



Localization, Mapping and SLAM in Marine and Underwater Environments

Guest Editors:

Prof. Dr. Antoni Burguera

Departament de Matemàtiques i
Informàtica, Universitat de les
Illes Balears, Carretera de
Valldemossa Km 7.5, 07122
Palma, Illes Balears, Spain

Dr. Francisco Bonin-Font

Departament de Matemàtiques i
Informàtica, Universitat de les
Illes Balears, Carretera de
Valldemossa Km 7.5, 07122
Palma, Illes Balears, Spain

Deadline for manuscript
submissions:

closed (31 October 2020)

Message from the Guest Editors

The use of robots for field applications in underwater and marine environments is rapidly growing. Tasks such as shipwreck recovery, ocean exploration, biological sampling, and industrial infrastructure inspection, among others, can be achieved thanks to underwater and marine robots.

All these tasks have one common requirement: to properly model the environment and estimate the robots' poses. Even though several mapping and SLAM methods exist, marine and underwater environments have some particularities that need to be taken into account.

The purpose of this Special Issue is to publish innovative research and application-oriented work related to underwater and marine localization and environment modelling. Papers related (but not limited) to the following topics will be taken into consideration:

- Marine and underwater localization and SLAM:
 - Visual;
 - Acoustic;
 - Laser based.
- Marine and underwater exploration and mapping:
 - Map building;
 - 3D ocean floor reconstruction;
 - Mosaicking;
 - Object and scene recognition.
- Marine and underwater multi-robot and multi-session localization, mapping, and SLAM.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi
Oceans Graduate School and The
UWA Oceans Institute, The
University of Western Australia,
Perth, WA 6009, Australia

Message from the Editor-in-Chief

The *Journal of Marine Science and Engineering* (JMSE; ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

Journal Rank: JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

Contact Us

*Journal of Marine Science and
Engineering* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/jmse
jmse@mdpi.com
[X@JMSE_MDPI](#)