## **Special Issue**

## Application of Artificial Intelligence for River Hydrodynamics Modeling

## Message from the Guest Editors

This Special Issue of Applied Sciences welcomes computational modeling and Al-driven approaches for river engineering problems including river hydraulic modeling, hydrological simulation, hybrid simulation of hydraulics and machine learning, and data fusion and predictability. In particular (i) approaches that can aggregate a wide variety of data sources in simulation, including deep learning based river system simulation techniques, (ii) computing systems with advanced optimization techniques that can quantify, and ideally minimize the error and uncertainty associated with models and data integration, (iii) computational learning techniques for river dynamic computation of non-linear and complex systems, and (iv) data modeling and database development. We also encourage contributions in integrative approaches such as integrating AI with traditional 2D/3D river computational modeling, physics-based streamflow simulation, and water resources related data mining and computational systems especially at local, national, and continental scales.

## **Guest Editors**

Dr. Vidya Samadi

Dr. Catherine Wilson

Prof. Dr. Ibrahim Demir

## **Deadline for manuscript submissions**

closed (25 February 2022)



# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/36149

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 multi-dimensional 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)

