidase from *Penicillium janthinellum* [M637]  
M. Takeguchi, Y. Seki (Yokohama, Japan), S. Muraio, T. Shin (Kumamoto, Japan) and I. Okura (Yokohama, Japan) ..... L3

### *Chemical and Metal Complex Catalysis*

- Effects of solvents on the cobalt phthalocyanine-catalyzed oxidation of hydrophobic thiols [M643]  
E.T.W.M. Schipper, J.P.A. Heuts, H.P.C. Hopstaken, R.P.M. Pinckaers, P. Piet and A.L. German (Eindhoven, Netherlands) ..... 7
- Oxidation of methoxybenzenes to *p*-benzoquinones catalyzed by methyltrioxorhenium(VII) [M646]  
W. Adam (Würzburg, Germany), W.A. Herrmann (Garching, Germany), C.R. Saha-Möller and M. Shimizu (Würzburg, Germany) ..... 15
- Complex catalysis. Part XLVI. The mechanism of mol mass regulation in the allyl nickel complex catalyzed 1,4-*cis* polymerization of butadiene [M647]  
R. Taube, S. Wache and H. Kehlen (Merseburg, Germany) ..... 21
- Palladium catalyzed telomerization of butadiene with water in a two phase system: drastic effect of the amine structure on the rate and selectivity [M648]  
E. Monflier (Lens, France), P. Bourdauducq, J.-L. Couturier, J. Kervennal (Pierre Bénite, France) and A. Mortreux (Villeneuve d'Ascq, France) ..... 29
- Synthesis of acetic acid from methanol alone by homogeneous metal complex catalyst. Part II<sup>1</sup>. Mechanistic study on methyl acetate formation from methanol alone by  $[(\eta^5-C_5H_5)(PPh_3)_2RuX]$  (X = Cl, SnF<sub>3</sub>) complex catalyst [M649]  
H. Einaga, T. Yamakawa and S. Shinoda (Tokyo, Japan) ..... 35
- Study of catalytic activity of nitro substituted ironporphyrins [M639]  
M.D. Assis, A.J.B.d. Melo, O.A. Serra and Y. Iamamoto (Ribeirão Preto, SP, Brazil) ..... 41

### *Molecular Aspects of Heterogeneous Catalysis*

- Influence of hydrogen sulfide adsorption on the catalytic properties of metal oxides [M644]  
M. Ziolek, J. Kujawa (Poznan, Poland), O. Saur and J.C. Lavalley (Caen, France) ..... 49
- Methylation of indole during catalytic tests for hydrodenitrogenation (HDN) reactions [M642]  
M. Callant (Louvain-la-Neuve, Belgium), K.A. Holder (Sunbury-on-Thames, Middlesex, UK), H.G. Viehe, P. Grange and B. Delmon (Louvain-la-Neuve, Belgium) ..... 57

### *Chemical and Metal Complex Catalysis*

- Water-soluble metal complexes and catalysts. Part 7. New efficient water-soluble catalysts for two-phase olefin hydroformylation: BINAS-Na, a superlative in propene hydroformylation [M652]  
W.A. Herrmann, C.W. Kohlpaintner, R.B. Manetsberger (Garching, Germany), H. Bahrman and H. Kottmann (Oberhausen, Germany) ..... 65
- Palladium-catalyzed, arylation of ethylene (the Heck reaction) under aqueous conditions [M653]  
J. Kiji, T. Okano and T. Hasegawa (Tottori, Japan) ..... 73
- Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases [M657]

S. Camestrini (Padova, Italia), J.O. Edwards (Providence, RI, USA), F.D. Furia and F. Novello (Padova, Italia) .....	79
--	----

