



Shanghai

The 32nd International Ocean and Polar Engineering (in-person) Conference

Ocean Arctic Energy

June 5-10, 2022

Join us at the in-person ISOPE-2022 Conference with delayed celebration of the 30th 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, the conference set new records with 1,700+ abstracts for ISOPE-2015 Hawaii.** The 2022 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 is back as an **in-person (face-to-face)** Conference.



Final Call For Papers

Update at
www.isopec.org

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

DEADLINES	Abstract Submission	November 30, 2021
	Manuscript for Review	January 20, 2022
	Final Manuscript due	March 28, 2022

Prospective authors are invited to **submit an abstract** in 300-400 words to: (1) **Online abstract submission** (see above) **or email meetings@isopec.org**; (2) **One of TPC members** (session organizers, see backside); or (3) **ISOPE-2022 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

AI, ML, Control Simulation, Digitalization, Floating install Turbine, Float-over, Foundation, Installation Decommissioning, FPSO, SPAR, TLP, VLFS, Compliant Struct
Hydrogen, LNG, FSRU, FLNG, LNG Immersed/Floating Tunnel/Bridge, AquaFarm, DP Control System, Mooring, Hybrid CFD, Hydroelasticity, Asset Integrity, SHM

DEEP-OCEAN MINING, GAS HYDRATES

Exploration, Minerals, Technology, Design

ISO, Codes and Standards, Rules, Regulation

CLEAN ENERGY, OCEAN, WIND TECH

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

Intelligent Hydrodynamics, AI, ML, ANN, CNN, **Data-driven modelling,** Multiscale Comparative Study, Measurements, **Particle Methods, Digitalization,** Waves; Load, Impact, Slamming, Cavitation, Hydroelasticity, Metocean, **Bubble, Renewables, Vortex, VIV SYMPOSIA: Slushing, Tsunami, SPH,**

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 (ML), ANN, Digital, Big Data, New Modeling, Mechanics Vortex Shedding, VIV Suppression

SUBSEA, PIPELINES, RISERS, AI

AI, Digitalization, HPHT, Deepwater 3D Riser Mechanics, 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, Model Ice Basin, Infrastructure, Arctic Harbor, Environment, Arctic Transport, Navigation, Route, Safety, Structures, Pipelines, Permafrost, Design, Remote Sensing, Polar Meteorology, Pack Ice, Risk & Safety Assessment

HIGH-PERFORMANCE MATERIALS

Environment Assisted Cracking (EAC) Symp
Cryogenic Materials, 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, Clean Propulsion/Emission, Adv Propulsion, Cavitation, Power Optimization, Smart Ship, MASS, Resistance, Optimization, ASV, USV, Navigation, Maneuver, DP Control, Simulation, AI, Digital; Big data, Learning, IoT

UNDERWATER TECHNOLOGY

Deep-Ocean Observation, Operations, CFD, 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, available at the Conference and for worldwide distribution; digital files at www.onepetro.org/ISOPE. Papers of archival value will be considered for further review for the *International Journal of Offshore and Polar Engineering, SCI-E* (ISSN 1053-5381)—www.isopec.org

Special room rates USD140+ per night at Shanghai International Convention Center (SHICC) for ISOPE-2022 participants

Send abstracts in 300-400 words to (1) ISOPE TPC Online (www.isopec.org) or (2) any of the members in the ISOPE Technical Program Committee (TPC) in the partial list below: **Abstract Deadline: November 30, 2021**

Dear Colleagues,

On behalf of ISOPE-2022 Conference TPC, we would like to invite your abstract for possible presentation at the 32nd International Ocean and Polar (Arctic) Engineering Conference, Shanghai, June 5–10, 2022. 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-2022 Shanghai (in-person) 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); 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); Prof. D Fan (Queens U.); Dr. I Turnbull (C-CORE); Mr. D Fissel (ASL Environ); Dr. E Martin (AKAC Inc); Dr. R Frederking, 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); 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); W Wang (CSSRC); C Liu (SJTU); GY Zhang (DUT);

CYPRUS: Dr. C Michailides (Cyprus U of Tech), Dr. D Stagonas (U of Cyprus); **DENMARK:** Prof. J D Sørensen (Aalborg U and DTU Wind); Dr. A Natarajan (DTU); Dr. T Sabaliauskas (Aalborg U); **FINLAND:** Dr. 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 Hisette (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 (Jörss – Blunck – Ordemann GmbH); 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, K Belibassakis (Nat'l Tech U Athens); Prof. A Dimas (U of Patras); **IRELAND:** Prof. F Dias (U College Dublin); **ITALY:** Prof. G Conte (UNIVOM); Dr. M Felli (INSEAN); Mr. F Lalli (ISPR); Prof. M La Rocca, Dr. A. Montessori (U Roma); Dr. A Fozzo (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 Prestinanzi (U Roma Tre);

INDIA: Dr. G A Ramadass, K Gopakuma (NIOT); Dr. V Sriram (IIT Madras);

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, Dr. Y Liu (Kyushu U); Drs. K Hase, T Handa, N Ishikawa, S Igi (JFE Steel); Prof. T Hiraiishi, 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 (Toitori 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 (NipponSteel-Sumitomo Metal); Prof. A Usui (Kochi U); Prof. Y Yamamoto, N Sakagami (Tokai U); Dr. T Zhu (Class NK); **KOREA:** 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 (TMO Solution); SY Hong, H-G Sung, S K Cho, K H Kim (KRISO); : Dr. J-H Cha (Mokpo Nat'l U); Prof. Y W Choo (Kongju Nat'l U); Dr. O S Kwon (KIOST); Prof. S S Kim (Hanyang U); Profs. H-I Park, Sunho Park (Korea Maritime & Ocean 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); Dr. M Eidem, A Minoretti (Norwegian Public Road Admin); **POLAND:** Dr. T Abramowski (InterOceanMetal); **PORTUGAL:** Prof. AJNA Sarmiento (Lisbon Tech U-IST); **RUSSIA:** 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); Mr. K Kornishin (Arctic Research Center); 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 Chucheepeakul, Dr. N Charusrojanadech (King Mongkut's U Tech); **TURKEY:** Prof. O Kirca, O Yagci (Istanbul U Tech); **UAE:** Dr. A M Wang (McDermott International); **UNITED KINGDOM:** Dr. S D Abyaneh (TechnipFMC); Dr. E Ransley, Dr. S Zheng (Plymouth U); Drs. A Kolios, E Boulourdous (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, C P Aubeny, H-C Chen, Dr. J Figlus (Texas A & M U); Prof. J S Chung (ISOPE); Dr. A Goupee (U Maine); Dr. A S Duggal, A H Izadparast (SOPEC); Dr. W C Kan, Dr. E J Wright (Formerly ExxonMobil); Mr. J Jin, Dr. Howard H Wang, Dr. Hongbin Wang (ExxonMobil Global Project Co.); 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 Matskevich, 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. Tso-Ren Wu (Cornell U); Dr. X Yu (U New Orleans)

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