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NEXT-GEN MARINE OFFSHORE ECOSYSTEMS:

Accelerating Operational Efficiency, Decarbonization, and Overcoming Sustainability Challenges

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11
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3
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**Operational data as of August 7, 2024*

Programme

NEXT-GEN MARINE OFFSHORE ECOSYSTEMS: Accelerating Operational Efficiency, Decarbonization, and Overcoming Sustainability Challenges

October 2nd, 2024 (0800 -1700 hrs.) – followed by a networking reception

Morning Chair: Jan Hagen Andersen- *Regional Director for Maritime Decarbonization, DNV Maritime*

0800 – 0900 **Registration and coffee / breakfast**

0900 – 0903 **Welcome Address and Recognition of Sponsors & Key Stakeholders**
Dr. Nimi Abili - *Chairman, IMarEST Houston (US Gulf Coast) Branch*

0903 – 0905 **Video Greeting from U.S. Senator John Cornyn**
Senator John Cornyn

0905 – 0915 **Keynote Conference Opening**
Chris Goldsworthy - *Chief Executive, IMarEST HQ*

0915 – 0930 **Keynote Speaker – Energy Transition in the Global Offshore Industry**
Craig Koehne – *Regional Business Development Director, DNV Maritime*

0930 – 0100 **Keynote Speaker - Emission Reduction Solutions for Offshore Decarbonization**
Dr. Wafik Beydoun– *Regional Director - Americas, International Association of Oil & Gas Producers (IOGP)*

1000 – 1045 **Panel 1 Discussion: Navigating decarbonization technologies challenges for marine and offshore developments**

Panel Discussion

- Discuss the challenges and opportunities of emissions reductions and explore CCUS and other technologies to decarbonize the marine and offshore industry.
- Explore the LNG fueled VLCCs which will carry 300,000 tons of crude oil each voyage for the next 2-3 decades saving some ship carbon emissions.
- Examine the techno-economic implications of transitioning to a low-carbon ecosystem.
- Explore the technical and regulatory barriers that need to be overcome to enable the widespread adoption of alternate fuels, such as safety, availability, cost, and compatibility.
- Hear recommendations from industry stakeholders and researchers to foster innovation and collaboration on emission reduction.
- Find out how offshore, marine and tech industry are collaborating to innovate in accelerating the adoption of clean energy solutions.
- Examine the benefits of integrated offshore renewable energy technologies with oil & gas offshore facilities to drive low carbon emission across operations.

Moderator: **William Burroughs –** *CEO, Monstrant Viam LLC*

Speakers:
Alberto Castelli – *Senior Manager - Americas Energy Transition, IOGP*
Dr. Bulent Mercan – *Technical Advisor, 2H Offshore*
Peter Noble – *President & Senior Advisor, Noble Associates Inc.*
Altaf Shaik – *Principle Engineer, American Bureau of Shipping (ABS)*

Programme

1045 – 1100 **Coffee / Tea**

1100 – 1130 **Keynote Speaker - Improving Resilience of Maritime Offshore Operations**
Ram Shenoy- *CEO, RBR Group*

1130 – 1215 **Panel 2 Discussion: Advancing Offshore Efficiency with Latest Technologies for Intelligent Operations**

Panel Discussion

- Explore difference data-driven technology solutions to drive offshore production efficiencies outcomes.
- Learn from experts who have adopted energy-efficient technologies on assets operations.
- Examine case studies of technologies including renewable energy sources, smart sensors and edge network are enabling legacy systems to become more efficient.
- Hear from experts in different segments of the industry who will share their insights and experiences on leveraging electrification and edge analytics for productivity improvement.
- Explore remote operations, leveraging the adoption of robotics, cobots, AI camera, ROV, AUV, and drones, to drive Decarbonization, Efficiency, and Productivity of marine offshore assets.
- Discuss what measures are to be taken to safeguard AI algorithms and models from biases and ethical concerns when implementing digital twins in critical business operations.
- Latest trends in SURF to improve offshore efficiency

Moderator: **Rafael Riva–** *Vice PresidentTechnical - Offshore, International Registries, Inc. (IRI)*

Speakers:
Jorge Peña Alarcón – *Director, Azure Data & AI, Microsoft*
Ove Heitmann Hansen – *Senior Principal Consultant DNV*
Dr. Matthew Franchek – *Professor of Mechanical & Aerospace Engineering, University of Houston*
Dhivakar Poosapadi – *Senior Mechanical Research Engineer, Halliburton*

1230 – 1330 **Lunch**

Afternoon Chair: Rajnish Kelkar – *Vice Chair, IMarEST Houston (US Gulf Coast)*

1330 – 1330 **Keynote Speaker – Fostering Innovations in the Offshore Energy Sector through Collaborations**
Truls Richardson - *DNV Offshore Regional Manager*

1400 – 1500 **Panel 3 - Presentations – Marine Offshore Innovations and Digital Solutions to Unlock Decarbonization, Safety, and Fuel Optimization**

Panel Discussion

- Find out what are the benefits and challenges of implementing digital solutions in the marine ecosystem.
- Learn best practices and lessons learned from existing marine offshore industry on fuel optimization solutions.
- Explore digital engineering models to support decarbonization efforts across the ecosystem value chain and asset life cycle.
- Find out how electrification can lower emissions and fuel costs for the maritime sector.
- Discuss how electrification can enable the use of battery power, fuel cell, and renewable energy sources for vessels, tugboats, and offshore installations.
- Explore ways to foster cross-sectoral collaboration and innovation among port authorities, shipping companies, terminal operators, and offshore development stakeholders.

