



Ottawa

The 33rd International Ocean and Polar Engineering Conference

Ocean Arctic Energy

June 19-23, 2023

Join us in Ottawa, the capital and soul of Canada

Since ISOPE-1992, the annual ISOPE conference has been the world's largest technical conference of its kind with **peer-reviewed** papers. Proceedings are **indexed by ISI ISTP/Web of Science, ISI/IT, ISI/PA, Clarivate, EI (Compendex), Scopus, Chemical Abstracts, Fluidex, and more.** Following the **all-time record-breaking attendance since ISOPE-2007 Lisbon, the conference has continued to set new records, receiving 1,700+ abstracts for ISOPE-2015 Hawaii.** The conference is being organized by the Technical Program Committee (TPC) of the **International Society of Offshore and Polar Engineers (ISOPE)** with 30 cooperating organizations. Its objective is to provide a timely international forum for researchers and engineers.



## First Call For Papers

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<b>DEADLINES</b>	Abstract Submission	<b>October 20, 2022</b>
	Manuscript for Review	January 20, 2023
	Final Manuscript due	March 28, 2023

Prospective authors are invited to **submit an abstract** in 300-400 words to: (1) **Online abstract submission (see above) or email [meetings@isopec.org](mailto:meetings@isopec.org)**; (2) **One of TPC members** (session organizers, see backside); or (3) **ISOPE-2023 TPC, 495 North Whisman Road, Suite 300, Mountain View, California 94043-5711, USA** (Phone 1-650-254-1871; Fax 1-650-254-2308), observing the above key dates. Abstract should emphasize the significance of the results and/or the originality. Abstract **must include** the paper title, all authors' and co-authors' names, affiliations, full addresses, and telephone and fax numbers and E-mail address of the corresponding author.

Some 140+ technical and industry sessions with participation from some 50+ countries will emphasize tentative topics:

### OFFSHORE TECHNOLOGY

#### & OCEAN ENGINEERING, DIGITAL

Intelligent Ocean Tech, AI, ML, Control, Simulation, Digitalization, Floating Installation, Foundation, Decommissioning, FPSO, SPAR, TLP, VLFS, Compliant Struct  
**Hydrogen, LNG, FSRU, FLNG, LNG Immersed/Floating Tunnel/Bridge, Aqua Farm, DP Control System, Mooring, Hybrid CFD, Hydroelasticity, Asset Integrity, SHM**

**DEEP-OCEAN MINING, GAS HYDRATES**  
Exploration, Minerals, System, Control, Design

**ISO, Codes and Standards, Rules, Regulation**

**RENEWABLE ENERGY: OCEAN, WIND**  
**Wind Turbines, Ocean Energy:** Waves, Tidal, Current, OTEC, **Hybrid** system, Aero-, Hydro-, Geo-Mechanics, Floating: Install, Noise, Control Simulation/Test, Energy Storage  
**Hydrogen, LNG Tech, Ammonia**

### OCEAN, ARCTIC ENVIRONMENT

Clean Water, Ocean Debris, Micro Plastic, Oil Spills, Contamination, Cleanup, CCS, Emission, Remote Sensing, Sensors, Monitoring/Impact

### GEOTECHNICAL ENGINEERING

Turbine Foundation, Design, Install, Pile-Soil, Suction Pile, Anchor, Soil, Stability, Big Data, Numerical Modeling, Liquefaction, Scour, Physical/Centrifuge Modelling, Geohazards

### OFFSHORE MECHANICS

#### HYDRODYNAMICS & CFD

AI, ML, NN, CNN, **Data-driven modelling, Comparative Study - CCP-WSI Blind Test and, Wind Turbine, Particle Methods, Digitalization, Waves; Load, Impact, Slamming, Cavitation, Hydroelasticity, Metocean, Bubble, Vortex Shedding, VIV/Suppression**  
**SYMPOSIA: Intelligent Hydrodynamics, Sloshing, Tsunami**

