

First CALL FOR PAPERS

The 18th ISOPE High Performance Materials (HPM) Symposium at the 30th ISOPE Conference Shanghai, China, June 14–19, 2020

The objective of the symposium is to provide a forum to discuss recent developments and commercial outlook in advanced materials technologies and provide a medium for technically based, interdisciplinary discussions of core materials technologies.

Special ISOPE room rate starts from \$110 per/night

Topics of Interest

HPM: 2020 Symposium Focus

- Renewable Energy & Materials: Materials for offshore wind/wave Energy, Offshore structures, Corrosion, Structural design practices, and shale oil & gas resources development challenges
- Natural Disaster monitoring: NDT, Remote sensing, Numerical methods, and Mitigation for structural integrity.
- Knowledge management: Digitalization, Sharing/learning tools, Best practices/limits
- Nanotechnology materials
- Case Studies in Failure Analysis.

Asset Integrity: including higher process-level topics.

- Damage Mechanisms Review, Integrity Operating Windows, Monitoring of Fixed and Rotating Equipment.
- Risk and reliability-based approaches for structures, pipelines, piping and rotating machinery.
- Artificial intelligence, machine learning and digitalization and applications.
- Systematic basis/ Best practices/Regulations/Monitoring Techniques/Business Drivers.
- Asset future decommission, life cycle assessment, design life extension.
- Fixed and floating structures and civil infrastructure integrity mgmt. including ports, civil.

General HPM Topics

Advanced Materials, Material Characterization, Fracture / Fatigue, Welding / Joining Technologies / Additive Manufacturing, Friction Stir Welding/Processing, Coatings / Surface Treatment, Non-Destructive Testing, Material Fabrication & Processing, Material Design, Corrosion / Cracking, Material Modeling, Wear / Erosion, Light-weight Materials, Composite and Concrete Materials, Material Selection

Symposium Organizing Committee:

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Key Dates:

Abstract submission:
October 20, 2019

Manuscript for review:
January 15, 2020

Final paper:
March 24, 2020

Interested authors should send abstracts to one of the organizing committee members or submit online at.

<http://www.isopec.org/index.php/online-submission/>

Include the name of the inviter. The abstracts MUST include the contact author's postal address, telephone and fax numbers, and e-mail address to facilitate communications.