
Call for Papers

Special Issue for Unmanned Systems

Unmanned Surface and Underwater Vehicles: Current Challenges in Design, Modeling, Control and Applications

Research and studies on unmanned vessels, which include unmanned surface vehicles (USVs) and unmanned underwater vehicles (UUVs), have attracted growing interests in an enormous scope of applications, such as passengers or goods transportation, environmental survey and monitoring, undersea surveillance and inspection, offshore search and rescue, offshore oil installations, to name a few. Concurrently the growing needs and requests of sophisticated mechanisms that can enhance the intelligence of these vessels have emerged during the years. Hence, to integrate advanced design, modeling, perception and control into the unmanned vessels is an effective way to improve the level of autonomy of this kind of unmanned systems. This special issue is to report the latest advancement and development of related technologies in this active field.

Topics of interests include, but are not limited to:

- Advanced design of unmanned vessels
- Dynamic modeling of unmanned vessels
- Perception of unmanned vessels
- Unmanned vessel cooperation and control
- Motion control and planning of unmanned vessels
- Navigation of unmanned vessels
- Soft-water robots
- Bio-inspired and biomimetic unmanned vessels
- Unmanned vessels applications

Deadline for Submission: June 30, 2021

Publication of the special issue: April 2, 2022

Interested authors should submit their manuscripts for possible inclusion as a special issue paper through the journal online submission system at www.editorialmanager.com/us/. Please choose the option for the corresponding special issue when uploading your manuscript.

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Unmanned Systems aims to cover all subjects related to the development of automatic machine systems, which include advanced technologies in unmanned hardware platforms (aerial, ground, underwater and unconventional platforms), unmanned software systems, modeling and control, communications systems, computer vision systems, energy systems, sensing and information processing, navigation and motion planning, computing, information fusion, multi-agent systems, mission management, machine intelligence, artificial intelligence, and innovative application case studies. More information on *Unmanned Systems* can be found at www.worldscientific.com/us/.
