Special Issue

Mobile Offshore Drilling Unit

Message from the Guest Editors

Mobile offshore drilling units (MODUs) have been in operation for more than 60 years. They have been designed for a limited nominal life, e.g., 20 years for jack-ups. However, according to DNV GL, 60% of the world's offshore units are kept in operation for well beyond their nominal design life. MODUs can be categorized into jack-up rigs, drilling barges, semi-submersible rigs, and drill ships. Several variables govern the design of MODUs, including water depth, drilling operation, environmental conditions, operational safety, and regulatory requirements. MODUs are transported from one location to another either under their own power, on a barge or by towing. The safety of every stage of operation, transportation, preparation for drilling, and drilling is governed by relevant regulations, thus requiring careful planning. Many accidents, some with fatalities, have been reported for MODU rigs, including structural failure, human error, poor safety procedures and unforeseen environmental conditions. Blowout, punch-through, system failure, rough weather, collisions, and human errors leading to fire and explosion were among them.

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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.

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