

# Contents

<b>Biosensors for Environmental Monitoring at Global Scale and the EU Level</b> .....	1
Marinella Farré, Sara Rodriguez-Mozaz, Miren López de Alda, Damià Barceló, and Peter-Diedrich Hansen	
<b>Achievements of the RIANA and AWACSS EU Projects: Immunosensors for the Determination of Pesticides, Endocrine Disrupting Chemicals and Pharmaceuticals</b> .....	33
Sara Rodriguez-Mozaz, Maria J. López de Alda, and Damià Barceló	
<b>Biosensors for Pharmaceuticals and Emerging Contaminants Based on Novel Micro and Nanotechnology Approaches</b> .....	47
Javier Adrián, Fátima Fernández, Alejandro Muriano, Raquel Obregon, Javier Ramón-Azcon, Nuria Tort, and M.-Pilar Marco	
<b>Recombinant Yeast Assays and Gene Expression Assays for the Analysis of Endocrine Disruption</b> .....	69
Benjamin Piña, Susanna Boronat, Marta Casado, and Alba Olivares	
<b>Biosensors for Aquatic Toxicology Evaluation</b> .....	115
Marinella Farré and Damià Barceló	
<b>Genetically Engineered Bacteria for Genotoxicity Assessment</b> .....	161
Alva Biran, Rami Pedahzur, Sebastian Buchinger, Georg Reifferscheid, and Shimshon Belkin	

<b>Adverse Effects in Aquatic Ecosystems: Genotoxicity as a Priority Measurement .....</b>	<b>187</b>
Tamara Grummt, Petra Rettberg, Petra Waldmann, Jürgen Zipperle, and Peter-Diedrich Hansen	
<b>Genotoxicity in the Environment (Eco-Genotoxicity) .....</b>	<b>203</b>
P. D. Hansen, E. Wittekindt, J. Sherry, E. Unruh, H. Dizer, H. Tüg, H. Rosenthal, V. Dethlefsen, and H. von Westernhagen	
<b>Liquid Chromatography–Mass Spectrometry Methods for Analysis of Endocrine-Disrupting Chemicals in Wastewaters.....</b>	<b>227</b>
Cristina Postigo, Marina Kuster, Marta Villagrasa, Sara Rodríguez-Mozaz, Rikke Brix, Marinel la Farré, Miren López de Alda, and Damià Barceló	
<b>Index.....</b>	<b>273</b>