

Special Issue on **Robotics and Control Engineering of Wave and Tidal Energy-Recovering Systems**

CALL FOR PAPERS

There is an increasing and undeniable concern over global climate change, the importance of reducing greenhouse gas emissions, and the limited life span of fossil fuels. The growing interest in the use of renewable energy in general, and in marine renewable energy (wave and tidal) in particular, has become substantially evident over the last few years. The sea is a huge collector, accumulator, and transformer of clean and inexhaustible energy and virtually unexploited. Some of the opportunities and benefits that could be achieved with the exploitation of wave and tidal energy-recovering systems include energy independence and decarbonisation or creation of jobs.

The hardness of the medium is a well-known characteristic of the marine environment. This has led to the conception, design, and operation of devices with exceptional features such as stability, redundancy, seakeeping, or survival in hostile conditions. In this respect, the development of new and innovative solutions in robotics and control engineering systems applied to wave and tidal energy-recovering systems has received a great deal of attention in the last years from a considerable number of researchers and from the industrial community. This special issue aims at exhibiting the latest research achievements, findings, and ideas in the fields of robotics and control engineering of wave and tidal energy-recovering systems.

Researchers are encouraged to contribute with their original research articles, technical advances, and review articles that summarize the most recent developments and perspectives in the aforementioned fields.

Potential topics include but are not limited to the following:

- ▶ Sensor systems: sensors and sensor networks, intelligent sensors, sensor uncertainty for fault tolerant control, and distributed and multimodality sensor network for control and automation, to name but a few
- ▶ Control: adaptive control, robust control, active disturbance rejection control, identification and estimation, delay systems, precision motion control, and so on
- ▶ Mathematical modelling: modelling, identification, and simulation of wave and tidal energy-recovering systems
- ▶ Robotics: modelling and identification, mobile robotics, mobile sensor networks, perception systems, visual servoing, robot sensing and data fusion, and autonomous and remotely operated (surface and underwater) systems
- ▶ Industrial informatics: embedded systems for monitoring and controlling wave and tidal energy-recovering systems

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/mppe/rcewt/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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