Programme

Moderator: Peter Wallace – *Principal Engineer, Lloyds Register*

Speakers:
Dr. Nazmul Rahmani – *Assistant Director of the Mary Kay O'Connor Process Safety Center*
Carlos Paz – *Global Business Development Manager for Production Systems*
Boyd Howell – *Director of Business Development, MODEC International, Inc*
Greg Trostel – *Global Industry Development Manager, Rockwell Automation*

1500 – 1515 Coffee Break

1515 – 1545 Keynote – Energy Transition 4.0 to Drive Digitalization, Automation, Optimization and Resilience in the Marine and Offshore Sectors

Sudhir Pai – *Chairman - Advisory Board, Technology Collaboration Center*

1545 – 1645 Panel 4 - Discussion – Leveraging big data analytic, IoT sensors, digital twin and generative AI to unlock resilience and productivity Improvement for offshore operations

Panel Discussion
- Explore how big data analytics, IoT sensors, digital twin, and generative AI convergence is accelerating productivity and sustainability in the offshore environment.
- Explore ways data-driven insights and generative AI can improve operational efficiency, safety, and resilience on offshore oil & gas operations.
- Explore how we can establish trust and confidence for all stakeholders, by leveraging AI and Digital Twins capabilities to create a secure and reliable digital world.
- Explore how to leverage big data analytics, edge computing, IoT, digital twin, automation and cybersecurity, would optimize monitoring of offshore operations and maintenance.
- Discuss the latest advancements in offshore developments generative AI and how it can be leveraged to streamline the design, deployment, and management of systems in the harshest conditions.
- Examine how humans in the decision-making loop constitute a risk between AI/ML/Digital Twins and safety critical systems, and the best practices and engineering solutions for futureproofing the marine and offshore energy sectors.

Moderator:
Cosmin Bozenovici – *Vice President, Technical - Offshore, International Registries, Inc. (IRI)*

Speakers:
Dr. Bulent Mercan – *Technical Advisor, 2H Offshore*
Dr. Prabu Parthasarathy – *Global VP - Strategic Projects, Cognite*
Blaine Mathieu – *CEO, Pratexo*
Rees Machtemes P.Eng. – *Director of Industrial Security, Waterfall Security Solutions*

1645 – 1700 Summary of the day's proceedings and closing remarks

Dr. Paul Jukes - *Director of Engineering, Pond & Co*

1700 – 1830 Post Conference Refreshments and Networking

Keynote Speakers

John Cornyn
United States Senator,

Senator Cornyn's leadership spans across industries in sponsorship of the LEADING Act which incentivizes research and development of carbon capture technology. His work also advances hydrogen infrastructure through the Hydrogen Infrastructure Finance and Innovation Act, Hydrogen for Ports Act, and Hydrogen for Industry Act, all of which demonstrates his commitment to an environmentally sound energy supply, and a compelling vision for a clean and innovative energy future.

Find out more:
https://www.cornyn.senate.gov/about/
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Dr. Nimi Abili PhD, MBA, CEng, CMarEng, FIMarEST
Chairman and Chief Energy Adviser, IMarEST Houston (US Gulf Coast) Branch

Dr. Abili is an Internationally Experienced Chief Technology Officer, Energy Transition Leader, Digital Technology Strategist and Management Advisor, accomplished in operating commercially within the Energy, Marine and Digital industry. He is a dynamic and proactive Energy Transition Adviser and Engineering Project Consultant, who excels at developing low carbon solutions to accelerate clean energy adoptions and commercial evaluations, with more than 2 decades of leadership experience on project value drivers across the value chain. Prowess in minimizing project costs while delivering results in advance of scheduled deadlines. Dr. Abili is actively involved in decarbonization projects, new energies, offshore & Onshore renewable wind, deepwater field developments, intelligent operations, cutting-edge green technology innovations, value engineering, digital and techno-economic enablement, strategic business development, financial risk management, policy formulations, and management of multi-disciplinary teams in the Energy Industry. Throughout his career, he has overseen the completion of multiple CAPEX projects valued at over $12 billion in growth opportunities and cash flow.

