

## Volume Contents

### VOL. 37 (1–6), 1 DECEMBER 2005

#### Articles

- Characterization of GDP-mannose pyrophosphorylase from *Escherichia coli* O157:H7 EDL933 and its broad substrate specificity  
Y.-H. Yang (Seoul, Republic of Korea), Y.-B. Kang (Incheon, Republic of Korea), K.-W. Lee (Seoul, Republic of Korea), T.-H. Lee, S.-S. Park (Seoul, Republic of Korea), B.-Y. Hwang (Austin, TX, USA) and B.-G. Kim (Seoul, Republic of Korea) . . . . . 1
- Synthesis of tripeptide RGD amide by a combination of chemical and enzymatic methods  
R.-Z. Hou, N. Zhang, G. Li, Y.-B. Huang, H. Wang, Y.-P. Xiao, Y.-J. Liu, Y. Yang, L. Zhao and X.-Z. Zhang (Changchun, China) . . . . . 9

#### Review

- Effect of ions and other compatible solutes on enzyme activity, and its implication for biocatalysis using ionic liquids  
H. Zhao (Savannah, GA, USA) . . . . . 16

#### Articles

- Non-coded amino acids as acyl donor substrates for peptide bond formation catalyzed by thermoase in toluene  
H.-Y. Shen, G.-L. Tian, Y.-H. Ye and J. Wang (Beijing, China) . . . . . 26
- Cloning and characterization of a fish microsomal epoxide hydrolase of *Danio rerio* and application to kinetic resolution of racemic styrene oxide  
H.S. Kim, S.J. Lee, E.J. Lee (Busan, Republic of Korea), J.W. Hwang (Seoul, Republic of Korea), S. Park (Busan, Republic of Korea), S.J. Kim (Ansan, Republic of Korea) and E.Y. Lee (Busan, Republic of Korea) . . . . . 30

#### Reviews

- Biotechnological applications of *Candida antarctica* lipase A: State-of-the-art  
P. Domínguez de María, C. Carboni-Oerlemans, B. Tuin, G. Bargeman, A. van der Meer and R. van Gemert (SB Arnhem, The Netherland) . . . . . 36
- Revisit of aminotransferase in the genomic era and its application to biocatalysis  
B.-Y. Hwang, B.-K. Cho, H. Yun, K. Koteshwar and B.-G. Kim (Seoul, Republic of Korea) . . . . . 47

#### Articles

- Improvement of a process for purification of tocopherols and sterols from soybean oil deodorizer distillate  
T. Nagao, T. Kobayashi, Y. Hirota, M. Kitano (Osaka, Japan), N. Kishimoto, T. Fujita (Nara, Japan), Y. Watanabe and Y. Shimada (Osaka, Japan) . . . . . 56
- Enzymatic resolution of 2-aryloxy-1-propanols via lipase-catalyzed enantioselective acylation using acid anhydrides as acyl donors  
T. Miyazawa, E. Kaito, T. Yukawa, T. Murashima and T. Yamada (Kobe, Japan) . . . . . 63
- Study on acyl migration in immobilized lipozyme TL-catalyzed transesterification of soybean oil for biodiesel production  
W. Du, Y.-Y. Xu, D.-H. Liu and Z.-B. Li (Beijing, PR China) . . . . . 68
- Unique mode of acetylation of oligosaccharides in aqueous two-phase system by *Trichoderma reesei* acetyl esterase  
L. Kremnický and P. Biely (Bratislava, Slovakia) . . . . . 72
- Kinetics of laccase-catalysed TEMPO oxidation  
J. Kulys and R. Vidziunaite (Vilnius, Lithuania) . . . . . 79
- $\alpha$ -Amylase-catalysed synthesis of alkyl glycosides  
J. Larsson, D. Svensson and P. Adlercreutz (Lund, Sweden) . . . . . 84
- Vinyl imidazole carrying metal-chelated beads for reversible use in yeast invertase adsorption  
B. Osman, A. Kara (Bursa, Turkey), L. Uzun (Ankara, Turkey), N. Beşirli (Bursa, Turkey) and A. Denizli (Ankara, Turkey) . . . . . 88
- Kinetic study of esterification of rapeseed oil contained in waste activated bleaching earth using *Candida rugosa* lipase in organic solvent system  
E.Y. Park and M. Mori (Shizuoka, Japan) . . . . . 95
- Role of N- and C-terminal domains and non-homologous region in co-refolding of *Thermotoga maritima*  $\beta$ -glucosidase  
B.-J. Kim, S.L. Mangala (Ibaraki, Japan), B.K. Muralidhara (Galveston, TX, USA) and K. Hayashi (Ibaraki, Japan) . . . . . 101

**Short communication**

|   |     |
|---|-----|
| Fed-batch production of ( <i>S</i> )-flurbiprofen in lipase-catalyzed dispersed aqueous phase reaction system induced by succinyl $\beta$ -cyclodextrin and its extractive purification<br>G.-S. Shin, K.-W. Lee and Y.-H. Lee (Daegu, South Korea) ..... | 109 |
| Author Index .....  | I   |
| Subject Index .....   | III |
| Volume Contents .....   | VI  |