

CALL FOR PAPERS

The 33rd ISOPE Conference
Ottawa, Canada, June 19–23, 2023

The 1st Marine Transportation of CO₂ & H₂ Energy Carriers (MaTCH) Symposium

The ISOPE-2023 Conference hosts The First Marine Transportation of CO₂ & H₂ Energy Carriers Symposium, encouraging an integrated approach towards the role of CO₂/H₂ marine transportation in energy transition, and in ocean/Arctic engineering. This symposium uniquely delves into the technology advances and policy regulations dynamics impacting the marine transport market of liquefied CO₂ and H₂ energy carriers.

The global energy transition is underway. Hydrogen and Carbon Capture and Sequestration (CCS) shall play a significant role as the world shifts towards a more sustainable future with energy transition in which the marine transportation of CO₂, hydrogen energy carriers will be increasingly in high demand.

New approaches to achieve international cooperation on carbon management through cost-effective long-distance marine transportation of CO₂ and hydrogen energy will require researchers and engineers who have technical expertise, and understand the complex interrelationships between various science and engineering disciplines. In addition, researchers must develop relationships with industry and other stakeholders in the CO₂/H₂ value chain to identify the most pressing challenges and opportunities to translate their work to practice.

This symposium will provide a forum to discuss recent developments on and commercial outlook in marine transportation of CO₂/H₂ over long distance and provide a medium for technology based discussions of interdisciplinary core technologies for intensive exchange between academia and industrial engineers.

Special ISOPE room rates arranged at The Westin Ottawa

Suggested Topics

- CO₂/H₂ marine carrier design
- Hydrogen energy carriers (e.g., NH₃, LOHC)
- Phase behaviour of CO₂/H₂
- Specification for CO₂/H₂ ocean transport
- Boil-off gas handling/Insulation Technologies
- Techno-economics analysis
- CO₂/H₂ containment system and sloshing dynamics
- Materials for CO₂/H₂/NH₃ infrastructures
- CO₂/H₂ terminals/infrastructure
- Materials behavior in CO₂/H₂ environments
- Re-liquefaction Technologies
- On-board CO₂ capture

Symposium Organizing Committee:

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SungGun Park, Daewoo Shipbuilding & Marine Engineering, S. Korea

Jesse Senkel, SeaRiver Maritime, USA

Key Dates:

Abstract submission:

October 30, 2022

Manuscript for review:

January 20, 2023

Final paper:

March 28, 2023



Conferen/Call-2023 TC CO₂/H₂

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

<https://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.

Individual papers from the ISOPE Conference, Symposium, and Journal are available from www.onepetro.org/isopec and from major libraries worldwide. **Proceedings** in CD or USB can be ordered from orders@isopec.org