# Special Issue

# Advancements in Methods to Evaluate Energy Potential of Water Currents and in the Design and Analysis of the Performance of Hydrokinetic Turbines

## Message from the Guest Editors

This Special Issue aims to present and disseminate knowledge on the most recent advancements related to all types of microgeneration systems from water currents. Topics of interest for publication include, but are not limited to:

- Innovative experimental methodologies related to tidal microgeneration systems under laboratory conditions;
- Numerical modelling methodologies using advanced computational methods;
- Development and validation of available resource assessment tools;
- Climate change and its effects on tidal microgeneration, and resilience of technology;
- Ecohydraulics: tidal microgeneration smart grids and its effects on biological ecosystems;
- Innovation and development of tidal energy harvesting technologies, such as smart grids and test rigs;
- Remote sensing and post-processing methods using BigData and machine learning algorithms;
- Internet of Energy (IoE): data communication protocols and its relationship with tidal microgeneration systems;
- Computational intelligence applied to tidal microgeneration energy: genetic algorithms (GAs), system analysis and advanced optimization methods.

### **Guest Editors**

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# Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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