# **Special Issue**

# New Challenges in Autonomous Underwater Networks

# Message from the Guest Editors

Current advancements in autonomous underwater vehicle (AUV) and acoustic modem technologies will make the development of large-scale autonomous underwater networks feasible in the near future. However, this will involve significant technological challenges in wireless communication underwater (multimodal—acoustic, radio, optical), AUV design, sonar imaging, localization and navigation in the absence of GPS/GNSS, and many others.

This Special Issue focuses on studying the challenges involved in developing future autonomous underwater networks. This includes, but is not limited to, the following topics:

- Underwater network protocols;
- Underwater localization, navigation and tracking;
- Design of underwater sensors and sensor networks;
- Underwater acoustic communication techniques;
- Underwater multimodal communication techniques and protocols:
- Devices, techniques and algorithms for underwater imaging;
- Novel signal processing techniques for underwater communication and imaging;
- Applications of AI/ML in autonomous underwater networks;
- AUV/ROV design;
- · Results from sea trials.

#### Guest Editors

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### Deadline for manuscript submissions

closed (30 April 2023)



# Journal of Marine Science and Engineering

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# **About the Journal**

# 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.

#### Editor-in-Chief

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