

Contents

Scope of the Book <i>Advanced Treatment Technologies for Urban Wastewater Reuse</i>.....	1
Klaus Kümmerer, Dionysios D. Dionysiou, and Despo Fatta-Kassinos	
Treatment Technologies for Wastewater Reuse: Fate of Contaminants of Emerging Concern	5
O. González, B. Bayarri, J. Aceña, S. Pérez, and D. Barceló	
Trace Organic Contaminants Removal by Combined Processes for Wastewater Reuse	39
Faisal I. Hai, Luong N. Nguyen, Long D. Nghiem, Bao-Qiang Liao, Ismail Koyuncu, and William E. Price	
Enhanced Biological Wastewater Treatment to Produce Effluents Suitable for Reuse.....	79
M. Concetta Tomei, Guido Del Moro, Claudio Di Iaconi, and Giuseppe Mascolo	
Conventional and New Processes for Urban Wastewater Disinfection: Effect on Emerging and Resistant Microorganisms	107
G. Ferro, M.I. Polo-López, and P. Fernández-Ibáñez	
Impacts of Advanced Oxidation Processes on Microbiomes During Wastewater Treatment	129
Johannes Alexander, Popi Karaolia, Despo Fatta-Kassinos, and Thomas Schwartz	
Advanced Technologies for Emerging Contaminants Removal in Urban Wastewater	145
Isabel Oller, Inmaculada Polo-López, Sara Miralles-Cuevas, Pilar Fernández-Ibáñez, and Sixto Malato	

Immobilized Heterogeneous Photocatalysis for Reuse of Water Contaminated by Recalcitrant Organic Compounds: The Case of Antibiotics	171
Marie-Noëlle Pons, Amélie Le Frêche, Aurélie Cortyl, Jessica Van Deik, Marie Poret, and Orfan Zahraa	
Constructed Wetlands Integrated with Advanced Oxidation Processes in Wastewater Treatment for Reuse	197
Ê.L. Machado, A.M. Lourenço, L.T. Kist, R.C.S. Schneider, D. Kern, E.A.A. Lobo, C.A. Lutterbeck, D.D. Silveira, T.B. Horn, and F.V. Zerwes	
Membrane Bioreactors (MBRs) for Water Reuse in the USA	223
Ziqiang Yin and Irene Xagorarakis	
Treatment of RO Concentrate for Enhanced Water Recovery from Wastewater Treatment Plant Effluent	247
Teik-Thye Lim and Pow-Seng Yap	
Recent Developments in Potable Water Reuse	269
Jörg E. Drewes and Nils Horstmeyer	
Long-Term Strategies for Tackling Micropollutants	291
Klaus Kümmerer, Dionysios D. Dionysiou, and Despo Fatta-Kassinos	
Index	301