

# SHIPBUILDING ICCAS SINGAPORE | 2017

International Conference on Computer Applications in Shipbuilding

26 - 29th September 2017, Singapore

Sponsored by:











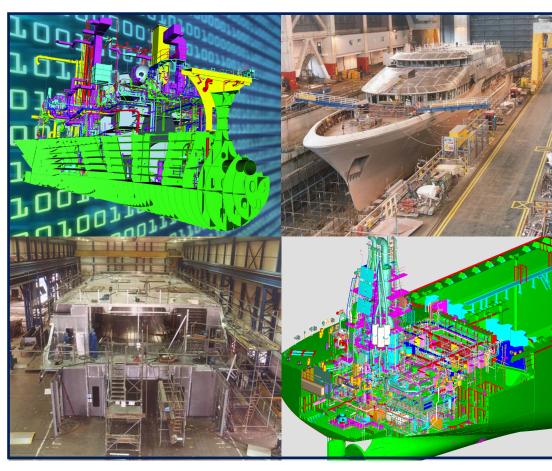




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THE 18<sup>th</sup> INTERNATIONAL CONFERENCE ON COMPUTER APPLICATIONS IN SHIPBUILDING (ICCAS 2017)

26-29 September 2017, Singapore

The 18<sup>th</sup> ICCAS conference follows the noteworthy success of the 17<sup>th</sup> ICCAS in 2015 at Bremen, Germany, in which a programme of 81 high quality papers from 19 countries was presented to delegates.

ICCAS offers unequalled opportunity for delegates from the global shipbuilding industry to understand the practical application of advanced computing technologies across all aspects of design, production, and in-service operation of ships.



Papers will discuss the implementation, issues, success and benefits of applying computing systems in the industry to improve methodologies, processes and productivity.

Attracting a large international audience, ICCAS provides an excellent forum for companies investigating or developing computer applications in shipbuilding, and for those seeking to enhance the computing systems they use.

ICCAS contributes to knowledge retention and enhancement, a global concern across the industry, with delegates discussing common problems with peers, and young engineers meeting, questioning and discussing a wide variety of presentation topics with authors and industry experts.

#### Venue

The ICCAS 2017 conference will take place in the Crystal Suite on the second floor of the Holiday Inn Singapore Orchard City Centre: 11 Cavenagh Road, Singapore 229616.

## **Deadlines and Key Dates**

Deadline for submission of papers (Authors)

Early Bird Registration discount ends

Conference

31st July 2017
28th August 2017
26 - 29 September 2017

## Language

The conference will take place in English.

#### **Conference Dinner**

Delegates are invited to a dinner at the end of the first day, 26<sup>th</sup> September, kindly sponsored by AVEVA.

## **Evening Drinks Reception**

There will be a drinks reception at the end of day two, 27th September, kindly sponsored by Siemens.

### **Shipyard Visit**

The conference will include an optional visit to a local shipyard on Friday 29<sup>th</sup> September. Places are limited and will be allocated on a first come, first served basis.

## Sponsorship & Exhibition

This conference provides an excellent opportunity to increase your organisations profile and to network with a highly focused audience. A number of cost effective sponsorship options are available, including various conference sponsorship packages, exhibition space and literature distribution. If you are interested in promotional opportunities, please contact the Conference Organiser to discuss your individual requirements.

## International Programme Committee:

- John Duncan (Chairman), Ministry of Defence, UK
- Jamie Duncan (Secretary), Ministry of Defence, UK
- Torben Andersen, Odense Steel Shipyard, Denmark
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- Richard Lee Storch, University of Washington, USA
- Aldo Zini, Cetena, Italy

#### Singapore

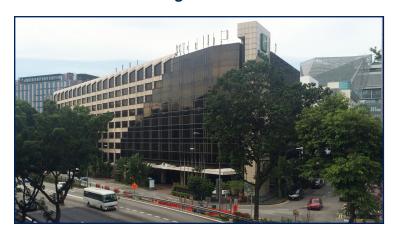
Founded in 1819 as a colonial trading post, since independence Singapore has become one of the world's most prosperous countries and one of its busiest ports. Combining the skyscrapers and subways of a modern affluent city with a medley of Colonial, Chinese, Malay and Indian influences the city it is a microcosm of Asia. It boasts a diverse mix of Malays, Chinese, Indians, and a large group of workers and expatriates from all across the globe resulting in tasty food, good shopping, and a vibrant night life scene. Singapore is one of the most poular destinations to visit.

