



Janusz A. Tomaszek & Piotr Koszelnik

Progress in Environmental Engineering

Water, Wastewater Treatment and
Environmental Protection Issues

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Environmental Protection Issues

Editors

Janusz A. Tomaszek & Piotr Koszelnik

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Preface

The monograph contains original theoretical and experimental papers dealing with: water purification, especially on risk management in water distribution system operation and maintenance, new concepts and methods of wastewater treatment e.g. elimination of activated sludge bulking or using a new support material in activated sludge technology, greenhouse gases emissions from WWTPs, and important ecological problems in freshwater ecosystems.

There have been many advances in the study of aquatic ecosystems in recent years, but there remain many questions to be solved. The areas that require new approach, in spite of the advances during the last decades, are the paramount eutrophical problems related to lakes and reservoirs restoration, the role of wetlands in the removal of heavy metals and complicated interactions between sediment and overlying water. This monograph contains contributions pointing to these directions. The goal of the monograph is not merely to provide technical proficiency but to add insight and understanding of the selected aspects of water purification, wastewater treatment and protection of aquatic ecosystems. We hope that the present monograph, by bringing together a plenty of information on origin, nature and reduction of environment contaminations, will help with providing modes of action to effectively solve the pollution problems.

The editors would like to express their acknowledgement to all the authors of the monograph for their enthusiasm, diligence and involvement.

We extend our gratitude to all those who helped with making the monograph.

Janusz A. Tomaszek and Piotr Koszelnik

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About the editors



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- *Water Chemistry/Ecosystem Dynamics*: transformations of organic compounds and nutrients, geochemistry of sediments, chemical processes at sediment-water interface, IRMS measurements, trace elements, heavy metals, GHG emissions.
- Water purification and sewage treatment.
- Water pollution control.



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- Waste management and utilization.

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