



*Join us at the Online/Virtual 2021 Conference; following the successful ISOPE-2020 Online/Virtual Conference*

Since ISOPE-1992, the annual ISOPE conference has been the world's largest technical conference of its kind with papers, *and the proceedings with all papers peer-reviewed and paginated, and indexed by Scopus, EI Compendex, Thomson ISTP, Web of Science, Google Scholar, Chemical Abstracts and more*. Following the **then-record-breaking attendance at ISOPE-2007 Lisbon and the conference set new records with 1,700+ abstracts for ISOPE-2015 Hawaii. The 2021 conference** is being organized by the Technical Program Committee (TPC) of the **International Society of Ocean and Polar Engineers (ISOPE)** with **30+ cooperating organizations**. Its objective is to provide a timely international forum for researchers and engineers. ISOPE-2022 Conference will be back as "in-person (face-to-face) Conference.



# First Call For Papers

Update at  
[www.isopec.org](http://www.isopec.org)

Online submission <https://www.isopec.org/online-submission/>

<b>DEADLINES</b>	Abstract Submission	<b>December 10, 2020</b>
	Manuscript for Review	February 5, 2021
	Final Manuscript due	April 10, 2021

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-2021 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, AI

AI, VR Simulation, Digitalization, Deeper Water, Floatover-install, Decommissioning  
**Subsea** Installation & Operation  
FPSO, SPAR, TLP, VLFS, Compliant Struct  
**LNG, FSRU, FLNG, LNG** Bunker & Storage  
Floating, Bridge, Underwater Tunnel, Farm  
DP System, Mooring, Hybrid  
CFD, Hydroelasticity, Asset Integrity, SHM

**ISO, Codes and Standards, Rules, Regulation**  
**DEEP-OCEAN MINING, GAS HYDRATES**  
Exploration, Environment, Technology

**OCEAN, WIND Renewable ENERGY Symp**  
Offshore **Wind** Energy/Turbines, **Ocean** Energy:  
Waves, Tidal, Current, OTEC, **Hybrid** system  
Aero-, Hydro-, Geo Mechanics: Simulation  
Test, Control Simulation, Design Optimization,  
Energy Storage, Transmission

**OCEAN, ARCTIC ENVIRONMENT**  
Ocean Debris/ Micro Plastic, Oil Spills,  
Contamination, Cleanup, CCS, Ship Emission,  
Remote Sensing, Sensors, Monitoring/Impact,

**GEOTECHNICAL ENGINEERING**  
Numerical Modeling, Liquefaction, Scour  
Offshore Wind Foundation, Design, Install  
Big Data, Soil, Slope Stability, Geohazards  
Pile-Soil, Suction Piles, Anchor-Seabed  
Arctic, Permafrost

### OFFSHORE MECHANICS

#### HYDRODYNAMICS & CFD

CFD, SPH, NWT, Multi-scale Hybrid modeling  
CCP-WSI, Flow Measurements/Simulation  
**Waves**; Load, Impact Load, Hydroelasticity  
Metocean, Rogue waves, Tsunami & Impact  
Wave-Struct Interactions,  
Vortex Shedding, VIV (FIV), Suppression  
**SLOSHING & DESIGN** Symposium  
**Tsunami & Safety** Symposium

#### COASTAL ENGINEERING & CFD

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

*Innovation, AI, Machine Learning, ANN,  
Digital, Big Data, New Modeling, Mechanics*  
**Vortex Shedding, FIV, VIV Suppression**

#### SUBSEA, PIPELINES, RISERS, AI

Subsea Digitalization, HPHT, Flow Assurance  
Deepwater 3D Riser Mechanics, Pipe Soil inter  
actions, Stability, Buckling, New Materials,  
Flexible Pipe, Umbilicals, Composite Pipe

#### SAFETY & RELIABILITY, MECHANICS

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

### ARCTIC SCIENCE & TECH Symposium

Infrastructure, Arctic Harbor, Environment  
Northern Sea Route, Arctic Communities, Safety  
Ice Mechanics, Icing, Iceberg, Ice Management  
Structures, Pipelines, Design, Permafrost  
Model Ice Basin, Risk & Safety Assessment  
Remote Sensing, Polar Meteorology, Pack Ice

