

T1-1

Date	Wednesday, October 21, 2026
Time	16:00 - 18:00
Location	Texas 5, 6, 7
Topic	Ship Performance in General 1
Chair	TBD

T1-1-1	Experimental investigation on aerodynamic interaction and performance optimization of multi-rigid wing sails for LNG carriers
16:00 - 16:20	<i>Gyu jung AN, Jin kyu KIM, Hee jung KIM and Yong chul LEE (Samsung Heavy Industries), Casper VENLOV (FORCE Technology)</i>
T1-1-2	Development and onboard application of a vibration compensator for ships
16:20 - 16:40	<i>Kuksu KIM, Yeorm KIM and Sung-gun PARK (Hanwha Ocean), Dong-ho YANG and Moon-kyu KWAK (Control Factory)</i>
T1-1-3	Comparison of one-way and two-way CFD-DEM coupling for the maneuvering performance of ARAON in floe ice
16:40 - 17:00	<i>Hyeongseok YOON, Kwangjun PAIK, Sanghyun KIM, Jaeyoon JEON, Jumyeong LEE, Joohyung OH and Jisoo HAN (Inha University)</i>
T1-1-4	Experimental investigation of noise mitigation and efficiency in non-conventional marine propulsion systems
17:00 - 17:20	<i>Mario FELLI, Marco ORRICO, Giulio ROSATI and Mauro SALE (National Research Council of Italy, Institute of Marine Engineering)</i>
T1-1-5	Development of a TVC noise prediction method based on bubble dynamics
17:20 - 17:40	<i>Ji-wan KO, Kwang-joon PAIK, Su-a JUNG, Joon-young KIM and Byeong-u YOU (Inha University)</i>
T1-1-6	Methodologies for assessing ships underwater radiated noise in deep and shallow water
17:40 - 18:00	<i>Khaled HELAL and Dan OLDFORD (ABS)</i>

T1-2

Date	Wednesday, October 21, 2026
Time	16:00 - 18:00
Location	Texas 1, 2, 3
Topic	Alternative Fuel in General 1
Chair	TBD

T1-2-1	CFD numerical study on ERA-based safety assessment of storage, supply, and bunkering systems for liquefied hydrogen-fueled ships
16:00 - 16:20	<i>Seung woo HAN, Gun woo KIM, Ha yeong KIM, Song hyun CHA, Dong hee HONG and Hyun seok KIM (KRISO)</i>
T1-2-2	CFD numerical study on ERA-based safety assessment of storage, supply, and bunkering systems for liquefied hydrogen-fueled ships
16:20 - 16:40	<i>Sung-in PARK (HD Korea Shipbuilding & Offshore Engineering)</i>
T1-2-3	Ammonia gas dispersion analysis and reduction research in the engine room
16:40 - 17:00	<i>Jae-won HEO, Dae-woong HWANG and Du-hyeon CHO (Hanwha Ocean), Yunhan LEE (Samsung Heavy Industries), Yong-hwan KIM (Seoul National University)</i>
T1-2-4	Safety distances in alternative fuel ship design: a hazard-based approach
17:00 – 17:20	<i>Nadhir KAHLOUCHE, Geng QIN, Huang-pin OHIEN and Donghan WOO (ABS)</i>
T1-2-5	Characteristic analysis and application discussion of clean alternative fuels for future ships
17:20 - 17:40	<i>Yihuai HU (Shanghai Maritime University), Juanjuan TANG (Shanghai Ship Design and Research Institute)</i>

T1-3

Date	Wednesday, October 21, 2026
Time	16:00 - 18:00
Location	Lakeview
Topic	AI and ML Application to Ship & Vehicle Design 1
Chair	TBD

T1-3-1	Learning admissible shape manifolds: a nonlinear framework for compact design spaces
16:00 - 16:40	<i>Andrea SERANI and Matteo DIEZ (CNR-INM)</i>
T1-3-3	AI-based web platform for hull form generation and performance prediction
16:40 - 17:00	<i>Dayeon KIM, Heejung KIM, Jinkyu KIM and Youngchul LEE (Samsung Heavy Industries), Jeongbeom SEO and Inwon LEE (Pusan National University)</i>
T1-3-4	Global response estimation of FOWT substructure via distortion mode-based conversion matrices
17:00 - 17:20	<i>Gi-young JEON, Beomil KIM and Kyeongtae KIM (Korean Register)</i>
T1-3-5	Generative models for ship design
17:20 - 17:40	<i>Panagiotis KAKLIS (University of Strathclyde), Georgios ANAGNOSTOPOULOS, Georgios PAXIMADAKIS and Dimitrios KAKLIS (Archimedes Unit, ATHENA Research Center), Stamatis STAMATELOPOULOS (Massachusetts Institute of Technology)</i>