Dr. Abili holds a PhD in Energy & Power and MSc in Subsea Engineering from a prestigious school at Cranfield University, England; an MBA in Energy at Middlesex University London, England; and a BEng in Electronic & Electrical Engineering (Hons) at the University of Sunderland, England. He has working experience with Major IOCs, including Shell, Eni International, Schlumberger, and top management consulting, as a Chief Advisor, covering several Oil & Gas, FPSO, Offshore Renewables, CCUS, hydrogen, Smart Grid, LNG and FLNG development projects, etc. Dr. Abili is well-travelled internationally on energy development projects with regional executive experiences across UKCS, Norway, Germany, Italy, France, Americas, Southeast Asia, and Sub-Saharan Africa (East & West Africa), particularly on Greenfield, Brownfield, Marginal field developments in onshore and offshore energy assets, and digital enablement across the enterprise ecosystems.

Dr. Abili is the Chairman of IMarEST Houston (US Gulf Coast) Branch and Offshore Oil & Gas Special Interest Group (OOGSIG). He is a Chartered Engineer (CEng), Chartered Marine Engineer (CMarEng) and a Fellow of the Institute of Marine, Engineering, Science and Technology (IMarEST). Dr Abili is a Council Member, Board of Trustee & Membership Committe with the IMarEST UK, charged with governance, leadership, assessment of membership, Chartered Engineers, Chartered Scientists and Fellows through the Institute's Royal Charter, the UK Engineering and Science Council. He has published several international journals and made major international oil and gas conference presentations, such as in Offshore Technology Conference (OTC), International Petroleum Technology Conference (IPTC), Deep Offshore Technology (DOT) International Conference, Offshore West Africa (OWA) Conference and Subsea UK, as a Thought-Leader and Speaker, where he bagged 3 international industrial 'Best Awards', and has been a reviewer for top international journals, including Journal of Marine Engineering & Technology (JMET) of the IMarEST. Dr. Abili has a passion for executive coaching, mentorship, and distinctive leadership development with transferable skills.

Keynote Speakers

Chris Goldsworthy CEng, CMarEng, FIMarEST

Chief Executive Officer, IMarEST

My marine career started at 19 years old after A-levels as a cadet with P&O Containers [while] attending South Tyneside Marine College for the three-year Higher National Diploma (HND) course.

I absolutely relished my sea time, all with the same company, which lasted a total of 16 years. I count myself very fortunate to come through my sea time at the time that I did, to experience the traditional watchkeeping on motor and steam vessels, then [to experience] Unattended Machinery Spaces (UMS).

Still with P&O, but after [the] merger with Royal Nedlloyd, I was invited to come ashore as a seconded fleet superintendent. The intention was to have six months in the office, a short leave, contract at sea, a second six months in the office, then rotate back to permanent sea staff.

However, after 20 years in ship management ashore, I'm still waiting for the return to sea! Two weeks into my shore career, an assigned vessel had an engine room fire, thankfully with no injuries, and the crew did an exceptional job extinguishing the fire, which led me to leading a nine-week repair in Panama - a steep learning curve.

Then from owner management, following the acquisition of P&O Nedlloyd by Maersk, I moved into third-party ship management with Columbia Ship Management in Cyprus as technical superintendent, then subsequently as technical manager in charge of the Japanese fleet. The teamwork and change in scope were welcomed and led to inclusion into more company operational and strategic decisions.

To develop vessel type knowledge, I then accepted a fleet manager role at Bernhard Schulte Ship Management, also in Cyprus, managing a fleet of product, crude, and chemical tankers. Following five years in that role, I accepted a position, fleet director, with a vessel owner in the Netherlands to create a new in-house ship management company, with full P&L responsibility, which involved team selection and building, Safety Management System (SMS) creation and implementation.

Within 10 months we had 10 vessels in management and had passed a Tanker Management Self Assessment (TMSA) II audit with clean results.

Then came the movement to Tamar Ship Management in Hong Kong, initially as technical fleet manager, then with the near tripling of the fleet size in three years, led to restructuring and a new role as technical director.

Craig Koehne

Regional Business Development Director, DNV Maritime

Craig Koehne is the Regional Business Development Director for DNV Maritime – Americas, based in Houston, TX. He has been with DNV for 15+ years, with a background in Engineering, Surveys, Management, and Business Development, both in the Offshore and Shipping Industries.

As the Regional Business Development Director, Craig manages all client relationships, contract negotiations, and strategic partnerships throughout both North and South America, including but not limited to Vancouver, Montreal, St. Johns, New York, Miami, Houston, New Orleans, Mexico, Brazil, Argentina, and Chile. His customer centric philosophy is focused on our industry's challenges today in the Merchant Shipping and Offshore market, but also looking into the future of Decarbonization and Digitalization in new and developing markets such as Offshore Wind.

Craig is passionate about driving innovation and success through his team and with our customers by applying a combination of technical knowledge, people management, and business development experience to assist in leading the Maritime industry to a more sustainable future.