#### Further Information:

If you have any questions regarding this conference, please contact the RINA Conference department on:

Tel: +44 (0)20 7235 4622 Fax: +44 (0)20 7259 5912 Email: conference@rina.org.uk

Website: www.rina.org.uk/ICCAS-2017



#### Papers accepted for ICCAS 2017, Singapore:

DEVELOPMENT OF SHIP STRUCTURAL DESIGN AND ASSESSMENT SYSTEM BASED ON HARMONIZED CSR, Hogyun Park, Korean Register, Korea

IMPROVING SHIPYARD STEEL MATERIAL HANDLING USING COMPUTER SIMULATIONS, Ujjawal Chauhan, IIT Kharagpur, India

INTEGRATED QUANTITATIVE RISK ASSESSMENT FOR MARINE LNG SYSTEMS, Byongug Jeong, Byung Suk Lee, Peilin Zhou, Department of Naval Architecture, Ocean and Marine Engineering, University of Strathclyde, UK

IMPROVEMENTS IN LEARNING PROCESS AND PRODUCTIVITY. AN ANALYSIS OF THE RETURN OF THE INVESTMENT, Rodrigo Perez, SENER, Spain

ENSURING SOFTWARE RELIABILITY, SAFETY, AND SECURITY, David Card, DNV GL. USA

SINGLE SOURCE DATA - HELP OR HINDRANCE, J L Martin, SAMOSC Ltd., UK

THE VIRTUAL SHIP: FROM DESIGN TO TRAINING, Massimo Peverero, Davide Tozzi, Aldo Zini (CETENA S.p.A.), Italy

NUMERICAL AND EXPERIMENTAL STUDY OF RESISTANCE, TRIM AND SINKAGE OF AN INLAND SHIP IN EXTREMELY SHALLOW WATER, Qingsong Zeng, Robert Hekkenberg, Cornel Thill, Erik Rotteveel, Department of Maritime and Transport Technology, Delft University of Technology, the Netherlands

SHIP MOTION PREDICTION USING SIMULATION - TECHNOLOGY DEVELOPMENTS AND RESULTS FROM A DEDICATED ROYAL NAVY SEA TRIAL, Bernard FERRIER, Hoffman Engineering, USA

RESEARCH ON THE COMBINATORIAL OPTIMIZATION PROBLEM AND PSO BASED SOLUTION IN SHIP BLOCK LIFTING DESIGN, Rui Li, Dalian University of Technology, China

ADOPTING EUROPEAN CAD/CAM SOFTWARE FOR USE IN THE US MARKET: A RETROSPECTIVE, Samantha Griswold, Josh Horst, Andrew Girdler, Nathan Larsen, Glosten, USA

VIRTUAL REALITY EMPOWERED DESIGN, Luis Sánchez, Alfonso Cebollero, Sener Ingeniería y Sistemas S.A., Spain

INNOVATIVE PROGRESS MONITORING TOOL FOR ELECTRICAL DETAIL DESIGN, Anish S, Cochin Shipyard Ltd., India

DEVELOPMENT FOR EVALUATION SW REGARDING TO CONTAINER SECURING STRENGTH, Jin-Young Park, Korean Register, Republic of Korea

HULL FORM GENERATION FROM CURVE NETWORK BASED ON OPEN SOURCE SOFTWARE FOR 3D SHIP CAD, Wangseok Jang, Seoul National University, Republic of Korea

