



## Recent Advances and Trends in Underwater Optical Wireless Communications and Networks

Guest Editors:

**Dr. Syed Agha Hassnain  
Mohsan**

**Dr. Yanlong Li**

**Dr. Zou Zhou**

**Dr. Khaled Rabie**

Deadline for manuscript  
submissions:  
**closed (30 November 2023)**

### Message from the Guest Editors

This Special Issue aims to provide a platform for the recent advances and innovations in UOWCs. You are cordially invited to submit original research articles or perspective reviews, including the recent trends and developments regarding the current state-of-the-art UOWCs. The scope of this Special Issue includes, but is not limited to:

- Emerging UOWC technologies;
- New advances and challenges of UOWCs;
- Hybrid underwater optical wireless networks;
- Energy transfer and harvesting in Underwater Optical Wireless Systems;
- Internet of Underwater Things (IoUTs);
- Single-photon detector-based communication;
- Detector sensors, high-efficiency photodetectors for UOWC systems;
- Optical light sources for UOWC systems;
- Characterization of aquatic optical channels;
- Machine-learning-based algorithms for UOWC;
- Non-orthogonal Multiple Access techniques for UOWCs;
- Intelligent Reflecting Surface (IRS)-based UOWCs;
- Quantum-key distribution techniques;
- Standards, protocols, and recommendation for UOWCs;
- Experiments, trials, and testbeds for UOWCs;
- Fiber-wireless communication systems;
- Scattering and oceanic turbulence mitigation techniques;
- Oceanic turbulence modeling and simulation

