



Dynamic Instability in Offshore Structures

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Message from the Guest Editors

Dear Colleagues,

Floating structures operating in the offshore environment are exposed to harsh conditions that may determine the occurrence of dynamic instability phenomena, such as parametric resonance, surf riding, and broaching. The large amplitude motions, resulting from dynamic instability, can have severe consequences for the safety and survivability of the structures and should, therefore, be mitigated and, where possible, avoided. Different technological solutions can be developed to achieve this, which range from novel designs of ships, offshore platforms, fish farms etc. to diminish the susceptibility risk, to advanced coupled condition monitoring and control systems to lessen the effects.

This Special Issue brings together contributions from different disciplines within marine engineering and technology, where the dynamic instability of offshore structures is encountered, to showcase lessons learned and highlight methods and solutions that may be transferrable between the various application areas. Contributions in modeling, analysis, control, and monitoring are welcomed.





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Message from the Editor-in-Chief

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