The Royal Institution of Naval Architects Presents:

SHIPBUILDING ICCAS International Conference on Computer Applications in Shipbuilding

13-15 September 2022, Yokohama, Japan

Conference Programme rev 3

DAY 1 - Tuesday 13th September 2022			
08.30-09.25	REGISTRATION & COFFEE		
Session 1	**Plenary - G401**		
09.25-09.30	**Welcome Address**		
	Dr. Abe Akinori - National Maritime Research Institute		
	Mr. Akihiko Masutani - Sumitomo Heavy Industries Marine & Engineering Co., Ltd.		
	Dr. Noriyuki Sasaki, University of Strathclyde		
10.45-10.50	**Siemens - Sponsor Presentation**		
10.50-11.20	**COFFEE**		
	Track I	**Track II**	**Track III**
Session 2	…	…	…
11.20-11.55	**Development of PLM system for precise production planning and production control in shipbuilding** K Matsuo, National Maritime Research Institute	**Semi-Automatic Distributed Ship Service Systems Routing Framework for Submarine Early-Stage Design** M H Mukti, University College London	**Cost Benefit Analysis to assess the effectiveness of measure against flooding of cruise ships and ROPAX ferries** S Wurst, BALance Technology Consulting GmbH
11.55-12.30	**Digital Platform Enabling Robotic Survey, Repair & Agile Manufacturing of Ships and Watercraft** F Santo, Lancaster University	**Automatic Data Extraction and Unfolding for Ship Hull Plates on CATIA** Y Hu, Wuhan University of Technology	**Development of a communication platform to support consensus-building among stakeholders in shipping decarbonization** K Takahashi, Mitsubishi Research Institute, Inc.
12.30-12.35	**Cadmatic - Sponsor Presentation**		
12.35-13.50	**LUNCH**		
Session 3	…	…	…
13.50-14.25	**Information management in shipbuilding projects - uninterrupted information flow from 3D design to production data** L Seppälä, Cadmatic	TBC	**Emergent Simulation Techniques in the Development of the Quiescent Period Prediction (QPP) Flight Deck Motion Forecasting Tool** B Ferrier, Hoffman Engineering
14.25-15.00	**Japanese Shipbuilding DX Acceleration Through the Application of Public Sector Transformation Strategies** G Goulanian, SSI	TBC	**Development of a low-cost real-time ocean wave observing system based on deep learning image algorithm** J Choi, Daewoo Shipbuilding & Marine Engineering Co., LTD.
15.00-15.35	**Smart Digital Shipyards with Model-Based Manufacturing** O Chouche, Dassalt Systemes SE	**An expanded application of Basic Ship-Planning Support System using Big Data in Maritime Logistics for Panamax and Capesize Dry Bulk Carriers** D A F Muzhoffar, Hiroshima University	**Obstacle Detection and Tracking of Unmanned Surface Vehicles Using Multi-view Images in Marine Environment** J Park, Seoul National University
15.35-16.10	**COFFEE**		
Session 4	…		
16.10-16.45	**Drawing design of hull block structure based on secondary development of AutoCAD** Z Hu, Wuhan University of Technology	**Application of mixed reality technology to ship manufacturing process** Y Mimori, Mitsubishi Shipbuilding Co., Ltd.	**Wind assisted propulsion: Investigations on the use of ship holistic models for performance analysis** A Bellot, LMG MARIN France
16.45-17.20	**The benefits of having a best-in-class shipbuilding tool** R Perez Fernandez, Siemens Digital Industries Software	**About Creating Open-source 3D Modular Viewer in Python** G Sikic, LINA et al.	**Study on Simulation Based Evaluation of Route and Cargo Specific Project for Introducing Decarbonized Ships** S Wanaka, National Maritime Research Institute
17.20-19.00	**EVENING DRINKS RECEPTION, SPONSORED BY SIEMENS**		

