# Special Issue

# Sustainable, Decentralized Flood Protection and Thermal Use

### Message from the Guest Editor

Due to effects of progressing global climate change on a regional and local scale and extensive changes in land use, increased flooding events are expected in the short and also long term and will cause substantial economic damage. An accumulation of such devastating flood events is expectable in the next years as land use pressures have intensified and will be intensifying in the future. Climatic conditions are supposed to be changing so that intense rain events will increase in terms of intensity, frequency, and variability. Sustainable and effective solutions have to be developed. Decentralized and local-based flood protection is one of the sustainable approaches and key technologies for reducing surface runoff and retaining water locally. Shallow geothermal use for heating and cooling is one sustainable extension for decentralized flood protecting areas due to the well-known local pedological and vegetation conditions and close distance to infrastructure. The combination of these two technologies will help to develop comprehensive decentralized sustainable approaches dealing with the upcoming effects of progressing global climate change.

### Guest Editor

Dr. David Bertermann

GeoZentrum Nordbayern, Friedrich-Alexander-University Erlangen-Nuremberg, Schlossgarten 5, D-91054 Erlangen, Germany

### Deadline for manuscript submissions

closed (10 May 2022)

**Sustainability**

**an Open Access Journal by MDPI**

**Impact Factor 3.3**
**CiteScore 7.7**

mdpi.com/si/66218

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

mdpi.com/journal/sustainability

Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 7.7

mdpi.com/journal/sustainability

MDPI

# About the Journal

## Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

## Editor-in-Chief

Prof. Dr. Marc A. Rosen
Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G 0C5, Canada

## Author Benefits

**Open Access:**

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

**High Visibility:**

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

**Journal Rank:**

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)