

## Volume Contents

**VOL. 31 (1–3), 15 OCTOBER 2004**

### Articles

Reactions of “hybrid” Mn-peroxidase of the white rot fungus <i>Panus tigrinus</i> with benzylic alcohols in the presence of mediators A. Lisov, A. Leontievsky, L. Golovleva (Pushchino, Russia) and C. Evans (London, UK) .....	1
Chemical modification of a catalytic antibody that accelerates insertion of a metal ion into porphyrin: essential amino acid residues for the catalytic activity Y. Kawamura-Konishi, T. Aoki, N. Satoh (Kanagawa, Japan), M. Katagiri (Kashiwara, Japan) and H. Suzuki (Kanagawa, Japan) ..	9
Reduction of (+)- and (-)-camphorquinones by cyanobacteria T. Utsukihara, W. Chai, N. Kato (Tokyo, Japan), K. Nakamura (Kyoto, Japan) and C. Akira Horiuchi (Tokyo, Japan) .....	19
Determination of the activity of laccase, and mediated oxidation of a lignin model compound, in aqueous-organic mixed solvents F. d'Acunzo, A.M. Barreca and C. Galli (Roma, Italy) .....	25
Hemiacetals and their esters as side-products in lipase-catalysed transesterifications of vinyl esters with sterically hindered alcohols D. Isaksson, M. Lindmark-Henriksson (Sundsvall, Sweden), T. Manoranjan (Peradeniya, Sri Lanka), K. Sjödin and H.-E. Höglberg (Sundsvall, Sweden) .....	31
Enhanced enantioselectivity of <i>Candida rugosa</i> lipase in ionic liquids as compared to organic solvents O. Ulbert, T. Fráter, K. Bélaifi-Bakó and L. Gubicza (Veszprém, Hungary) .....	39
Functional properties and application in peptide synthesis of trypsin modified with cyclodextrin-containing dicarboxylic acids M. Fernández (Matanzas, Cuba), A. Fragoso, R. Cao, M. Baños (Havana, Cuba), M. Ansorge-Schumacher, W. Hartmeier (Aachen, Germany) and R. Villalonga (Matanzas, Cuba) .....	47
Evaluation of the potential for use in biocatalysis of a lipase from a wild strain of <i>Bacillus megaterium</i> V.M.G. Lima, N. Krieger, D.A. Mitchell (Parana, Brazil), J.C. Baratti (Marseille, France), I. de Filippis (Rio de Janeiro, Brazil) and J.D. Fontana (Parana, Brazil) .....	53

### Short communication

Use of high acyl donor concentrations leads to penicillin acylase inactivation in the course of peptide synthesis T.A. Shcherbakova, A.V. Korennyykh (Moscow, Russia), L.M. van Langen, R.A. Sheldon (Delft, The Netherlands) and V.K. Švedas (Moscow, Russia) .....	63
---	----

### Article

The kinetic study on lipase-catalyzed asymmetric alcoholysis of $\alpha$ -cyano-benzyl acetate in organic media J. Zhang, J. Wu and L. Yang (Hangzhou, China) .....	67
--	----

**VOL. 31 (4–6), 8 DECEMBER 2004**

### Review

Current strategies for in vitro protein glycosylation Y.L. Khmelnitsky (Albany, NY, USA) .....	73
---	----

### Articles

Distinct effect of a cationic surfactant on the transient and steady state phases of 2-naphthyl acetate hydrolysis catalyzed by $\alpha$ -chymotrypsin E. Abuin, E. Lissi and R. Duarte (Santiago, Chile) .....	83
A comparative molecular field analysis of the biotransformation of sulfides by <i>Rhodococcus erythropolis</i> J.B. French, G. Holland, H.L. Holland and H.L. Gordon (St. Catharines, Canada) .....	87
In vitro bi-enzymatic synthesis of benzaldehyde from phenylalanine: practical and mechanistic studies K. Okrasa (Orsay, France and Warsaw, Poland), E. Guibé-Jampel (Orsay, France), J. Plenkiewicz (Warsaw, Poland) and M. Therisod (Orsay, France) .....	97

Enzymatic separation of hardly separable mixtures of structural isomers S. Tanikawa, K. Suzuki, M. Ono and H. Akita (Chiba, Japan) . . . . .	103
A novel process for enzymatic synthesis of <i>N</i> -lauroyl- $\beta$ -amino propionitrile using packed bed reactor coupled with on-line separation Y.-M. Xia (Wuxi, China and Ann Arbor, MI, USA), Y. Fang, Z.-G. Xu, X.-Y. Hu, Y.-A. Shen (Wuxi, China) and J. Brown Jr. (Ann Arbor, MI, USA) . . . . .	111
Enantioselective lipase-catalyzed kinetic resolution of <i>N</i> -(2-ethyl-6-methylphenyl)alanine L. Zheng, S. Zhang, Y. Feng, S. Cao, J. Ma, L. Zhao and G. Gao (Changchun, PR China) . . . . .	117
Aldol additions with mutant lipase: analysis by experiments and theoretical calculations C. Branneby, P. Carlqvist, K. Hult, T. Brinck and P. Berglund (Stockholm, Sweden) . . . . .	123
Evaluation of acetophenone monooxygenase and alcohol dehydrogenase activities in different fungal strains by biotransformation of acetophenone derivatives L.H. Andrade, A.F. Keppler, I.H. Schoenlein-Crusius, A.L.M. Porto and J.V. Comasseto (São Paulo, Brazil) . . . . .	129
Evaluation of cardosin A as a proteolytic probe in the presence of organic solvents A. Cristina Sarmento, C.S. Oliveira (Aveiro, Portugal), E.M. Pires (Coimbra, Portugal), P.J. Halling (Glasgow XL, UK) and M.T. Barros (Aveiro, Portugal and Viseu, Portugal) . . . . .	137
Entrapment of lipase into K-carrageenan beads and its use in hydrolysis of olive oil in biphasic system P.D. Desai, A.M. Dave and S. Devi (Vadodara, India) . . . . .	143
Glucose concentration determination by means of fluorescence emission spectra of soluble and insoluble glucose oxidase: some useful indications for optical fibre-based sensors M. Lepore, M. Portaccio, E. De Tommasi, P. De Luca, U. Bencivenga, P. Maiuri and D.G. Mita (Naples, Italy) . . . . .	151
Chemo- and stereo-selective biocatalytic reduction of $\alpha,\beta$ -unsaturated ketones employing a chemo-tolerant ADH from <i>Rhodococcus ruber</i> DSM 44541 R. van Deursen, W. Stampfer, K. Edeger, K. Faber and W. Kroutil (Graz, Austria) . . . . .	159
Comparison of cyclohexanone monooxygenase as an isolated enzyme and whole cell biocatalyst for the enantioselective oxidation of 1,3-dithiane F. Zambianchi, S. Raimondi, P. Pasta, G. Carrea, N. Gaggero (Milano, Italy) and J.M. Woodley (London, UK) . . . . .	165
Author Index . . . . .	I
Subject Index . . . . .	III
Volume Contents . . . . .	VII