### **Molecular Aspects of Heterogeneous Catalysis**

A copper/silica catalyst prepared from a monolayer film of copper 2,2'-bipyridine dimer on Cab-O-Sil [M641] H.N. Choksi (Atlanta, GA, USA), A. Zippert (Atlanta, GA, USA), P. Berdahl (Berkeley, CA, USA), J.A. Bertrand (Atlanta, GA, USA), D.L. Perry (Berkeley, CA, USA), M.B. Mitchell (Atlanta, GA, USA) and M.G. White (Atlanta, GA, USA) .....	85
Superacid properties of Al <sub>2</sub> O <sub>3</sub> -SbF <sub>5</sub> catalytic system [M651] M. Marczewski, H. Marczewska and K. Witoslawski (Warsaw, Poland) .....	101
Effect of pH in the Pt-catalyzed oxidation of D-glucose to D-gluconic acid [M654] A. Abbadi and H. Van Bekkum (Delft, Netherlands) .....	111

### **Biochemical Catalysis**

Activity decay and conformational change of lipase in presence of organic solvents. A fluorescence study of <i>Candida rugosa</i> lipase [M660] C. Torres and C. Otero (Madrid, Spain) .....	119
---	-----

### **Biochemical Catalysis**

Comparison of methane hydroxylation activity with intact cells and cell-free extracts of <i>Methylosinus trichosporium</i> OB3b [M693] D. Sugimori and I. Okura (Yokohama, Japan) .....	L135
--	------

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

Vapour phase deep oxidation of chlorinated hydrocarbons catalyzed by pillared bentonites [M659] L. Storaro, R. Ganzerla, M. Lenarda (Venice, Italy) and R. Zanoni (Rome, Italy) .....	139
--	-----

### **Molecular Aspects of Heterogeneous Catalysis**

Microporous poly- <i>N,N</i> -dimethylacrylamide- <i>p</i> -styrylsulfonate-methylene bis(acrylamide): a promising support for metal catalysis [M656] M. Králik, M. Hronec (Bratislava, Slovak Republic), S. Lora (Legnaro Pd., Italy), G. Palma, M. Zecca, A. Biffis (Padova, Italy) and B. Corain (L'Aquila, Italy) .....	145
Theoretical studies of ethylene adsorption and oxidation on clean and oxygen covered rhodium(111) [M645] M.J. Calhorda, P.E.M. Lopes (Lisboa, Portugal) and C.M. Friend (Cambridge, MA, USA) .....	157
Oxidative dehydrogenation of propane on VAPO-5, V <sub>2</sub> O <sub>5</sub> /ALPO <sub>4</sub> -5 and V <sub>2</sub> O <sub>5</sub> /MgO catalysts. Nature of selective sites [M666] P. Concepción, J.M. López Nieto and J. Pérez-Pariente (Valencia, Spain) .....	173
Stacked phthalocyanines in VPI-5 pores as evidenced by CPDOR <sup>1</sup> H- <sup>27</sup> Al NMR [M650] R.F. Parton, F. Thibault-Starzyk, R.A. Reynders, P.J. Grobet, P.A. Jacobs (Heverlee, Belgium), C.P. Bezoukhanova (Sofia, Bulgaria), W. Sun and Y. Wu (Chapel Hill, NC, USA) .....	183

### **Biochemical Catalysis**

Synthetic mimics of tyrosinase: catechols from <i>ortho</i> -, <i>meta</i> - and <i>para</i> -substituted phenols and copper(I) complexes [M640] F. Chioccare (Napoli, Italy), G. Chiodini, F. Farina, M. Orlandi, B. Rindone and R. Sebastiano (Milano, Italy) .....	187
Alteration of the activity and selectivity of immobilized lipases by the effect of the amount of water in the organic medium [M658] M. Arroyo, J.M. Moreno and J.V. Sinisterra (Madrid, Spain) .....	195

<b>Contents</b> (Vol. 97) .....	203
---------------------------------	-----

<b>Author index</b> (Vol. 97) .....	205
-------------------------------------	-----

<b>Subject index</b> (Vol. 97) .....	207
--------------------------------------	-----