# **Special Issue**

# The Hydrological Cycle and Its Relations with Climate: Latest Advances and Prospects

# Message from the Guest Editors

The hydrological cycle describes the transfer of water, a primary component for life of all living beings, in all its three phases between the Earth (including the snow/ice components, the groundwater and the exchange with vegetation) and the atmosphere. Meteorological events can produce strong accelerations in some of those transfers, while climate regulates the balance at regional scale. As a result of the balance, some areas can be rich in water and other poor, determining the water resources available for that region. Sometimes, events of intermediate scale between meteorology and climate (weeks to seasons) produce an alteration of regional balance, causing events of drought or floods that are able to produce severe damages to persons and infrastructures, and/or to have negative economic consequences. Climatic changes, occurring at present and projected for the near or far future, pose a further challenge, as they have an impact on several components of the hydrological cycle.

#### **Guest Editors**

Prof. Dr. Claudio Cassardo

Department of General Physics, University of Turin, Via Pietro Giuria, 1, 10125 Torino, Italy

Prof. Dr. Silvia Ferrarese

Department of General Physics, University of Turin, Via Pietro Giuria, 1, 10125 Torino, Italy

# Deadline for manuscript submissions

closed (30 April 2020)



# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/25612

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/applsci





# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



# **About the Journal**

# Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

# Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

### **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, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

