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Underwater Wireless Communications

Guest Editors:

Dr. Haixin Sun

Department of Information and
Communication Engineering,
Xiamen University, 422 Siming
South Road, Xiamen 361005,
China

Prof. Dr. Hamada Esmail

Electrical Engineering
Department, Faculty of
Engineering, Aswan University,
Aswan 81542, Egypt

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Message from the Guest Editors

Effective underwater wireless communications (UWCs) are essential for a number of both military and civil applications. Four communication techniques are utilized in the ocean environment: optical, electromagnetic, magnetic induction communication, and acoustic communication. Each has its advantage and disadvantages. Efforts in this area have been made by both researchers and industry to improve underwater wireless communication and discover the role of ocean water in reinforcing environmental sustainability. However, the physical characteristics of the oceanic environments still pose important challenges. These environmental challenges restrict the recharging capabilities of underwater communication nodes and limit the underwater channel bandwidth. These challenges have motivated us to invite interested researchers to design highly efficient energy and spectral underwater wireless communication systems. The new designs can be based on deep learning and artificial intelligence. This Special Issue may include signal processing algorithms designed to improve underwater wireless sensor nodes, thus enabling the Internet of Underwater Things.



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Special Issue



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Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria
Elettrica e dell'Informazione
(Department of Electrical and
Information Engineering),
Politecnico di Bari, Via Edoardo
Orabona n. 4, 70125 Bari, Italy

Message from the Editor-in-Chief

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Sensors Editorial Office
MDPI, St. Alban-Anlage 66
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