



Beyond the Channel—Investigating Processes at Crucial Fluvial Interfaces

Guest Editors:

Prof. Dr. Carlo Gualtieri

Department of Civil, Architectural
and Environmental Engineering,
Università di Napoli Federico II,
80125 Napoli, Italy

Dr. Dongdong Shao

School of Environment, Beijing
Normal University, Beijing
100875, China

Prof. Tao Sun

State Key Laboratory of Water
Environment Simulation &
School of Environment, Beijing
Normal University, Beijing, China

Deadline for manuscript
submissions:

closed (30 September 2018)

Message from the Guest Editors

Due to climate change and anthropogenic impacts, many rivers worldwide have experienced regime shifts in fluvial processes, which often affects their health and delivery of services. Complementary to flow and sediment regimes in the main channel, several processes of paramount importance are occurring at the environment interfaces such as the air-water, water-sediment, water-vegetation, and freshwater-seawater interfaces.

The overall goal of this Special Issue of Geosciences is to explore the processes at these crucial interfaces of the fluvial environment, that also play important role in river geomorphology and in maintaining the health and functioning of rivers and interfacing ecosystems.

This special issue aims to cover, without being limited to, the following areas:

- gas-transfer at free-surface;
- sediment transport and morphodynamics in streams and rivers;
- hyporheic fluxes;
- flows at river confluences;
- vegetated flows;
- estuarine hydrodynamics and morphodynamics;
- riverine eco-hydraulics.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Jesus Martinez-Frias

Instituto de Geociencias, IGEO
(CSIC-UCM), C/ Del Doctor Severo
Ochoa 7, Edificio
Entrepabellones 7 y 8, 28040
Madrid, Spain

Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

Author Benefits

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

High Visibility: indexed within Scopus, ESCI (Web of Science), GeoRef, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Geosciences, Multidisciplinary*) / CiteScore - Q1 (General Earth and Planetary Sciences)

Contact Us

Geosciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/geosciences
geosciences@mdpi.com
[X@Geosciences_OA](https://twitter.com/Geosciences_OA)