### HIGH-PERFORMANCE MATERIALS

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

### ADVANCED SHIP TECHNOLOGY

Big data, Learning, IoT, EEDI; Digital Twin  
LNG, Hydrogen processing, Electrical  
Smart Ship, MASS, Hydrodynamics, Cavitation,  
Resistance, Adv Propulsion, Optimization.  
ASV, USV, Navigation, Maneuver, Control  
Rules, Regulation

### UNDERWATER TECHNOLOGY

Deep-Ocean Observation, Operations, CFD,  
Robotics, Control, Dynamics, Design, Sensing,  
Navigation, Launch & Recovery  
AUV, ROV, Gliders, Seafloor Vehicles, Tunnel

**PAPER REVIEW AND PUBLICATIONS:** All papers will be rigorously **peer-reviewed** prior to acceptance. The accepted papers will be included in the Conference proceedings, which will be available at the Conference and for worldwide distribution; digital files on [www.onepetro.org](http://www.onepetro.org). Papers of archival value will be further considered for publication in the *International Journal of Offshore and Polar Engineering* (ISSN 1053-5381)—[www.isopec.org](http://www.isopec.org).

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: November 20, 2020**

**Dear Colleagues,**

On behalf of ISOPE-2021 Conference TPC, we would like to invite your abstract for possible presentation at the 31st International Ocean and Polar (Arctic) Engineering Conference, Rhodes (Rodos), June 20–25, 2021. 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.

**ISOPE-2021 Rhodes Conference Technical Program Committee (TPC) and Local Committee**

**AUSTRALIA:** Dr. A Nezamian (ALCM Solutions); Prof. D-S Jeng (Griffith U); Dr M S Hossain (U Western Australia); Dr. I Chaves (U of Newcastle); Prof. M Zhao, Dr. P Hu (Western Sydney U, Australia); **BRAZIL:** Prof. GFM Souza (U Sao Paulo); **CANADA:** Dr. B J Buckham (U Victoria); Dr. S Etienne (Ecole Polytech de Montreal); Mr. D Fissel (ASL Environ); Dr. E Martin (AKAC Inc); Dr. M Sayed, Ms. I Kubat (NRC Canada, Ottawa), Dr. S. Islam, Dr J Wang (NRC Canada, St John's); Prof. J Q Shang (U Western Ontario); Dr. R Taylor (C-CORE);

**CHINA:** Mr. LS Song (COSL); Profs. B Teng, D Ning, W Shi, Y Wang, X Zhen (Dalian U of Tech); Prof. FP Gao, Dr. WG Qi (Inst of Mechanics, CAS); Prof. GJ Chen (China U Petroleum); Dr. G He (Harbin Inst Tech); Prof. A-M Zhang (Harbin Eng U); Prof. TQ Li, Dr. L Zhu (Wuhan U Tech); Profs. H Liu, D C Wan, BL Wang, Dr. DF Liang, LF Xiao, JH Wang (Shanghai Jiao Tong U), Dr. Z Lu (China Geological Survey); Prof. Y Shen (Hainan U); Dr. A M Wang (COOEC); Prof. S Wang (CAS); Prof. G Xu (Huazhong U Sci Tech); Dr. H Cao (Hohai U), Dr. L Zhu (Wuhan U of Tech); W Wang (CSSRC); MB Liu (Beijing Univ); GY Zhang (DUT); Wang (CSSRC); C Liu (SJTU); GY Zhang (DUT);