T1-4

Date	Wednesday, October 21, 2026
Time	16:00 - 18:00
Location	Paluxy
Topic	Marine Autonomy 1
Chair	TBD

- T1-4-1** | **Navigating the hurdles of maritime autonomy**
16:00 - 16:20 | *Mingi JEONG (Virginia Tech) and Alberto QUATTRINI LI (Dartmouth College)*
- T1-4-2** | **COLREGs-compliant collision avoidance and grounding prevention for autonomous marine navigation**
16:20 - 16:40 | *Mayur Shivaji PATIL and Nataraj SUDHARSAN (Texas A&M University), Veneela AMMULA, Jude TOMDIO, Jin WANG and Michael KEI (ABS), Prabhakar PAGILLA, Sivakumar RATHINAM (Texas A&M University)*
- T1-4-3** | **Application of a simulation-based safety assessment method to real-world automatic berthing and unberthing trials**
16:40 - 17:00 | *Makoto ITO and Tomoaki YAMADA (ClassNK), Yusuke UETANI and Shinichiro MABUCHI (Nabtesco), Tomoya NAKANO and Yoshimitsu KOGURE (Tokyo Keiki)*
- T1-4-4** | **Integrating sub-seasonal forecast into maritime autonomous surface ships for strategic pre-voyage planning**
17:00 - 17:20 | *Taehyung KIM and Dong-hyun CHA (Ulsan National Institute of Science and Technology)*
- T1-4-5** | **Learning-enhanced wave-aware trajectory planning for roll-reduced ship navigation**
17:20 - 17:40 | *Xiangheng LI, Mingyang ZHANG and Hongdong WANG (Shanghai Jiao Tong University), Nastia DEGIULI and Ivana MARTIC (University of Zagreb)*

T1-5

Date	Wednesday, October 21, 2026
Time	16:00 - 18:00
Location	Woodbine
Topic	Marine Structures and Materials 1
Chair	TBD

T1-5-1	Changing ice conditions: advanced analysis techniques and considerations for ice going vessels and icebreakers
16:00 - 16:20	<i>Ed MOAKLER, Michael GRANT and Dan OLDFORD (ABS)</i>
T1-5-2	Hydrogen embrittlement of aluminum alloys under cathodic charging
16:20 - 16:40	<i>Molly PITRA (Georgia Institute of Technology)</i>
T1-5-3	Effect of notch geometry on hydrogen embrittlement and fracture behavior of 304L stainless steel
16:40 - 17:00	<i>John-Michael MENDEZ (University of Connecticut)</i>
T1-5-4	Dynamic load recovery of icebreaking vessel via reduced-order modeling and optimal sensor placement
17:00 - 17:20	<i>Ye jin KIM, Min-hyuk KIM and Seung-hwan BOO (Korea Maritime & Ocean University)</i>
T1-5-5	Residual mode-enhanced reconstruction of full-field structural responses for digital twin
17:20 - 17:40	<i>Na yeong HAN, Ye-jin KIM, Kyeong-min KIM and Seung-hwan BOO (Korea Maritime & Ocean University)</i>

T1-6

Date	Wednesday, October 21, 2026
Time	16:00 - 18:00
Location	Gulf Coast
Topic	Decarbonization 1
Chair	TBD

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| T1-6-1 | Air lubrication technology for ship drag reduction: opportunities & challenges |
| 16:00 - 16:20 | <i>Simo Aleksi MAKIHARJU (UC Berkeley)</i> |
| T1-6-2 | Voyage optimization of a rotor sail-assisted ship for minimum fuel consumption based on dynamic programming |
| 16:20 - 16:40 | <i>Ju-myeong LEE, Sanghyun KIM, Jae-yoon JEON, Hyeong-seok YOON, Joo-hyung OH and Ji-soo HAN (Inha University)</i> |
| T1-6-3 | A novel vertically stacked tri-lobe LCO₂ tank adapted to the midship cross section for efficient storage of onboard-captured CO₂ |
| 16:40 - 17:00 | <i>Jinho LEE and Hyun-seok KIM (University of Science and Technology)</i> |
| T1-6-4 | Evaluating the energy efficiency of fishing vessels: definition, indicators and improvement options |
| 17:00 - 17:20 | <i>Nikola VLADIMIR, Ivana JOVANOVIC and Nolla TODOROVIC (University of Zagreb)</i> |

T2-1

Date	Thursday, October 22, 2026
Time	13:40 - 15:40
Location	Texas 5, 6, 7
Topic	Ship Performance in General 2
Chair	TBD

