



an Open Access Journal by MDPI

# The Impact of Human Activities on Groundwater Resources in Arid and Semi-Arid Regions

Guest Editors:

#### Dr. Zaiyong Zhang

School of Water and Environment, Chang'an University, Xi'an, China

#### Dr. Yuli Wang

Department of Bioenvironmental Systems Engineering, National Taiwan University, Taiwan, China

#### Prof. Dr. Yue Liang

School of River and Ocean Engineering, Chongqing Jiaotong University, Chongqing, China

Deadline for manuscript submissions: **30 November 2024** 



mdpi.com/si/204495

### Message from the Guest Editors

Dear Colleagues,

Groundwater is an extremely valuable freshwater resource in the natural world, playing a crucial role in maintaining the balance of ecosystems and supporting the development of human society's economy. However, as populations surge and industrial and agricultural activities expand rapidly, human utilization of groundwater resources has intensified, leading to impacts that are mainly reflected in two areas: a decrease in quantity and a deterioration in quality. In terms of quantity, the overextraction of groundwater is the most direct impact. The continuous growth in demand for agricultural irrigation, industrial water, and urban supplies has led to a consistent decline in groundwater levels. Excessive pumping, particularly in arid and semi-arid regions, has not only made groundwater resources increasingly scarce but has also triggered a series of geological and environmental issues such as land subsidence and the drying up of springs. In terms of quality, the pollution of groundwater is worsening.

### [...]

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

https://www.mdpi.com/journal/water/special\_issues/ 4D1482982G







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 scientific domains and 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, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/water water@mdpi.com X@Water\_MDPI