

Special Issue

Equilibrium Processes in Nutrient Removal Technologies from Wastewater, Waste Reuse in Construction Materials

Message from the Guest Editor

Phosphorus and nitrogen in the effluent of wastewater treatment plants (WWTPs) lead to eutrophication and deterioration of the receiving water environments. The municipal wastewater discharge, which increases with the urbanization process, has become a serious threat to aquatic eco-systems in urban areas. Existing wastewater treatment yet remains a low level. Therefore, it has become a trend to upgrade municipal WWTPs and to implement more stringent discharge standards for water environmental regulation. The carbon to nitrogen ratio (C/N) is generally low in wastewater treatments using biogas plants, which leads to insufficient carbon source for nutrient removal in WWTPs. Anaerobic ammonium oxidation process can be applied for nutrient rich wastewater after biogas plants applications as well as after organic carbon has been used in microbial fuel cells for generating energy or enhancing nitrogen and phosphorus removal. Denitrifying phosphorus removal enables to save energy from aerobic stage using nitrate as electron acceptor to capture phosphorus. For further reading, please visit the [Special Issue website](#)

Guest Editor

Dr. Ivar Zekker

Institute of Chemistry, University of Tartu, 50090 Tartu, Estonia

Deadline for manuscript submissions

closed (1 December 2021)



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/22572

Water
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

[mdpi.com/journal/
water](https://mdpi.com/journal/water)





Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



[mdpi.com/journal/
water](https://mdpi.com/journal/water)



About the Journal

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.

Editor-in-Chief

Dr. Jean-Luc PROBST

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR
CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique
(CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane,
Toulouse, France

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)