Preface

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Biographical notes: Bing Xie received his PhD in Environmental Engineering for research on biotechnology and water pollution control technology. Now he is associate professor of the Department of Environmental Science & Technology, East China Normal University, and director of Shanghai Environmental Microbiology Association. He is the author of more than 50 papers, published in national and international journals and conference proceedings.

Aijie Wang received her PhD in Environmental Engineering in 2000. Now, she is Professor of the School of Municipal and Environmental Engineering, Harbin Institute of Technology (HIT), and State Key Lab of Water Resource and Water Environment. Also, she is an associate director of Center for Environment and Biotechnology in HIT. Her main specialisation are the areas of molecular microbial ecology and omics (genomics, proteomics and metabonomics), wastewater utilisation and waste-to-bioenergy, modelling for biological processing, and catchment biological remediation. She has published 100 papers in national and international journals and conferences.

Microorganisms in global ecosystems play an important role in nutrient regeneration and energy flow. In the field of pollution control, microbial technology is mostly used for pollutant control, particularly in the field of organic waste removal, owing to its low cost and high efficiency. Nowadays, more and more attractive technologies and methods have been introduced to this area, which implies that microbial technology is playing a highly important and promising role in environmental protection.

Therefore, we called for the papers addressing research on pollutant control by microbial technology. After reviewing, several papers were selected for this Special Issue, covering: an analysis of microflora abundance in aquatic eutrophication ecosystem on a community or species level (Wu and Zhou); a review of the behaviour of bacterial extracellular polymeric substance from activated sludge (Tian); phenol degradation and

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microbial characteristics in an upflow anaerobic sludge blanket (Ke et al.); a study of treatment of distillery anaerobic effluent in a hybrid biological reactor (Mazumder et al); a review of microbial degradation of phenols (Agarry et al); biodegradation of phenol in refinery wastewater by pure cultures of *Pseudomonas* (Agarry et al.); biotechnology of biofiltration for VOC emission control in some Italian industries (Pietrangeli et al.); and innovative wastewater treatment process involved biosorption by fungal or stalks biomass (Zouboulis et al).

These papers cover the research areas of environmental microorganisms, microbial ecology, bioremediation, and biodegradation of organic substance pollutant control technology by microorganisms, which can bring new insights into microbial technology. We hope they will be useful to interested researchers.