**CYPRUS:** Dr. C Michailides (Cyprus U of Tech); **DENMARK:** Prof. J D Sørensen (Aalborg U and DTU Wind); Dr. A Natarajan (DTU); Dr. T Sabaliauskas (Aalborg U); **FINLAND:** S Hirdaris (Aalto Univ); **FRANCE:** Mr. L Brosset (GTT); Dr. L Diebold (Bureau Veritas); Dr. N Loukachenko (Arcelor Mittal); Mr Robert Bridges (TOTAL SA), Dr. E Giry (SAIPEM, S.A.); **GERMANY:** Dr. F Adam (Universität Rostock); Prof. A Baeten (Augsburg U Appl Sci); Dr. S Herion (Karlsruhe Inst Tech); Dr. Y P Hong, Q Hissette (HSVA); Dr. S Lochte-Holtgreven (City U of Appl Sci); Dr. D Matha, Mr. F Wendt (Rambøll); Dr. G Schriever (Biolab Forschungsinstitut); Mr. W Popko (Fraunhofer IWES); Dr. F Vorpahl (Windsy GmbH); MA Maksoud (TUHH); **GREECE:** Profs. D C Angelides, T Karambas, E Loukogeorgaki (Aristotle U Thessaloniki); Prof. G Triantafyllou, E E Theotokoglou, Dr. K Belibassakis (Nat'l Tech U Athens); Prof. A Dimas (U of Patras); **INDIA:** Dr. M Atmanand, K Gopakuma (NIOT); Dr. V Sriram (IIT Madras); **IRELAND:** Prof. F Dias (U College Dublin); **ITALY:** Prof. G Conte (UNIVOM); Dr. M Felli (INSEAN); Mr. F Lalli (ISPRA); Prof. M La Rocca, Dr. A. Montessori (U Roma); Dr. A Fonzo (C.S.M.); Dr. M Martelli (U of Genova); Dr. L Martinelli (U of Padova); Prof. P Ruol (U Padova); Prof. R Archetti (U Bologna); Prof. D Vicinanza (Second U Naples); Dr. P Prestininzi (U Roma Tre);

**JAPAN:** Prof. T Kawabata (U Tokyo); Prof. S Hirabayashi, Dr. R Gonçalves (U of Tokyo); Prof. T Yao., M Kashiwagi, T Matsui, N Osawa, H Suzuki, Dr. S Araki, M Minoura (Osaka U); Prof. S Yamaguchi (Kyushu U); Drs. K Hase, T Handa, N Ishikawa, S Igi (JFE Steel); Prof. T Hiraishi, Dr. A Khayyer (Kyoto U); Dr. H Kawai, K Hirayama (PARI); Mr. K Honda (NILIM); Dr. N Inukai (Nagaoka U of Tech); Dr. S Ishibashi (JAMSTEC); Prof. K Kawasaki (Hydro-soft Tech Inst); Dr. S-Y Kim (Tottori U); Prof. M Nakamura (RIAM, Kyushu U); Dr. T Nakamura (Nagoya U); Prof. H Murakawa (JWRI, Osaka U); Prof. S Nagata (Saga U, IOES); Prof. Y Nishi (Yokohama Nat U); Dr. C Ma (NMRI); Dr. N Tenma (AIST); Dr. T Hara, Y. Shinohara (NipponSteel-Sumitomo Metal); Prof. A Usui (Kochi U); Prof. Y Yamamoto, N Sakagami (Tokai U); Dr. T Zhu (Class NK);

**KOREA:** Dr. J-H Cha (Mokpo Nat'l U); Prof. Y W Choo (Kongju Nat'l U); Prof. C-K Chung (Seoul Nat'l U); Prof. Y Kim, Dr. B S Jang, YS Lim, B W Nam (Seoul Nat'l U); Dr. S-W Hong, SY Hong, H-G Sung, S K Cho, K H Kim (KRISO); Dr. O S Kwon (KIOST); Prof. SS Kim (Hanyang U); Profs. H-I Park, BS Hyun, Sunho Park, Dr. C Huh (Korea Maritime & Ocean U); Prof. S C Shin (Pusan Natl U); Dr. S H Van (Safe Tech Research),

**NETHERLANDS:** Prof. A M Gresnigt, Dr. A Antonini (TU Delft); Dr. P Meijers (Deltares); Mr. Y-H Kim (Lloyds Register EMEA); Dr. P Liu (INTECSEA BV); Dr. S Schreier (TU Delft); Z Sulaiman (CustoMSC B.V.) **NORWAY:** Dr. O M Akselsen (SINTEF); Prof. M Muskulus, Dr. A D Jenkins (Uni Computing); Dr. J Jia (Aker Solutions); Dr. Irina Didenkulova (U of Oslo); Prof. D Karunakaran (Subsea7; U Stavanger), Profs. I Langen, O Gudmestad, R M C Ratnayake (U Stavanger); Dr. N A Marchenko (Univ Centre in Svalbard (UNIS)); Dr. E Østby (DNV GL); Dr. L Oosterkamp (Equinor); Dr. N Ye (MARINTEK); **POLAND:** Dr. T Abramowski (InterOceanMetal); **PORTUGAL:** Prof. AJNA Sarmento (Lisbon Tech U-IST); **RUSSIA:** Prof. A Bekker (Far Eastern Federal U); Prof. A S Bolshev (Saint Petersburg State Polytech U); Dr. I Buzin, Mr. A V Chernov (AARI); Dr. S L Karlinsky (RUBIN, St. Petersburg State Marine Tech U); Dr. V Pavlenko (Russian Academy of Sci).

