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Wastewater Treatment and Resource Recovery under the Circumstance of Carbon Neutrality

Guest Editors:

Prof. Dr. Shihai Deng

Department of Earth and Environmental Sciences, School of Human Settlements and Civil Engineering, Xi'an Jiaotong University, Xi'an 712000, China

Prof. Dr. Yaqian Zhao

1. UCD School of Civil Engineering, University College Dublin, Belfield, Dublin, Ireland
2. Institute of Water Resources & Hydro-electric Engineering, Xi'an University of Technology, Xi'an 710048, China

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Message from the Guest Editors

Carbon neutrality is presently a hot topic for wastewater treatment plants around the world. Under this circumstance, the goal of wastewater treatment systems has extended from purifying the received water and protecting human health to improving sustainability. This includes the innovations in technologies and strategies for reducing consumption and improving resource recovery in wastewater treatment. Concerning the reduction in resource consumption, it includes the improvement of treatment capabilities with more effective use of energy and/or chemicals. Regarding resource recovery, it involves the reuse of treated effluents, energy recovery through the generation of electricity, H_2 or CH_4 from organic contaminants, nutrient recovery (e.g., nitrogen and phosphorus) through the production of fertilizers and/or biosolids, energy harvesting through combined heat and power systems, etc.

This Special Issue welcomes original research articles, reviews and perspectives on the innovations in technologies and strategies for reducing consumption and improving resource recovery in wastewater treatment towards carbon neutrality.



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Special Issue



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Dr. Jean-Luc PROBST

Laboratory of Functional Ecology
and Environment, Centre
National de la Recherche
Scientifique (CNRS), University of
Toulouse, Campus ENSAT,
Auzeville Tolosane, France

Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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Water Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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