T2-1-1 13:40 - 14:00	Numerical investigation of wake vortex dynamics in flapping hydrofoil with two-dimensional and three-dimensional motions <i>Jun-sung PARK, Kwang-jun PAIK and Jae-hyeon AN (Inha University)</i>
T2-1-2 14:00 - 14:20	Non-linear relative wave motions at the bow and along the side of an FPSO leading to green water <i>Joo-sung KIM, Yong-ho CHOI, Hye-jong SON and Rae-hyoung YUCK (Samsung Heavy Industries)</i>
T2-1-3 14:20 - 14:40	A comparison of hydrodynamic optimization strategies for surface combatant vessels <i>Giacomo PELLIZZARI and Stefano BRIZZOLARA (Virginia Tech), Francesco GRECO (Fincantieri), Giuliano VERNENGO (Universita di Genova), Nicola ARTUSO (CETENA)</i>
T2-1-4 14:40 - 15:00	Optimization of design variables for a pre-swirl flow control fin using a surrogate model and multi-objective optimization <i>Hyunjun KIM, Seung-myun HWANGBO and Inwon LEE (Pusan National University)</i>
T2-1-5 15:00 - 15:20	Experimental investigation of wave-induced vortex dynamics around a surface-piercing monopile using PIV <i>Sion JIN, Ji-hwan KIM, Jong-min BAEK, Ji-won HAN and Byoung-kwon AHN (Chungnam National University)</i>

T2-2

Date	Thursday, October 22, 2026
Time	13:40 - 15:40
Location	Texas 1, 2, 3
Topic	Alternative Fuel in General 2
Chair	TBD

T2-2-1	Research on noncontact sensing techniques for measuring ammonia fine leaks
13:40 - 14:00	<i>Mike KOO (Samsung Heavy Industries)</i>
T2-2-2	Reassessing toxic area criteria for ammonia-fueled ships: an AEGL-based approach to improve risk assessment
14:00 - 14:20	<i>Hyunpyo KIM (HD Korea Shipbuilding & Offshore Engineering)</i>
T2-2-3	Technology selection for nuclear marine propulsion
14:20 - 14:40	<i>Mayir MAMTIMIN (ABS) and Koroush SHIRVAN (Massachusetts Institute of Technology)</i>
T2-2-4	Development of a multiphase CFD model to predict pressure rise in LPG tanks
14:40 - 15:00	<i>Young hun KIM and Sungwoong CHOI (Gyeongsang National University)</i>
T2-2-5	A CFD study on the leakage characteristics of alternative marine fuels
15:00 - 15:20	<i>Sungsu LEE and Seulgi LEE (Chungbuk National University)</i>

T2-3

Date	Thursday, October 22, 2026
Time	13:40 - 15:40
Location	Lakeview
Topic	AI and ML Application to Ship & Vehicle Design 2
Chair	TBD

T2-3-1	Generative AI for extreme ship roll under the influence of wind and waves
13:40 - 14:00	<i>Kevin MAKI, Eric HEILSHORN and Adam SAK (University of Michigan), Ji young SEO and Bo woo NAM (Seoul National University),</i>
T2-3-2	A method of exemplar-based symbol detection for enhancing the accuracy and efficiency of ship fire and safety plan review
14:00 - 14:20	<i>In-su HAN, Myung-Il ROH, In-chang YEO, Seong-won CHOI (Seoul National University), Dohyun CHUN (ABS)</i>
T2-3-3	Physics-informed design-space dimensionality reduction for RANS-based propeller optimization
14:20 - 14:40	<i>Stefano GAGGERO (University of Genoa) and Andrea SERANI (National Research Council - Institute of Marine Engineering)</i>
T2-3-4	Development of an AI-based rapid risk assessment model for ammonia leakage mitigation using water spray systems in ammonia-fueled vessels
14:40 - 15:00	<i>Changwoo LEE, Min-seong KIM and Jae-hui JEONG (HD Korea Shipbuilding & Offshore Engineering)</i>
T2-3-5	Accelerating the hydrodynamic design optimization of biomimetic underwater gliders via machine learning: the BIODRONES project
15:00 - 15:20	<i>Matteo DIEZ and Andrea SERANI (CNR-INM), Umberto IEMMA (Roma Tre University), Giampaolo IUZZI (Sapienza University of Roma)</i>
T2-3-6	Transfer learning in the structural optimization of ship hulls
15:20 - 15:40	<i>Gianluigi ROZZA and Lorenzo FABRIS (SISSA mathLab), Marco TEZZELE (Emory University), Ciro BUSIELLO and Mauro SICCHIERO (Fincantieri)</i>

T2-4

Date	Thursday, October 22, 2026
Time	13:40 - 15:40
Location	Paluxy
Topic	Marine Autonomy 2
Chair	TBD

