

# Special Issue

## Advanced Flood Frequency Analysis and Floodplain Inundation Modelling

### Message from the Guest Editor

This special issue welcomes the research papers on developing advanced modelling tools for quantifying changes in precipitation, surface runoff, flood magnitude, floodplain inundation and hydrological connectivity of floodplain wetlands.

This special issue aims to cover, the following research areas: Precipitation modelling: using various global climate models to assess changes in precipitation under projected future climates; Streamflow assessment: modelling the changes in streamflow under predicted future precipitation using hydrological and river system models; Flood frequency analysis: quantifying changes in flood magnitude and frequency under different climate scenarios using statistical/empirical models; Floodplain inundation modelling: assessing the potential impacts on spatial and temporal changes in flood inundation using hydrodynamic modelling and remote sensing techniques; Hydrological connectivity: assessing the potential changes in connectivity between rivers and off-stream wetlands using hydrodynamic modelling and GIS based analysis.

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### Guest Editor

Dr. Fazlul Karim

CSIRO Land & Water, Commonwealth Scientific and Industrial Research Organisation, Canberra, Australia

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### Deadline for manuscript submissions

closed (30 June 2018)



# Geosciences

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Alberto G. Fairén

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