

## Special Issue

# Recent Advances in Underwater Acoustic Communication

### Message from the Guest Editors

Underwater acoustic communication plays a crucial role in various applications such as ocean exploration, marine research, environmental monitoring, and military submarine communications. This Special Issue aims to present the latest research trends and innovative technologies that address these challenges. In particular, we focus on recent advances in underwater acoustic channel modeling and analysis, physical layer modulation/demodulation techniques, underwater acoustic network optimization, advanced signal processing algorithms, beamforming and MIMO systems, and adaptive modulation technologies.

#### Research Topics:

- Underwater Acoustic Channel Modeling and Characterization;
- Physical Layer Modulation/Demodulation Techniques for Underwater Communications;
- Underwater Acoustic Network Protocols and Optimization;
- Adaptive Signal Processing Algorithms;
- Beamforming and MIMO System Design;
- Channel-Adaptive Modulation Schemes;
- Underwater Communication System Implementation and Performance Evaluation;
- Underwater Sensor Network Technologies;
- Machine Learning-based Underwater Communications.

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### Guest Editors

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### Deadline for manuscript submissions

closed (10 July 2025)



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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