T2-4-1 13:40 - 14:00	Virtual testing for autonomous navigation systems towards a standardized framework for safety and performance evaluation <i>Donghan WOO, Geng QIN, Liza CHUA, Dohyun CHUN and Yao Hua TEN (ABS)</i>
T2-4-2 14:00 - 14:20	Risk analysis of marine autonomous navigation systems using Monte Carlo simulations <i>Mayur Shivaji PATIL, Jiachang XING, Anthony Salim SAAIBY, Nataraj SUDHARSAN, Keliang PAN, Heonyong KANG, Sivakumar RATHINAM and Prabhakar PAGILLA (Texas A&M University), Veneela AMMULA, Jude TOMDIO, Jin WANG (ABS)</i>
T2-4-3 14:20 - 14:40	An improved method for detection and tracking of maritime obstacles using multiple-sensor fusion in real-world maritime environments <i>Yun-sik KIM, Myung-il ROH, Ha-yun KIM, In-chang YEO and Nam-sun SON (Seoul National University)</i>
T2-4-4 14:40 - 15:00	Intelligent modeling framework for ship maneuvering decision processes under real operational conditions <i>Xindong LIU, Mingyang ZHANG, Hongdong WANG (Shanghai Jiao Tong University), Nikolaos TSOULAKOS (Laskaridis Shipping), Pentti KUJALA (Tallinn University of Technology, Estonian Maritime Academy), Spyros HIRDARIS (ABS)</i>

T2-5

Date	Thursday, October 22, 2026
Time	13:40 - 15:40
Location	Woodbine
Topic	Marine Structures and Materials 2
Chair	TBD

T2-5-1	Sustainable materials for liquefied gas containment systems - toward a net-zero shipping industry
13:40 - 14:00	<i>Avery BARLOW, Tae-dong PARK, Dongchun QIAO, Bo WANG and Marcus CRIDLAND (ABS)</i>
T2-5-2	Effect of tramp elements (Sn, N) and stress state on the toughness in offshore structural steels
14:00 - 14:20	<i>Seongtak OH and Ho-sang JANG (Hyundai Steel R&D Center)</i>
T2-5-3	Analysis of fatigue behavior of 66 kV wet type submarine cable
14:20 - 14:40	<i>Yun-jae KIM and Sung woong CHOI (Gyeongsang National University)</i>
T2-5-4	Future BOR targets for LNG carriers: technical trends and economic insights
14:40 - 15:00	<i>Ushin LEE and Jong-ki LIM (Hanwha Ocean)</i>
T2-5-5	Layer-count and purge-gas effects on foil-and-paper multilayer insulation in a Cryostat-100 calorimeter
15:00 - 15:20	<i>Neha DOSSANI (Georgia Institute of Technology)</i>
T2-5-6	Effects of hollow glass microspheres and transportation vibration on cryogenic insulation performance
15:20 - 15:40	<i>Sanjay KARTHIK (University of Florida)</i>

T2-6

Date	Thursday, October 22, 2026
Time	13:40 - 15:40
Location	Gulf Coast
Topic	Decarbonization 2
Chair	TBD

T2-6-1 An experimental study on the aerodynamic characteristics of a wing sail

13:40 - 14:00 *Sungyoon CHOI, Woojun OH and Jung-eun KIM (KOMERI)*

T2-6-2 Estimation of power saving of wing sail and roller wing retrofits using reconstructed relative wind from bulk carrier operational data

14:00 - 14:20 *Donghyun CHO, Jin-won YU and Inwon LEE (Pusan National University)*

T3-1

Date	Thursday, October 22, 2026
Time	16:00 - 18:00
Location	Texas 5, 6, 7
Topic	Ship Performance in General 3
Chair	TBD

T3-1-1 16:00 - 16:20	Coupling of RANS CFD-based parametric hull form optimization framework with added resistance of the IMO minimum power level 2 assessment <i>Dae-hyun KIM and Sungeun KIM (ABS)</i>
T3-1-2 16:20 - 16:40	Hydrodynamic behavior of floating offshore wind turbines over variable seabed bathymetry <i>Ikjae LEE and Moohyun KIM (Texas A&M University)</i>
T3-1-3 16:40 - 17:00	A study on the maneuvering performance of DARPA SUBOFF using a mathematical model and CFD <i>Yunhye LEE, Kwang-jun PAIK and Byeong-u YOU (Inha University)</i>
T3-1-4 17:00 - 17:20	Ship as a wave buoy: parametric and non-parametric estimation of directional wave spectra using full-scale and model-test data <i>Yooil KIM (Inha University)</i>
T3-1-5 17:20 - 17:40	Lateral force distribution-based maneuvering model for a surface vessel in low-speed conditions using CFD <i>Long tien BIEN, Diep NGUYEN, Khoa anh VO, Muhammad SULMAN and Hyeon-kyu YOON (Changwon National University)</i>

