

Special Issue

Marine Cable Technology: Cutting-Edge Research and Development Trends

Message from the Guest Editors

With the accelerating exploitation of marine resources and the rapid expansion of offshore renewable energy systems, marine cables (including submarine power cables, umbilicals, and communication cables) have emerged as critical infrastructures for energy transmission, data transfer, and subsea control operations. These cables are engineered to withstand harsh marine environments, such as extreme pressures, dynamic currents, and corrosive conditions, while ensuring reliability and longevity. As global demands for offshore wind farms, ocean observatories, and deep-sea mining escalate, the design, installation, and maintenance of marine cables are faced with unprecedented technical challenges and opportunities. This Special Issue aims to gather cutting-edge research on marine cable technologies, addressing advancements in multi-physics coupling design methodologies, extreme-condition dynamic reliability, deep-sea environmental compatibility, intelligent health monitoring systems, and sustainable material development. The Special Issue will serve as a platform to advance the frontier of marine cable engineering and support the sustainable development of ocean resources.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Journal of Marine Science and Engineering (JMSE, ISSN: 2077-1312) focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

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