



*water*

an Open Access Journal by MDPI



## Antimicrobial Resistance in the Urban Water Cycle and Natural Aquatic Environments

Guest Editors:

**Dr. Charmaine Ng**

NUS Environmental Institute,  
E2S2, National University of  
Singapore, Singapore City,  
Singapore

**Dr. Le Thai Hoang**

Faculty of Environmental and  
Food Engineering, Nguyen Tat  
Thanh University, Ho Chi Minh  
City, Vietnam

**Dr. Goh Shin Giek**

NUS Environmental Institute,  
E2S2, National University of  
Singapore, Singapore City,  
Singapore

Deadline for manuscript  
submissions:

**closed (28 February 2022)**

### Message from the Guest Editors

Dear Colleagues,

Antimicrobial resistance (AMR) continues to be an important global health challenge. Rapid urbanization, increased population density, and human/animal misuse of antibiotics contribute to the AMR burden in aquatic compartments that receives discharge from these activities and other sources.

To protect environmental health and reduce AMR burden in water resources, a holistic approach to surveillance, modeling dissemination patterns, and developing risk assessment frameworks offer solutions to manage the spread of AMR in aquatic environments.

This Special Issue aims to feature novel detection methods, comprehensive and current trends in AMR surveillance data (e.g., antimicrobial agents/antibiotic resistant bacteria/antibiotic resistance profiles) in the urban water cycle and natural environments, the fate and transport (sources and sinks) of AMR, and risk models and assessments that will help in water management.

For further reading, please follow the link to the Special Issue Website at:

[https://www.mdpi.com/journal/water/special\\_issues/Antimicrobial\\_Aquatic](https://www.mdpi.com/journal/water/special_issues/Antimicrobial_Aquatic)



[mdpi.com/si/85506](https://www.mdpi.com/si/85506)

# Special Issue



*water*



an Open Access Journal by MDPI

## Editor-in-Chief

### 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.

## 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 (*Water Science and Technology*)

## Contact Us

---

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

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/water](http://mdpi.com/journal/water)  
[water@mdpi.com](mailto:water@mdpi.com)  
[X@Water\\_MDPI](https://twitter.com/Water_MDPI)