T3-2

Date	Thursday, October 22, 2026
Time	16:00 - 18:00
Location	Texas 1, 2, 3
Topic	Alternative Fuel in General 3
Chair	TBD

T3-2-1	Development of AI-powered real-time port lifecycle assessment digital solution
16:00 - 16:20	<i>Sua CHO, Byongug JEONG, Injun YANG, Jae-han JEON, Yong-woo HUR and Geun-su KIM (University of Strathclyde)</i>
T3-2-2	Engine readiness 2026 - addressing technical challenges in ammonia-fueled engines and fuel supply systems
16:20 - 16:40	<i>Onur SEMIZ and Quaim CHOUDHURY (ABS)</i>
T3-2-3	Experimental study and numerical modeling on vacuum generation in a double-walled liquefied hydrogen tanks
16:40 - 17:00	<i>Jihong AN, Taemin CHO, Taeyoon PARK and Chang-seon BANG (Samsung Heavy Industries), Young-hyun CHOI, Jae-young JEONG and Hang-jin JO (POSTECH)</i>
T3-2-4	Integrated ammonia gas management system for next-generation marine fuel applications: A unified approach to release mitigation, re-liquefaction, and energy recovery
17:00 - 17:20	<i>Saejeong Oh, Jongki LIM, Taehyeong Gim, Yehwan Chung (Hanwha Ocean)</i>
T3-2-5	Development of multi-purpose fuel tank with FGSS for LNG/ammonia gas turbine LNG carrier
17:20 - 17:40	<i>Da yeon KANG (Hanwha Ocean)</i>

T3-3

Date	Thursday, October 22, 2026
Time	16:00 - 18:00
Location	Lakeview
Topic	AI and ML Application to Ship & Vehicle Design 3
Chair	TBD

T3-3-1 16:00 - 16:20	Design by reward: teaching AI to build better boats <i>Austin SHAEFFER, Timothy MCINTYRE, Alexander GRAY and Joseph CAREY (NSWCCD)</i>
T3-3-2 16:20 - 16:40	Application of generative AI for hull form generation across ship types: from merchant ships to naval vessels <i>Jeongbeom SEO and Inwon LEE (Pusan National University)</i>
T3-3-3 16:40 - 17:00	Achieving robust active learning unlocking more efficient and reliable paths to optimal design <i>Hayriye Pehlivan SOLAK, Francesco Di FIORE, Laura MAININI (Imperial College London), Jeroen WACKERS (Ecole Centrale de Nantes), Riccardo PELLEGRINI, Andrea SERANI and Matteo DIEZ (National Research Council - Institute of Marine Engineering)</i>
T3-3-4 17:00 - 17:20	Guideline-assisted reinforcement learning for vessel navigation using real-world AIS data <i>Eunji KANG, Moohyun KIM (Texas A&M University), Iksoon CHO (Korea Maritime & Ocean University)</i>
T3-3-5 17:20 - 17:40	A transformer-based approach for ship trajectories data mining trajectories from AIS data <i>Seok ho KANG and Sewon KIM (Sejong University)</i>

T3-4

Date	Thursday, October 22, 2026
Time	16:00 - 18:00
Location	Paluxy
Topic	Marine Autonomy 3
Chair	TBD

T3-4-1 16:00 - 16:40	A unified evaluation method for camera-based object detection under diverse maritime conditions based on reference detectability criteria <i>Hyun CHOI (KRISO)</i>
T3-4-3 16:40 – 17:00	Environment-aware simulation framework for the evaluation of marine autonomous navigation systems in confined waters <i>Mayur Shivaji PATIL, Anthony Salim SAAIBY, Keliang PAN, Nataraj SUDHARSAN, Jiachang XING, Heon-yong KANG, Sivakumar RATHINAM and Prabhakar PAGILLA (Texas A&M University), Veneela AMMULA, Jude TOMDIO and Jin WANG (ABS)</i>
T3-4-4 17:00 - 17:20	Toward a self-improving ship heading controller: data-driven learning using sea-trial operational data <i>Siwon KIM, Jinhyuck SEO, Sun-hyuck IM, Seong-hyeon KIM, Yeon-su KIM and Jongyong PARK (Pukyong National University)</i>
T3-4-5 17:20 - 17:40	RSSM-based world-model reinforcement learning for autonomous USV docking <i>Yeonsu KIM, Jinhyeok SEO, Sun-hyuck IM, Si-won KIM, Seong-hyeon JEONG, and Jong-yong PARK (Pukyong National University)</i>
T3-4-6 17:40 - 18:00	A study on risk assessment architecture for shore-based remote operation in MASS sea trials <i>Kwanwook CHUN, Geonwoo KIM, Seunghyeon LIM and Hyeonjae JO (KRISO)</i>