Craig has a bachelor's degree in Aerospace Engineering from the University of Texas, Austin.Ie title of Professor in the Department of Process Engineering

Keynote Speakers

Dr. Wafik Beydoun

Director for the Americas, International Association of Oil & Gas Producers (IOGP)

As the Director for the Americas, Wafik promotes IOGP's good practices in upstream operations and in the low-carbon energy transition to IOGP Members, regional industry associations, governments, and other stakeholders in the region. Wafik first worked as a geophysicist with Atlantic Richfield in Texas. He then held various roles in TotalEnergies, including Area Exploration Manager for the "Golden Block" 17 in Angola, Global Geophysical Operations and Technologies Manager in France, President & CEO TotalEnergies Research & Technology USA LLC in Houston, R&D Division Manager at ADNOC in Abu Dhabi, and General Manager and Country Chair for TotalEnergies in Kuwait. He was Chairman of OTC (2018-2019). Wafik has a Master's and a PhD in Geophysics from MIT. He is a member of SEG, SPE, EAGE, AAPG, AGU, and Sigma Xi, and has over 100 publications and communications.

Dr. Ram Shenoy

CEO, RBR Group

Ram Shenoy has 24 years experience in upstream oil & gas, holding a variety of roles around technology development, management and marketing.

He spent 20 years with Schlumberger, starting as a research scientist, and completed a series of assignments of increasing responsibility, culminating in his last position with Schlumberger as Vice-President of Research, managing Schlumberger global corporate research laboratories.

He subsequently became Chief Technology Officer of ConocoPhillips, a position he held for 4 years. He currently advises venture capital and private equity companies on matters of technology strategy and due diligence in the energy sector. He also serves on a number of advisory boards, most notably the US Secretary of Energy Advisory Board, and the Project Production Institute.

Rajnish Kelkar CEng, FIMarEST

Vice Chair, IMarEST Houston (US Gulf Coast) Branch

Rajnish is a Houston, TX-based Maritime executive with experience in management, operations, assurance, and safety within the Oil, Gas, Energy, and Maritime industries. He leads Environmental, Energy, and Regulatory Programs at Excelerate Energy, focusing on FSRU terminal development, environmental and regulatory compliance. Previously, he was Marine Projects Manager for the Jordan Cove LNG terminal, managing marine interfaces and budgets.

After completing Marine Engineering training at Indian Maritime University, Rajnish served on tankers with Chevron Shipping and later joined Teekay Shipping Ltd., where he became Chief Engineer. Until 2009, he held management roles at Teekay Vancouver, overseeing Fleet Performance Management, Risk, Reliability and Safety programs for around 150 vessels.

From 2009 to 2016, he was Director of Maritime HSSE at BG Group in Houston, providing leadership for maritime operations across 10 locations and about 150 assets, including LNG Carriers and offshore vessels.

Keynote Speakers

Jan Hagen Andersen P.E.

Business Development Director, Regional Director for Maritime Decarbonization, DNV Maritime

Jan Hagen Andersen has over 30 years of experience in the maritime industry with a broad technical knowledge and business development understanding. After graduating from engineering college in Norway, he completed a Bachelor and a Master of Science in Mechanical Engineering from the University of Washington in Seattle, Washington. He then joined Trans Marine Propulsion Systems, Inc. in 1991, a marine engineering and service company in Seattle with a focus on marine propulsion and ship machinery systems.

In 2005, he joined DNV in Norway in the Machinery Section of Maritime Technical Advisory. The advisory group in DNV provides consultancy and non-class support services to ship owners, shipyards, manufacturers, designers, and other stakeholders. In 2010 he moved to DNV Maritime in Houston, Texas and is currently in Business Development and the Regional Director for Maritime Decarbonization.

Truls Richardsen

Regional Offshore Manager, DNV Maritime

Truls Richardsen, a Master of Science in Naval Architecture, currently serves as the Regional Offshore Manager for DNV Maritime in North America. Currently, Truls oversees offshore classification services from Suriname to the Arctic, encompassing various offshore sectors, including traditional oil and gas, renewables, offshore floating infrastructure, and marine aquaculture. He is a key advocate for Digital Transformation in Offshore Classification, driving efficiency through innovative digital solutions.

Truls' expertise spans over a decade, specializing in fleet in-service and asset integrity management. He is widely recognized for his commitment to innovation and operational efficiency in the offshore industry, complemented by his leadership skills honed during his service as an Army officer in the Norwegian Army.

Sudhir Pai

Chairman - Advisory Board, Technology Collaboration Center

Sudhir Pai is the Chairman, Advisory Board, Technology Collaboration Center. With over 30 years of experience across the energy, renewables and commercial aerospace industry, his recent role was Executive Vice President, Data and Robotics Division, The Action Group. Prior to that he was responsible for setting the robotics and sustainability strategy for Axiom Space, building the first commercial space station replacing current ISS. Sudhir spent most of his career at Schlumberger in leadership positions across Middle East, India, Africa, Europe and United States. In 2016 the United States National Diversity Council recognized him with Business Leadership Award. In 2021 he was inducted into the Commercial Spaceflight Federation as a Patron. Sudhir holds a Bachelors in Electrical Engineering from University of Bombay and Masters pf Science Honors degree in Space Operations from Embry Riddle Aeronautical University pursuing specialization in Sustainability.

