## Contents

1  Removal of lead from aqueous solutions by complexation ultrafiltration with chitosan  
Jiahui Shao, Zhewang Xie, Yiliang He and Guowai Liu

7  Impact of magnetic ion exchange resin pretreatment on alleviating UF membrane fouling  
H. Xu, W. Chen, J. Sun and Z. Yuan

15  Removal of algogenic organic matter by magnetic ion exchange resin pre-treatment and its effect on fouling in ultrafiltration  
C. Liu, W. Chen, V. M. Robert and Z. G. Han

23  Pilot scale evaluation of biofiltration as an innovative pre-treatment for ultrafiltration membranes for drinking water treatment  
P. M. Huck, S. Peldzus, C. Hallé, H. Ruiz, X. Jin, M. Van Dyke, G. Amy, W. Uhl, M. Theodoulou and  
D. B. Mosqueda-Jimenez

31  Influence of particle size and operating parameters on virus ultrafiltration efficiency  
Angayar K. Pavanasam, Ali Abbas and Vicki Chen

39  Long-term behaviour of a gravity-driven dead end membrane filtration unit for potable water supply in cases of disasters  
F. -B. Frechen, H. Exler, J. Romaker and W. Schier

45  Determination of water supply sources in the Barcelona distribution system by UV spectrophotometry and PLS  
S. Platikanov, V. Garcia, E. Landeros, R. Devesa, L. Matía and R. Tauler

55  Detection of bisphenol A in water samples using ELISA determination method  
J. Zheng, S. Q. Zhao, X. T. Xu and K. Zhang

61  Adsorption of cadmium(II) from aqueous solutions by thiol-functionalized activated carbon  
Doyoon Kim, Young Wook Jung, Seokjoon Kwon and Jae-Woo Park

67  The sustainable industrial water cycle - a review of the economics and approach  
M. Andrews, P. Berardo and D. Foster

79  Bacteriological and physico-chemical quality assessment of household drinking water in Ado-Ekiti, Nigeria  
J. O. Oluyege, A. E. Koko and O. A. Aregbesola

85  Degradation of humic acid from water by advanced electrochemical oxidation method  
I. Vlaicu, A. Pop, F. Manea and C. Radovan

97  Effect of floc structure and strength on membrane permeability in the hybrid coagulation-microfiltration process  
Bingqing Zhao, Dongsheng Wang, Tao Li and Chihpin Huang

107  Improving the biological stability of drinking water by ion exchange  
113  Novel multifunctional membrane technology for visual detection and enhanced adsorptive removal of lead ions in water and wastewater
   Linzi Zhang and Renbi Bai

121  Preparation of TiO$_2$-diatomite composites by ball-milling and its photocatalytic degradation of methyl orange
   Yanxi Deng, Xuming Wang, Jinfeng Yin, Yanfeng Li, Hao Ding and Fei Chang

129  Degradation of propoxycarbazone-sodium with advanced oxidation processes
   A. Dulov, N. Dulova, Y. Veressinina and M. Trapido