T3-5

Date	Thursday, October 22, 2026
Time	16:00 - 18:00
Location	Woodbine
Topic	Marine Structures and Materials 3
Chair	TBD

T3-5-1	Study on prediction of welding residual stress and deformation in cryogenic steel
16:00 - 16:20	<i>Ho-sang JANG, Woo-min CHO and Seong-tak OH (Hyundai Steel Company)</i>
T3-5-2	Structural crashworthiness analysis of a 15,000 TEU SMR-powered container ship under collision accidents
16:20 - 16:40	<i>Jae kang LEE, Won-seok CHOI, Jin-hyung KIM, Dong-hyeon KIM, Gi-ryeol PARK and Jung-min SOHN (Pukyong National University), Dong-wook KIM (KRISO)</i>
T3-5-3	Isogeometric analysis-based comparative study on ship hull spatial shell structures
16:40 - 17:00	<i>Zhijie DAI, Yuheng JI, Chuntong LI and Deyu WANG (Shanghai Jiao Tong University), Chun FANG, Pengyu WEI and Zeyu DAI (National Key Laboratory of Ship Structural Safety)</i>
T3-5-4	Prolonging the operational life of FPSO and SPM CALM buoy systems through hull and deck plate enhancement.
17:00 - 17:20	<i>Chigozie EBUNUOHA (Offshore Technology Institute, University of Port), Saturday Genuine EBIGENIBO and Celestine EBIETO (University of Port Harcourt)</i>

T4-1

Date	Friday, October 23, 2026
Time	10:10 - 12:10
Location	Texas 5, 6, 7
Topic	Ship Performance in General 4
Chair	TBD

T4-1-1	Enhancing vessel power prediction using sea trials and wind added resistance
10:10 - 10:30	<i>Orfeas BOURCHAS and George PAPALAMBROU (National Technical University of Athens)</i>
T4-1-2	A numerical study on the performance of a contra-rotating propeller according to immersion depth and regular wave
10:30 - 10:50	<i>Jun-young CHOI, Kwang-jun PAIK and Su-a JEONG (Inha University)</i>
T4-1-3	A longitudinal study of the drag penalty due to hull roughness on an operating ship
10:50 - 11:10	<i>Nicholas HUTCHINS, Jelle WILL, Isnain ALIMAN and Jason MONTY (University of Melbourne), Hendriyadi HENDRIYADI and Trisnadi MULIA (Samudera Indonesia), I Ketut SUASTIKA and I Ketut UTAMA (Institut Teknologi Sepuluh Nopember)</i>
T4-1-4	Scale effects on DARPA SUBOFF submarine and extrapolation approach based on CFD
11:10 - 11:30	<i>Heewon CHO, Kwang-jun PAIK and Byeong-u YOU (Inha University)</i>
T4-1-5	Numerical modelling techniques of a rotating circular cylinder as an energy saving device
11:30 - 11:50	<i>Sang-eui LEE (Changwon National University), Byung-hyuk LEE (HD Korea Shipbuilding & Offshore Engineering)</i>

T4-3

Date	Friday, October 23, 2026
Time	10:10 - 12:10
Location	Lakeview
Topic	AI & Digitalization 1
Chair	TBD

T4-3-1	From roughness to readiness: the science of surfaces in additive manufacturing
10:10 - 10:30	<i>Bart RAEYMAEKERS, Kubra SEKMENT, Samsul MAHMOOD and Piash BHOWMIK (Virginia Tech)</i>
T4-3-2	Enhancing hull structural response reconstruction by wave-induced modal approach with MLP-generated virtual sensors
10:30 - 10:50	<i>Seungyoung LEE, Kyoung-tae KIM and Won-ki MOON (Korean Register), Keun-bok SONG (HD Hyundai Heavy Industries)</i>
T4-3-3	AI-based ETA and fuel consumption prediction-driven integrated optimization for just-in-time port operations
10:50 - 11:10	<i>Juhyang LEE, Hungyu HWANG, Duhyeon JANG and Jeonghun SEO (Research Institute of Medium & Small Shipbuilding)</i>
T4-3-4	Development and application of vibration monitoring technology for marine engine room equipment
11:10 - 11:30	<i>Yihuai HU (Shanghai Maritime University)</i>
T4-3-5	Case study of a digital platform for production collaboration between shipyards and suppliers
11:30 - 11:50	<i>Jin-hyung PARK (Research Institute of Medium & Small Shipbuilding)</i>

T4-4

Date	Friday, October 23, 2026
Time	10:10 - 12:10
Location	Paluxy
Topic	Maritime Autonomous Surface Ships 1
Chair	TBD