Dr. Paul Jukes PhD, CEng, CMarEng, FIMarEST

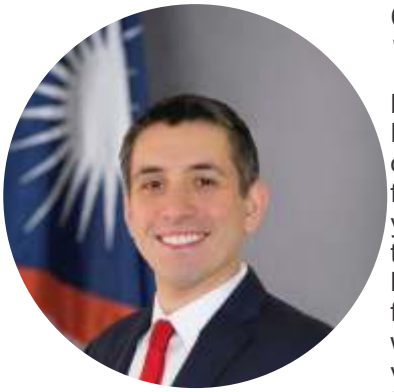
Director of Engineering, Pond & Co

Obtained a Honours Degree in Mechanical and Structural Engineering (BEng Hons), a Masters in Business Administration (MBA) and a Doctorate in Structural Engineering (PhD).

Over 25 years of experience in the Oil & Gas industry. Previously the Group Managing Director for MCS Kenny, a Division of wood (formerly Wood Group). Currently the Director of Engineering for Pond & Co. in Houston.

Joined the IMarEST as a Graduate Member in 1998, Member and a Chartered Engineer in 1999, and became a Fellow in 2005. Honorary Secretary for the South East England Branch (SEE) of IMarEST (1999-2005) and Chairman for the 'IMarEST Young Members Network' (2005). Past Regional Co-ordinator for the Young Marine Professional (YMP) (1999-2002), and judge for the SET Awards (2003-2005). Previously Chairman of the Houston Gulf Coast Branch (2006 – 2012). Council Member (2010-2013). Board of Trustees (2007-2012). Obtained President' Commendation Award in 2006.Coauthor of the 'Encyclopedia of Maritime and Offshore Engineering' jointly with Carlton, J., and Sang Y, Wiley Books, March 2018.

Speakers/Moderators/Panelists



Cosmin Bozenovici

Vice President, Technical - Offshore, International Registries, Inc. (IRI) / The Marshall Islands Registry

Mr. Bozenovici joined IRI as Vice President, Technical - Offshore in April 2018. Based in Houston, Mr. Bozenovici is responsible for business development in the offshore sector and oversees the technical service and support functions for Republic of the Marshall Islands-flagged offshore vessels around the world. Prior to joining IRI, Mr. Bozenovici spent seven years with Noble Corporation, which owns and operates a technologically advanced fleet in the offshore drilling sector. As their Lead Naval Architect and Project Manager, Mr. Bozenovici's team was responsible for engineering and project support of the entire existing fleet, four new ultra-deepwater drillships, and six latest generation jack-up units. Prior to working with Noble Corporation, he spent five years with American Bureau of Shipping in various marine surveying and engineering roles in Houston, Rio de Janeiro, and Singapore. Mr. Bozenovici earned an M.B.A. from Temple University and a B.S. in Naval Architecture and Marine Engineering from the University of New Orleans.

Rafael Riva

Vice President, Client Relations, International Registries, Inc. (IRI) / The Marshall Islands Registry

Mr. Riva joined IRI's Houston office in January 2023 as Vice President, Client Relations. Prior to joining IRI, he spent nearly 19 years with Lloyd's Register (LR) in a variety of management, business development, and technical roles. Mr. Riva specialized in LNG and LPG and moved around the world to support LR's strategic interests and business development, including positions in London, Shanghai, and New York. In 2020, he was promoted to Vice President of Commercial Operations Americas, where he oversaw activities of all commercial teams in the Americas, including several projects with Offshore Wind and Gas. Mr. Riva holds an MSc in Naval Architecture from Spain's Technical University of Madrid and has studied at the Technical University of Denmark. He is also a qualified Chartered Engineer, a member of the Royal Institution of Naval Architects, the Spanish Association of Naval Architects, and The Society of Naval Architects and Marine Engineers (SNAME).

Altaf Shaik

Principle Engineer, American Bureau of Shipping (ABS)

Altaf is a Marine Engineer with over 15 years of experience. He currently serves as a Principal Engineer in ABS Corporate Technology Department and is responsible for developing requirements for emerging technologies in the maritime industry that includes Onboard Carbon Capture, Kinetic Energy Storage Systems, Liquefied Carbon Dioxide Carriers.

Prior to this role, he was in ABS Engineering department conducting plan reviews for different types of vessels such as LNG carriers, Offshore supply vessels, Yachts, High Speed Crafts and Barges. During this time, he became an SME for Ballast Water Treatment Systems. As part of the USCG Type Approval of BWTS, he worked closely with the Independent laboratories and helped clients get the USCG Type Approval for their systems.

