

*The Proceedings of
The Thirty-second (2022) International
Ocean and Polar Engineering Conference
Shanghai, China (Hybrid), June 5–10, 2022*

ISBN 978-1-880653-81-4 ISSN 1098-6189

Indexed by Web of Science, Google Scholar, EI (Compendex), Scopus, Fluidex and others.
Individual conference papers available to order at: www.onepetro.org/isope.

VOLUME I

OFFSHORE MECHANICS, OCEAN TECHNOLOGY

LNG Bunkering, Subsea Codes, Hydrates, Drilling and Cement Slurry, Offshore Lifting and Floatover Operation and Simulation, Jackup Design and Analysis, Floating Platform Construction and Tow, Analysis, FPSO, Offshore Systems

UNDERWATER TECHNOLOGY

Deepsea Macro Organisms, Diving, Hydrate, 3D Reconstruction, Degaussing, Sound Absorbing/Wake, Path Planning, Positioning, Seabed Topography, Launch and Recovery, Biomimetic, Flapping Foil, Underwater Design and CFD, Control/Control Device/Manupretor/Towed Body

ARTIFICIAL INTELLIGENCE, MACHINE LEARNING, DIGITALIZATION, NEURAL NETWORK

OCEAN MINING AND GAS HYDRATES SYMPOSIUM

Deep Seabed Minerals: Crusts, Polymetallic Sulfide, Seabed Crust Breaking, Seabed Vehicles and Hydraulic Transport, Hydraulic Solid Particle Transport, Seabed Path Track-keeping, Dynamic Behavior of Transport Pipe

RENEWABLE ENERGY: OFFSHORE WIND TURBINE AND OCEAN ENERGY AND STRUCTURES

Floating Wind Turbines, Wind Farm Platform, Wind Turbine Support/Platform, Wind Turbine Installation, SIDRI Wind Farm, Digital, Ocean Energy & Aqua Cage, Tidal Energy, Wave Energy, MHD Generator and Innovative Energy

OCEAN ENVIRONMENT AND POLLUTION

Oil and Metal Pollutant, Carbon and Physico Chemistry, Pollutant, Sludge, Sewage

ARCTIC SCIENCE AND TECHNOLOGY

Ice Ridges and Properties, Ice Management and Iceberg Towing, Ships Maneuvering and Icebreaking, Safety and EER, Ice Loads, Arctic Region, Ice Physics and Ice Tests, Ships in Ice and Vessel Design

VOLUME II

SUBSEA, PIPELINES, RISERS AND UMBILICALS

Pipeline, Deepwater Riser, Flexible Pipe, Subsea, Flexible & Umbilical, Flow Assurance, Subsea Structure, Mooring System

OFFSHORE GEOTECHNICAL ENGINEERING

Behavior of Soils and Rocks, Pile Foundations, Offshore Geotechnics, Marine and River Geotechnics, Pipelines and Anchors

VOLUME III

HYDRODYNAMICS: WAVES, DYNAMICS, TSUNAMI, SLOSHING, VIV/FIV, CFD

Waves, Wind and Current, Motions of Floating Structures, Motion and Wave Drift, Ship Dynamics,

Impact, Slamming,

Tsunami and Internal Waves, Rogue Waves,

Sloshing Dynamics and Design,

Vortex-Induced Vibrations (FIV, VIV)

COMPARATIVE STUDY, PARTICLE METHODS, INTELLIGENT HYDRODYNAMICS

COASTAL HYDRODYNAMICS

Risk Assessment, Wave Characteristics, Vertical Wall, Seawall and Bridge, Breakwater, Structure Performance, Beach, Coastal and River Environment

VOLUME IV

HIGH-PERFORMANCE MATERIALS (HPM)

Advanced Materials, Advances in Welding Technology, Fracture/Fatigue & Asset Integrity, Nonmetallic Materials

ENVIRONMENT ASSISTED CRACKING (EAC)

Hydrogen Embrittlement, Effect of Corrosive Environment

MECHANICS, IMPACT, COLLISION, RISK, SAFETY, RELIABILITY

Flexible Structures, Loads, Strength, Drilling, Fatigue and Crack, Learning and Neural Network, Stress and Risk, Safety and Accident, Impact on Water, Impact on Solid, Impact and Underwater Explosion

ADVANCED SHIP TECHNOLOGY

Machine Learning Application, Electric Ship and Subsystems, MHD and Hydrodynamics, Propeller Cavitation, Hydrofoil Cavitation, Ship Design, Ship Resistance & Added Resistance, Drag and Resistance Reduction, Hull Form and Optimization, Navigation, Propeller Performance, Ship Propulsion, Finite Depth and Shallow Water, High-Speed Vehicle Dynamics, Ship Structures, Strength and Design, Ship Power Systems, Waterjet Propulsion, Shafting and Vibration