T4-4-1	Cybersecurity across the shipbuilding lifecycle: why early design intent matters
10:10 - 10:30	<i>Sean RYAN (ABS)</i>
T4-4-2	Modeling of dwell time prediction under MASS code-based port arrival scenarios
10:30 - 10:50	<i>Jeongon EOM and Se-won KIM (Sejong University)</i>
T4-4-3	Design of a shadow mode-based AI data acquisition system for autonomous ships
10:50 - 11:10	<i>Seunghyeon LIM, Hyun-jae JO, Kwan-wook CHUN and Geun-tae YIM (KRISO)</i>
T4-4-4	Robust quay wall detection for ship berthing assistance using 3D LiDAR under fender and field-of-view constraints
11:10 - 11:30	<i>Seong-hyeon JEONG, Jin-hyeok SEO, Sun-hyuck IM, Si-won KIM, Yeon-su KIM, and Jong-yong PARK (Pukyong National University)</i>

T4-5

Date	Friday, October 23, 2026
Time	10:10 - 12:10
Location	Woodbine
Topic	Marine Resources & Renewable Energy 2
Chair	TBD

T4-5-1	Safety issues and smart monitoring of deepsea mining system by using DT/AI
10:10 - 10:30	<i>Moohyun KIM (Texas A&M University), Kun-ho KIM, Zhongfu GE and Tyson BREEDLOVE (ABS)</i>
T4-5-2	Shape optimization of a 15MW FOWT substructure for motion response minimization under site-specific metocean conditions
10:30 - 10:50	<i>Hyun jung PARK and Kwang-hyo JUNG (Pusan National University), Yun-suk CHUNG (Bureau Veritas Korea), Dong-woo JUNG (KRISO)</i>
T4-5-3	Current development status and future plans for the prototype of concave-shaped multi-flap wingsail technology by KRISO
10:50 - 11:10	<i>Kwangseok LEE and Hee-jin KANG (KRISO), Yeon-seung LEE (Hongik University)</i>
T4-5-4	Improving wind direction tracking of a single point moored floating offshore wind turbine using differential thrust control
11:10 - 11:30	<i>Jaehoon KIM, Dong-myung IM and Yoon-hyeok BAE (Hongik University), Javier FERNANDEZ and Pablo ZAMBRANA (EnerOcean S.L)</i>
T4-5-5	The expanding role of unmanned aerial vehicles in maritime inspections
11:30 - 11:50	<i>Georgios KOUTSOUMPAS (ABS)</i>

T5-1

Date	Friday, October 23, 2026
Time	13:40 - 15:40
Location	Texas 5, 6, 7
Topic	Design & Production of Marine Systems
Chair	TBD

T5-1-1 16:00 - 16:20	Application of risk based winterization: a case study <i>Ed MOAKLER, Michael GRANT and Dan OLDFORD (ABS)</i>
T5-1-2 16:20 - 16:40	Development of an automated pipe bundle routing system for ship engine rooms integrating pathfinding algorithms and design reuse <i>Mi-jin KIM, Jeongyeon KIM, Hyunseung LEE, Min-chul KONG and Inseok LEE (HD Korea Shipbuilding & Offshore Engineering), Hyunho WOO (HD Hyundai Heavy Industries)</i>
T5-1-3 16:40 - 17:00	Introduction to the application of aluminum sector cables in ships <i>Jeong-ho KIM and Tae-ryong CHOI (HD Hyundai Samho)</i>
T5-1-4 17:00 - 17:20	Research on comparative analysis of ship hull spatial shell structures based on isogeometric Method <i>Chuntong LI, Zhijie DAI, Yuheng JI, Pengyu WEI, Chun FANG and Deyu WANG (Shanghai Jiao Tong University)</i>

T5-2

Date	Friday, October 23, 2026
Time	13:40 - 15:40
Location	Texas 1, 2, 3
Topic	Advances in Maritime Life Cycle Assessment: Methods, Data, and Applications
Chair	TBD

T5-2-1	PEMFC durability evaluation for marine application <i>Jae hong KIM, Jae-heon KWON, Seon-hyeong LEE, Hyun PARK and Kwang-hyo JUNG (Pusan National University), Sanghoon LEE (Pureuntek Energy)</i>
13:40 - 14:00	
T5-2-2	Development of a data-driven framework for scenario-based economic evaluation of commercial vessels considering operational profiles <i>Nakyong CHOI (HD Korea Shipbuilding & Offshore Engineering, Inha University), Kwang-jun PAIK (Inha University)</i>
14:00 - 14:20	
T5-2-3	Introduction to dynamic failure mode and effects analysis for using hydrogen as marine fuel <i>Yoon CHOI and Byong-ug JEONG (University of Strathclyde)</i>
14:20 - 14:40	
T5-2-4	Risk of rotorsail wind propulsion technology systems <i>Hadis EBRHIMI and Harish PATEL (Corporate Technology)</i>
14:40 - 15:00	