**SINGAPORE:** Prof. CF Leung (Nat'l U Singapore); **SPAIN:** Ms. M F Lecca (Alstom Wind); **SRI LANKA:** Dr. DPC Laknath (Lanka Hydraulic Inst); **SWEDEN:** Dr. W Mao (Chalmers U of Tech); **TAIWAN:** Prof. R-Y Yang, H-T Hu, H-J Tang (Nat'l Cheng Kung U); Profs. L-K Chien, W-P Huang (Nat'l Taiwan Ocean U); Dr. K.-C. Lu (NCREE); **THAILAND:** Prof. S Chucheeprakul, Dr. N Charusrojanadech (King Mongkut's U Tech); **TURKEY:** Prof. O Kirca, O Yagci (Istanbul U Tech); **UNITED KINGDOM:** Dr. S D Abyaneh (TechnipFMC); Dr. S Zheng (Plymouth U); Drs. A Kolios, E Boulougouris (U of Strathclyde); Dr. Yongwon Lee (Lloyd's Register); Dr. Q Liang (Loughborough U); Dr. F K Lim (2H Offshore); Dr. H Polezhayeva (Surrey); Prof. L Qian (Manchester Metropolitan U); Prof. QW Ma, Dr. S Yan (City, U of London); Dr. G E Varelis (PDL Solutions); Mr. S Maleki (TWI); Dr. Z Xie (Cardiff U); Dr. J Zang (U Bath)

**USA:** Dr. H W Jin, N Ma, H J Jun (ExxonMobil Res & Eng.); Dr. C R Bostater (Florida Inst Tech); Dr. YS Cao (C-Z Marine Tech); Dr. C-Y Chen (Oil Field Dev Eng); Mr. YJ Chen (DMAR Eng); Profs. J Niedzwecki, H-C Chen, M H Kim, Dr. J Figlus (Texas A & M U); Prof. J S Chung (ISOPE); Dr. A Goupee (U Maine); Dr. A S Duggal, A H Izadparast (SOFEC); Dr. W C Kan, Dr. E J Wright (Formerly ExxonMobil); Mr. Howard H Wang (ExxonMobil Global Project Co.); Mr. J Jin, Dr. H B Wang, Dr. A Bahrami (ExxonMobil Production Co.); Prof. S T Grilli (U Rhode Island); Dr. J K Na (EWI); Dr. P Jukes (The Jukes Group); Dr. L Lai (Genesis Oil & Gas); Dr. Zhongwei Li (EXMAR Offshore Co.); Dr. Zhiling Li (BP); Dr. P Lomonaco (Oregon State U) Drs. D Matskevitch, D Mitchell, N S Thirumalai (ExxonMobil Upstream Res); Prof. R H Knapp, Dr. P Cross, Dr. D Gedikli (U Hawaii); Dr. S H Lee (Glosten Assoc.); Mr. W H Lee (DNV-GL), Dr. A Majed (IntecSea); Dr. T Makogon (Houston); Dr. T Mathai (NREL); Dr. B-F Peng (Oil Field Development Engineering Houston); Mr. Ali Reza (Exponent); Dr. S Sundararaman (2H Offshore); Mr. K-M Tjok (Fugro Geoconsult); Profs. M Triantafyllou, N M Patrikalakis, T P Sapsis (MIT, Mechanical/Ocean Eng); Prof. H G Wheat (U Texas at Austin); Mr. M Wu (Trafigura Trading), Dr. X Yu (U New Orleans)

**Sponsor: ISOPE. Cooperating Organizations and Societies:** USA - ASCE, Canada - CSCE, CAPP, China - CSOE, CSNAME, CSTAM, Germany - DKMM, GMT, EIT (Thailand), IAHR, IEA-OES, E Australia, INAE (India); IRO (The Netherlands), Japan - JASNAOE, JSMS; Korea - KSCE, KSOE, KAOST, NPF (Norway), U.K. - OES, SPRI, PII (Indonesia), RAS (Russia), SOBENA (Brazil), SSSS (Singapore), TCG (Greece), TOC (Turkey), TSOE, USME (Ukraine), VTT (Finland)