# Contents

Discovery and Utilization of Biocatalysts for Chiral Synthesis:  
An Overview of Chinese Scientists Research and Development .......... 1  
Hui-Lei Yu, Jian-He Xu, Wen-Ya Lu, and Guo-Qiang Lin

Microbial Transformation of Nitriles to High-Value Acids or Amides.... 33  
Jing Chen, Ren-Chao Zheng, Yu-Guo Zheng, and Yin-Chu Shen

Secondary Metabolites from Higher Fungi: Discovery,  
Bioactivity, and Bioproduction ......................................................... 79  
Jian-Jiang Zhong and Jian-Hui Xiao

Large Scale Culture of Ginseng Adventitious Roots  
for Production of Ginsenosides.......................................................... 151  
Kee-Yoeup Paek, Hosakatte Niranjana Murthy, Eun-Joo Hahn,  
and Jian-Jiang Zhong

Approaches to Optimizing Animal Cell Culture Process: Substrate  
Metabolism Regulation and Protein Expression Improvement .......... 177  
Yuanxing Zhang

Approaches to High-Performance Preparative  
Chromatography of Proteins .............................................................. 217  
Yan Sun, Fu-Feng Liu, and Qing-Hong Shi

Recent Developments in Biodesulfurization of Fossil Fuels .......... 255  
Ping Xu, Jinhui Feng, Bo Yu, Fuli Li, and Cuiqing Ma

Characterization, Modeling and Application  
of Aerobic Granular Sludge for Wastewater Treatment ...................... 275  
Xian-Wei Liu, Han-Qing Yu, Bing-Jie Ni, and Guo-Ping Sheng

Index........................................................................................................... 305

xiii
Biotechnology in China I
From Bioreaction to Bioseparation and Bioremediation
Zhong, J.-J.; Bai, F.-W.; Zhang, W. (Eds.)
2009, XIII, 322 p. 101 illus., 2 illus. in color., Hardcover
ISBN: 978-3-540-88414-9