T5-3

Date	Friday, October 23, 2026
Time	13:40 - 15:40
Location	Lakeview
Topic	AI & Digitalization 2
Chair	TBD

T5-3-1 13:40 - 14:00	Advanced machine learning architectures for multi-component emission prediction and energy optimization in cruise vessels <i>Chenxi JI and Zijing WANG (ABS)</i>
T5-3-2 14:00 - 14:20	Fuel-aware route and speed optimisation for cargo vessels using data-driven modelling and reinforcement learning <i>Konstantinos MESOLONGITIS, Orfeas BOURCHAS, Kyriakos ECONOMOU and George PAPALAMBROU (National Technical University of Athens)</i>
T5-3-3 14:20 - 14:40	Development and validation of an integrated framework for automated ship structural strength assessment with machine learning prediction <i>Jaewook AHN, Shin-woo JANG and Jinsu SON (RaonX Solutions)</i>
T5-3-4 14:40 - 15:00	A novel ship energy efficiency assessment method based on equipment degradation index <i>Yihuai HU and Huiru GUO (Shanghai Maritime University)</i>

T5-4

Date	Friday, October 23, 2026
Time	13:40 - 15:40
Location	Paluxy
Topic	Maritime Autonomous Surface Ships 2
Chair	TBD

T5-4-1	Radiometric field-adaptive thermal buoy detection under dynamic maritime conditions
13:40 - 14:00	<i>Kyungwon BAE, Joo-wan KIM, Chang-yeol JEE and Hyun joe KIM (Samsung Heavy Industries)</i>
T5-4-2	RoI-based VLM for data-efficient AtoN classification
14:00- 14:20	<i>Sun-hyuck IM, Si-won KIM, Jin-hyeok SEO, Seong-hyeon JUNG, Yeon-su KIM and Jong-yong PARK (Pukyong National University)</i>
T5-4-3	Selective SSM-based auto-gain tuning predictive PD controller for real-world time-varying dynamics in time-delay systems
14:20 - 14:40	<i>Jin hyeok SEO, Sun-hyuck IM, Si-won KIM, Seong-hyeon JEONG, Yeon-su KIM and Jong-yong PARK (Pukyong National University)</i>
T5-4-4	Enhanced BIT-based collision-free path planning for autonomous ships under positional uncertainty in confined port environments
14:40 - 15:00	<i>Sojin KIM (University of Science and Technology (UST)), Jeong-hong PARK (KRISO)</i>
T5-4-5	Traffic decomposition-based path planning for ship crossing in dense maritime traffic
15:00 - 15:20	<i>Zihao CAI, Yuan JIN, Hongdong WANG and Mingyang ZHANG (Shanghai Jiao Tong University)</i>

T5-5

Date	Friday, October 23, 2026
Time	13:40 - 15:40
Location	Woodbine
Topic	Marine Resources & Renewable Energy 3
Chair	TBD

T5-5-1	Modelling of the low frequency behavior of the floating systems: second order model and nonlinear Froude Krylov + nonlinear hydrostatic model
13:40 - 14:00	<i>Sime MALENICA, George JAGITE and Igor TEN (Bureau Veritas Marine and Offshore)</i>
T5-5-2	Parametric study of sum frequency load for TLP FOWT in frequency domain
14:00 - 14:20	<i>Won-jun CHOI and Seung-jae LEE (Korea Maritime & Ocean University), Yong-uk RYU (Chonnam National University)</i>
T5-5-3	“Long term wave induced motion prediction of FOWTs using Fourier neural operator with time series decomposition
14:20 - 14:40	<i>Gwanwoo PARK, Seungjae LEE and Hae-young LIM (Korea Maritime & Ocean University), Minjun LEE (Tsinghua University)</i>
T5-5-4	Experimental and numerical investigation of the ultimate torsional behavior of wind turbine tower structures
14:40 - 15:00	<i>Won seok CHOI, Jin-hyung KIM, Dong-hyeon KIM, Jae-kang LEE, Gi-ryeol PARK and Jung-min SOHN (Pukyong National University), Sang-jin KIM (National Sun Yat-sen University)</i>
T5-5-5	Statistical analysis of hydrogen accident
15:00 - 15:20	<i>Insik HWANG and Byong-ug JEONG (University of Strathclyde)</i>
T5-5-6	Performance verification of coastal vessels equipped with rotor sails
15:20 - 15:40	<i>Junghyung PARK, Yun-ho KIM, Kwang-seok LEE, Bong-gi CHOI and Hee-jin KANG (KRISO)</i>