He holds a Bachelor of Science in Marine Engineering from Andhra University in India and an MBA degree from Bowling Green State University, Ohio, US. Prior to joining ABS, he spent few years sailing on Tankers.

Speakers/Moderators/Panelists

Ove Heitmann Hansen

Senior Principal - Digital Trust, DNV

Ove Heitmann Hansen has more than 35 years of experience in leadership, strategy development, change management, stakeholder management and integrated & remote operations. Ove is Senior Principal Digital Trust for DNV, where he focuses on automated and autonomous operations, utilizing Digital Twin solutions, Industry 4.0 solutions and automated requirements verification by using a common digital language (ontology).

Ove has published a variety of articles and papers, most recently on topics such as Digital Twins and Artificial Intelligence. Ove holds Masters degrees in Industrial Economics and Change Management and has served in the Royal Norwegian Navy.

Boyd Howell

Director of Business Development, MODEC International, Inc

Boyd Howell is Director of Business Development at MODEC International, Inc. , the Houston-based affiliate of Tokyo-based MODEC, Inc. one of the world's largest and most experienced designers, builders and operators of complex floating offshore structures such as FPSOs, FSOs and TLPs for the international energy industry.

Boyd has been working the Offshore Oil and Gas Industry for over 40 years. The past 30 of which has been focused on Turret-moored and Spread-moored ship-shaped FPSO and FSO systems as well as TLPs and production Semi's for implementation worldwide. Boyd has held positions as Engineering Manager, Project Manager and Interface Manager for a large number of FPSO and FSO projects, before transitioning into Business Development.

Boyd holds a Bachelor of Engineering & Naval Architecture Degree from Memorial University in Newfoundland, Canada and a diploma from Rice University Executive Education Department – Jones Graduate School of Management, in Houston Texas.

Rees Machtemes P.Eng.

Director of Industrial Security, Waterfall Security Solutions

Rees is the lead threat researcher for the annual Waterfall / ICSStrive OT Threat Report and writes frequently on the topic of OT / ICS cybersecurity. Being solutions-focused, he champions INL's Cyber-Informed Engineering program and regularly provides advice and commentary to government agencies and standards bodies issuing OT security guidance.

Rees is a professional engineer with 15 years of industry experience in power generation and transmission substation automation, food and beverage plant automation, public and government telecom, data centres and IT support. He holds a B.Sc. in Electrical Engineering from the University of Alberta.

Blaine Mathieu

CEO, Pratexo

Blaine is a former software company founder, Gartner analyst, and multi-time C-level executive at both public tech giants and private enterprise software and Industrial IoT startups. Over the course of his career, his work has taken him across North America, Europe, and Asia, and his passion for AI, IoT, and edge computing has also made him a sought-after speaker at dozens of global industry events. He is currently CEO at edge-to-cloud platform company Pratexo.

Speakers/Moderators/Panelists

Peter Noble

President & Senior Advisor, Noble Associates Inc.

Peter Noble is naval architect and ocean engineer with a wide range of global experience across many sectors within the marine and offshore industries.

He started his career as an apprentice with a Clyde-side shipbuilder, while attending the University of Glasgow studying naval architecture.

His career has included positions with shipyards; ship and offshore design consultants; marine R&D development companies; major classification societies; and with an international oil company. Peter is a past Vice President of IMarEST and past president of SNAME.

Peter currently based in Texas where his work includes advising on a range of subject matter including ocean renewable energy and future marine fuels. He continues to support student and young professional activities in naval architecture and ocean engineering through mentoring, serving on advisory boards and advising on capstone projects.

Dr. Prabu Parthasarathy

Global VP - Strategic Projects, Cognite

As the Global VP - Strategic Projects at Cognite, I help combine domain expertise and digital technology to help clients across upstream and midstream industries harness the power of data and AI to optimize their operations, reduce emissions, and enhance safety. With over 20 years of international experience in the Oil and Gas sector, I have a deep understanding of the technical and business challenges that our clients face, and how to deliver value by combining domain knowledge with digital technologies. Before joining Cognite, I was the VP of Intelligent Operations at Wood Group, where I oversaw a global business line that provided advanced technology solutions to the process industry.

Dr. Nazmul Rahmani

Professor, Chemical Engineering and Petroleum Engineering, Texas A&M University

Dr. Nazmul Rahmani is a Professor of Practice in the Department of Chemical Engineering at Texas A&M University (TAMU) College Station, where he serves as the Assistant Director of the Mary Kay O'Connor Process Safety Center. He is primarily responsible for overseeing the center's teaching activities, assisting with research proposal development, and mentoring graduate students in safety engineering. Previously, Dr. Rahmani spent six years teaching in the Department of Chemical and Natural Gas Engineering at Texas A&M Kingsville, where he developed a minor program in Natural Gas Midstream Engineering.
Dr. Rahmani has over 12 years of experience in R&D and process design, focusing on oil and gas exploration and midstream engineering. He played a key role in the development and implementation of research center safety goals and objectives. His current research interests include safety and risk analysis for natural gas and LNG processes, corrosion and reliability, pipeline transportation, and thermal hydraulics modeling.
He holds a PhD in Chemical Engineering from the University of Alberta, Canada, and completed postdoctoral research at CANMET ENERGY, a research laboratory of Natural Resources Canada.