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DAY 2 - Wednesday 14th September 2022			
	Track 1	**Track 2**	**Track 3**
08.30-09.00	**REGISTRATION**		
Session 1	…	…	…
09.00-09.35	**Development of a Pipe Fabrication Process Determination System Using Graph Database and Process Simulation** Y Mihara, Yokohama National University	**Digital Enterprise Platform - Enabling efficient CAD, PLM, ERP Integration on shipyards** J Bitomsky, Prostep	**TBC**
09.35-10.10	**Autonomous Mobile Robots introduction in shipyards' manufacturing process** C Dentesano, Fincanteri	**TBC**	**TBC**
10.10-10.45	**Automated Generation and Low Effort Authoring of Commissioning Content in the Maritime Industry** A Elzalabany, Technical University of Hamburg	**A New Approach for Using CAD and PLM Integration** R Perez Fernandez, Siemens Digital Industries Software	**TBC**
10.45-10.50	**Class NK - Sponsor Presentation**		
10.50-11.20	**COFFEE**		
Session 2	…	…	…
11.20-11.55	**From Point Cloud to CAD-model based on AI** J Luetzenberger, Prostep	**A route planning method for coastal navigation of small ships** D Jeong, Seoul National University	**Coupling a high fidelity near surface effects model into PARAMARINE S4** P Crossland and C Forrest, QinetiQ Ltd
11.55-12.30	**Digital Twinning for Optimizing Operational Energy Efficiency of Harbour Craft** G S Chopra, SeaTech Solutions International	**Development of a Shipping Market Forecasting System Using Vessel Movement Data and its Practical Application** Y Wada, National Maritime Research Institute, Japan	**A Mobile Application to Assess the Stability of Small Fishing Boats** A Grech La Rosa, University College London
12.30-13.50	**LUNCH**		
Session 3	…	…	…
13.50-14.25	**Digital Transformation Through Data-Driven and Data-Centric Approaches with Artificial Intelligence** J Khairuddin, Universiti Teknologi Malaysia	**A Model-Based Decision Support Framework for Maritime Industry: Case Study of Alternative Fuels Deployment** K Hiekata, The University of Tokyo	**TBC**
14.25-15.00	**A Method of Variable Recognition and Connection for Reviewing Ship Regulations** M Kong, Seoul National University	**Dynamic modelling of ammonia crackers and hydrogen PEM fuel cells for shipping applications** C McKinlay, University of Southampton	**TBC**
15.00-15.35	**Making 3D Model-Based Approval a Reality** T Masui, NAPA Japan	**Voyage optimization with wind propulsion** V Paakkari, Norsepower	**TBC**
15.35-15.40	**Prostep - Sponsor Presentation**		
15.40-16.10	**COFFEE**		
Session 4	…	…	…
16.10-16.45	**Interface development between the 3D CAD software and the structural strength assessment software for efficient classification approval** J Kim, Korean Register	**IoS-OP: Initiatives for ship operation data collection, distribution, and utilization** Y Ikeda, ShipDC	**TBC**
16.45-17.20	**Streamlining the ship structural optimization process by using an early 3D product model** T Masui, NAPA Japan	**Zero Infrastructure Geolocation Of Nearby First Responders On Ro-Ro Vessels** D Zeinalipour, University of Cyprus	**TBC**
17.20-17.25	**END OF DAY 2**		

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DAY 3 - Thursday 15th September 2022			
	Track 1	**Track 2**	**Track 3**
08.30-09.00	**REGISTRATION**		
Session 1	…	…	…
09.00-09.35	**ACV (Acoustic Control Vantage)** R Taylor, IMI Truflo Marine Limited	**A position estimation system for indoor workshops making use of maximum likelihood estimation in Weibull distribution model of wireless LAN** H Kimura, Kyushu University	**TBC**
09.35-10.10	**Automated IoT equipment Installation Design & Cable laying instructions for shipbuilding** A Lalechos, LePlan	**Development of simulation system based on heuristic algorithm for berth planning.** H Kim, Samsung Heavy Industries Co. Ltd.	**TBC**
10.10-10.45	**A social - network based visualisation platform for monitoring naval ships design** G Anagnostopoulos, University of Strathclyde	**Plan, Do, Check, Act: Enabling the Deming Cycle for Ship Production** C Zerbst, Prostep	**TBC**
10.45-10.50	**BETA CAE - Sponsor Presentation**		
10.50-11.20	**COFFEE**		
Session 2	…	…	…
11.20-11.55	**Accelerating simulation-driven hull form optimisation using shape-supervised dimension reduction** S Khan, University of Strathclyde	**About Using the Game Engines in Shipbuilding, Software Developer's Perspective** G Sikic, LINA et al	**Vehicle Hot Spot Detector and Dangerous Goods Detector to Fire Ignition Prevention in Ro-Ro Ships** Á Marrero, CENIT Research Group of CIMNE
11.55-12.30	**Development of CAD based stability calculation software for Pure-Loss of Stability and Parametric Rolling Failure Mode of 2nd Generation Intact Stability Criteria** J Park, Korean Register	**Virtual reality beyond design reviews in shipbuilding : the need for industry-tailored immersive data interaction.** N Fourrier, Segula Technologies	**Stowage Planning Tool Supporting Fire Risk Management: A New Way For Cargo Distribution** F Rodero, CENIT Research Group of CIMNE
12.30-12.35	**SSI - Sponsor Presentation**		
12.35-13.50	**LUNCH**		
Session 3	…	…	…
13.50-14.25	**AI/ML applications for ship design** M Wheeler and J Hodges, Siemens Industry Software Computational Dynamics Limited	**Sustainable Ship design with Modular Shipbuilding approach** R Audoire, Dassault Systemes	**A study of process simulation based on a multi-agent system for shipbuilding** T Taniguchi, National Maritime Research Institute
14.25-15.00	**TBC**	**Seamless Integration of Ship Stability Systems into a PLM Driven Digital Twin** T-H Wölke, CLEVR GmbH	**Simulation Method of Fleet Transition Based on Technology, Economics, and Regulation Scenario for Decarbonization of Shipping** S Wanaka, National Maritime Research Institute
15.00-15.35	**Interceptor Effects on a 3D Rectangular Plates in a Calm Water by Using Computational Fluid Dynamics** A M F Putra, Osaka University	**Dynamic optimization of port operations onboard a typical Ro-Ro vessel, aided by a smart decision support system** C S Uppal, Cochin University of Technology	**Performance optimisation of solid oxide fuel cells through wasted heat recovery systems for marine applications** P Manias, University of Southampton
15.35-15.40	**Sponsor Presentation**		
15.35-17.20	**COFFEE and CLOSE**		