#### COASTAL ENGINEERING & CFD

**CFD, MPS, NN, Learning, GIS, Tsunami, Typhoon, Storm Surge, Hydrodynamics, Waves, Internal Waves, Morphodynamics, Structures, Mooring, Breakwaters, Port, Ecosystem Particle Methods for Ocean and Coastal Symp**

**Innovation, AI, Machine Learning (ML), ANN, CNN, Digital, Big Data, MPH, Mechanics**

#### SUBSEA, PIPELINES, RISERS, AI

AI, Digitalization, HPHT, Deep Ocean 3D Riser Mechanics, Biaxial bending, Torsion, Stability, Buckling, Slugging induced Fatigue, Flow Assurance, Pipe Soil interactions, Flexible Pipe, Umbilicals, Composite Pipe

#### MECHANICS, RISK & RELIABILITY

Risk, Safety and Reliability, Earthquake, Collision, Impact, Damage Mechanics  
Structural Mechanics, Ultimate Strength, SHM

### ARCTIC SCIENCE & TECH Symposium

Ice Mechanics, Iceberg, Icing, Ice Management, Infrastructure, ML, CNN, RNN, Arctic Harbor, Environment, Arctic Transport, Navigation, Route, Structures, Pipelines, Permafrost, Design, Remote Sensing, Meteorology, Pack Ice, Risk & Safety Assessment

### HIGH-PERFORMANCE MATERIALS

Environment Assisted Cracking (EAC) Symp  
**Cryogenic /Arctic Materials Symp**  
Asset Integrity, Welding Technology, Fatigue, Fracture, Structural Integrity, Tubular Structures  
**Wind Energy Materials & Structures, Smart Structures, Nanotechnology, Functional Coating, Natural Disaster Monitoring (NDT, remote), Knowledge Management**

### ADVANCED SHIP TECHNOLOGY

**Clean Fuel & Technology, Hydrogen, Ammonia, LNG, Electric, Hybrid Propulsion, ML, IoT, AI, Digital; Big data,**  
Adv Propulsion, Cavitation, Power Optimization, Smart Ship, MASS, Resistance, Optimization, ASV, USV, Navigation, Maneuver, DP Control,

### UNDERWATER TECHNOLOGY

**AI, ML, CFD, Deep-Ocean Survey, AUV, ROV, Seabed Vehicles, Robotics, Control, Dynamics, Design, Sensing, Navigation, Launch & Recovery, Floating/ Immersed Tunnel**

**PAPER REVIEW AND PUBLICATIONS:** All ISOPE papers are **peer-reviewed** prior to acceptance. The accepted papers will be included in the Conference proceedings on USB, available at the Conference from ISOPE and for worldwide distribution;

\* **Papers of archival value** will be considered for further in-depth review for the **International Journal of Offshore and Polar Engineering (IJOPE), SCI-E (ISSN 1053-5381) [www.isopec.org](http://www.isopec.org).**

\*\* **Individual Conference and Journal papers** available at [www.onepetro.org/ISOPE](http://www.onepetro.org/ISOPE). **Proceedings in CD or USB** can be ordered from [orders@isopec.org](mailto:orders@isopec.org); **Conference and Symposium Program** at <https://www.isopec.org/conferences-symposia-and-workshops/>

**Special room rates** at The Westin Ottawa arranged for ISOPE-2023 participants

Send abstracts in 300-400 words to (1) ISOPE TPC Online ([www.isopec.org](http://www.isopec.org)) or (2) any of the members in the ISOPE Technical Program Committee (TPC) in the partial list below: **Abstract Deadline: October 20, 2022**

Dear Colleagues,

On behalf of ISOPE-2023 Conference TPC, we would like to invite your abstract for possible presentation at the 33rd International Ocean and Polar (Arctic) Engineering Conference, Ottawa, Canada, June 19-23, 2023. In addition to strong sessions on the existing popular ISOPE topics, we continue to promote **additional specialty symposia and focus sessions on emerging topics** as listed on the front side.

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