Carlos Paz

Global Business Development Manager for Production Systems, SLB

Carlos Paz is currently the Global Business Development Manager for Production Systems at SLB, headquartered in Houston. He began his career with SLB in 2005 as a Field Engineer, working in diverse locations such as West Africa, the Caspian Sea, and the North Sea. Over the years, Carlos has taken on several leadership roles in Sales & Operations and Digital Transformation across the Middle East, Europe, and North America. With over 20 years of experience in the Oil & Gas and Energy industry, Carlos brings a wealth of knowledge and expertise to this panel, driving innovation and growth within the sector.

Speakers/Moderators/Panelists

Jorge Peña Alarcón

Director of Data & AI, Microsoft

As a visionary leader in the realm of Data & Artificial Intelligence (AI), Jorge Peña Alarcón stands at the forefront of innovation at Microsoft. As the Director of Data & AI, Jorge's expertise in engineering and operations is pivotal in leading organizations in adopting and transitioning to cloud native digital platforms. His strategic approach integrates data analytics and artificial intelligence to enhance business value, particularly within the Energy sector.

Jorge's leadership is characterized by a relentless pursuit of excellence and a commitment to driving tangible business outcomes for executive clients. His experience spans over a decade in technology and energy operations, with a rich background in Aerospace, Oil and Gas, Mining, and Utilities industries. His proficiency in enterprise software development, sales, go-to-market strategies, and business development has been instrumental across various vertical markets.

A specialist in IT-OT convergence and Automation Industries, Jorge's academic foundation in Aerospace Engineering, with a concentration on Advanced Analytics and Propulsion Engines from The University of Michigan, Ann Arbor, MI, USA, empowers him to innovate in digital transformation initiatives with a unique blend of technical acumen, industry insight, and unwavering focus on achieving operational excellence.

Dr. Bulent Mercan

Technical Advisor, 2H Offshore

Bulent Mercan currently serves as a technical advisor for 2H Offshore in Houston. He has more than ten years of industry experience in the analysis, design, and integrity monitoring of structural systems for offshore oil, gas and renewable assets. His responsibilities include project management, technical sales, and technology development. He holds a PhD in Civil/Structural Engineering from the University of Minnesota and a Professional Engineer Licence in Texas.

Bulent also serves as a part-time senior lecturer at the University of Houston. He has more than eight years of teaching experience at the UH. He teaches undergraduate and graduate level courses in the Civil Engineering Department.

William Burroughs CEng, CMarEng, FIMarEST

CEO, Monstrant Viam LLC

William Burroughs is the CEO of Monstrant Viam LLC. He is a Chartered Marine Engineer (CMarEng), Chartered Engineer (CEng) and Fellow of the Institute of Marine Engineering, Science and Technology (IMarEST). William is a member of the IMarEST Ballast Water Experts Group (BWEG) – an IMarEST Special Interest Group (SIG) focused on supporting the marine industry's ballast water management regulatory and equipment development. He is a 1982 graduate of Auburn University (Alabama) having earned a Bachelor of Chemical Engineering (BChE) and, after serving in the United States Navy Submarine Force for 12 years, worked as an industrial and municipal water and wastewater engineer. Beginning in 2001, he worked as an offshore water treatment equipment engineer including leading a team for the successful development of a shipboard Ballast Water Management System (BWMS) until 2013. He joined the American Bureau of Shipping (ABS) in 2014 as their Subject Matter Expert for ballast water management. William is one of the principal authors of the ABS Guide for Ballast Water Exchange, the ABS Guide for Ballast Water Treatment, the ABS Ballast Water Management Advisory, the Best Practices for Operations of Ballast Water Management Systems Report, and numerous thought leadership periodical articles. He is a recognized expert for the implementation of the IMO's Ballast Water Management Convention and the USCG/U.S. EPA's ballast water regulations. He is a member of the International Organization for Standardization (ISO) Technical Committee 8 (Ships and marine technology) Working Group 12 (Aquatic nuisance species). He was a delegate to the International Maritime Organization (IMO) Marine Environment Protection Committee (MEPC) and Pollution Prevention and Response (PPR) sub-committee with the International Association of Classification Societies (IACS). He is a delegate to MEPC with RINA (Royal Institute of Marine Engineers) for MEPC 77 through 81 (March 2024).

Speakers/Moderators/Panelists

Dhivakar Poosapadi CEng, CMarEng, FIMarEST

Senior Research Engineer, Quest Global Services

Dhivakar Poosapadi has over 16 years of experience in the design, development, testing, installation, and commissioning of drilling equipment, subsea completion systems, well access systems, subsea drilling systems, advanced sealing and control systems, and riser gas handling systems. He has held various positions at Keppel Offshore and Marine Technology (Singapore), TechnipFMC, Managed Pressure Operations (a part of Aker Solutions), AFGlobal Corporation, and is currently contracted to Halliburton through Quest Global Services North America. Additionally, he is involved in Front End Engineering and Design (FEED) for EPCIC projects, covering areas such as planning, budget control, tendering/costing processes, resource management, manufacturing planning, and inspection.

He earned a Master of Science in Mechanical Engineering (Smart Product Design) from Nanyang Technological University, Singapore. Dhivakar holds a patent in FPSO offloading systems and has reviewed several conference papers, including those for the Offshore Technology Conference, Society of Petroleum Engineers, American Association of Drilling Engineers, and One Petro. He has been instrumental in developing innovative products that have received multiple prestigious awards, including the 30th Annual Woelfel Best Mechanical Engineering Achievement Award from ASME and Hart's Meritorious Engineering Awards for enhancing the safety and efficiency of drilling and completion equipment.

Greg Trostel

Global Industry Development Manager, Rockwell Automation

Greg is the Global Oil & Gas Industry Development Manager for Rockwell Automation, and the host of a new podcast series for World Oil on the topic of Artificial Intelligence in the Energy Industry.

His energy career began with a major EPC firm, and then Greg spent significant time in technology & software development within the energy industry; he's now worked for over 15 years involved with automation & digitalization technologies.
Greg has a Chemical Engineering degree from Texas A&M University and an MBA from the University of Houston.

Peter Wallace PE, CEng, CMarEng, FIMarEST

Principal Engineer, Lloyds Register

Peter is Principal Engineer--Risk and Regulatory Advisory at Lloyd's Register. He is a practicing naval architect working to bring applied technologies to improve safety and efficiency in both steel and digital to life across design, construction, and operations. Peter's career includes working for ship operators, design agents, shipyards, and oil majors prior to joining LR in 2022. Digital projects include being part of the original delivery team for the ABS SafeHull system for Tankers, Bulk Carriers, and Condition Assessment; leading a shipping company team that developed the predecessor to the ShipServ procurement platform; working as a shipyard project engineer that championed the VFI/tagging system that later became the core of the SSI PIL system; leading an oil major in development of a safety risk rating system for operator/ship pairs used in vetting; and developing an oil major's tools for fleet sizing and estimation of CAPEX, OPEX, voyage time, and emissions threads for complex tanker trading.

Peter has a B.Sc. in naval architecture and marine engineering from Webb Institute and an MBA from Tulane University.

Speakers/Moderators/Panelists

Alberto Castelli

Senior Manager, International Association of Oil & Gas Producers

Alberto Castelli has over 25 years of upstream and midstream global leadership experience. As Eni representative he managed commercial and business development operations for major oil and gas operating companies, in Nigeria, Venezuela and Kazakhstan. He has been involved with Energy Transition initiatives in the USA and, in 2023 He has been seconded by Eni to the Americas Region of the International Association of Oil and Gas Producers (IOGP).

Dr. Matthew Franchek

Professor of Mechanical & Aerospace Engineering, University of Houston

Education

- Ph.D., December 1991, Mechanical Engineering, Texas A&M University, Advisor: S. Jayasuriya
- M.S., December 1988, Mechanical Engineering, Texas A&M University, Advisor: S. Jayasuriya
- B.S., May 1987, Mechanical Engineering, University of Texas at Arlington
- Associate in Arts and Science, May 1984, Eastfield College

Professional Experience

- April 2011 - Present: Director of Subsea Engineering, University of Houston, Department of Mechanical Engineering
- August 2002 - Present: Professor, University of Houston, Department of Mechanical Engineering
- August 2002 - December 2009: Professor and Chair, University of Houston, Department of Mechanical Engineering
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- August 2002 - May 2009: Professor and Director, University of Houston, Biomedical Engineering Program
- July 2001 - August 2002: Professor, Purdue University, School of Mechanical Engineering
- July 1997 - July 2001: Associate Professor, Purdue University, School of Mechanical Engineering
- June 1997 - August 2002: Deputy Director, Purdue University, Electro-Hydraulic Control Research Center
- January 1992 - July 1997: Assistant Professor, Purdue University, School of Mechanical Engineering.
- May 1981 -August 2002 CONSULTING ENGINEER Control system design and implementation, mechatronics, hydraulic system

Professional and Scientific Affiliations

- Member of American Society of Mechanical Engineers, Dynamic Systems and Control Division
- Member of Society of Automotive Engineers
- Member of Institute of Electrical and Electronics Engineers
- Engineering In Training Certified in 1987 (Texas)

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