INTELLIGENT PME SOFTWARE FOR PRODUCTIVITY IN DESIGN OFFICES, Prabjot Singh Chopra, Manager, Technical & Business Development, SeaTech Solutions International (s) Pte. Ltd. Singapore, Umamaheshwar Reddy Gadekari, Asst. Manager, SeaTech Solutions International (s) Pte. Ltd. Singapore

USING VIRTUAL REALITY PARADIGM TO PRESENT SHIP STRUCTURES IN CAD ENVIRONMENT, Gordan Sikic, USCS d.o.o., Croatia

REAL-TIME SHIP AIR-WAKE AND FREE STREAM MEASUREMENTS USING DOPPLER LiDAR, Jacqueline Christmas, University of Exeter, UK

DRIVING TRANSFORMATION IN THE AGE OF EXPERIENCE, Stéphanie FOURNIER, Dassault Systemes, France

IMPROVING LAUNCH AND RECOVERY OPERATIONS THROUGH QUIESCENT PERIOD PREDICTION FROM RADAR, Jacqueline Christmas, University of Exeter, UK

PARAMETRIC DESIGN AND MULTI-OBJECTIVE OPTIMISATION OF CONTAINERSHIPS, Alexandros Priftis, University of Strathclyde, UK

PERFORMANCE VERIFICATION OF A SUBMARINE AIR CONDITIONING SYSTEM, Jan D. Wilgenhof, MecDes, the Netherlands, Jesús Molina Toledo, Navantia, Spain

EXPERIENCE CAPTURE IN SHIPBUILDING THROUGH COMPUTER APPLICATIONS AND NEURAL NETWORKS, Sangeet S U and K Sivaprasad, Department of Ship Technology, Cochin University of Science and Technology, Kochi, India

AN EVOLUTIONARY MODEL FOR UNDERSTANDING THE EFFECTS OF LIMITED INFORMATION ON SHIP DESIGN DECISIONS AND LOCK-IN, Dorian C. Brefort, Colin P. F. Shields, David J. Singer, University of Michigan, USA

 $\begin{array}{l} \textbf{MITIGATION OF INEFFECTIVE COLLABORATIVE WORKING}, \ \textit{Paul Moscrop}, \\ \textit{Daniel Stokes, BAE Systems, UK} \end{array}$ 

IMPROVING SHIPYARD SAFETY AND REALIZING COST SAVINGS IN SHIPBUILDING THROUGH ADVANCEMENTS IN DIGITALIZATION, *Ujjawal Chauhan*, *IIT Kharagpur*, *India* 

A FUNCTION LEARNING METHOD FOR ASSESSING THE EFFECTS OF DESIGN BIAS IN EARLY-STAGE SHIP DESIGN, Michael J. Sypniewski and David J. Singer, Department of Naval Architecture and Marine Engineering, The University of Michigan, USA

CAD/CAM INTEGRATION WITH ERP/PLM IN NAVAL SHIPBUILDING, D Morais, D Larkins and M Waldie, SSI, Canada

ANALYSIS OF SLOSHING IN TANKS USING IMAGE PROCESSING, Rahul Kamilla, ITT Kharagpur, INDIA

AN ADAPTED ANT COLONY OPTIMIZATION METHOD FOR EXPLORING SURVIVABLE DISTRIBUTED SYSTEM CONFIGURATIONS WITHIN A NOTIONAL NAVAL COMBATANT, Colin P. F. Shields, Michael J. Sypniewski, and David J. Singer, Department of Naval Architecture and Marine Engineering, The University of Michigan, USA

SPATIAL AUGMENTED REALITY FOR MANUFACTURING INFORMATION OF CURVED SHELL PLATES, Kazuo Hiekata, Taiga Mitsuyuki, Masakazu Enomoto, Kota Okada, Yoshiyuki Furukawa, The University of Tokyo, Japan

ON A CONCEPT OF A 3D CAD/CAM SYSTEM BASED ON GEOMETRIC THEORY FOR CFRP PLATES MOLDING PROCESS IN SHIPBUILDING, Kohei Matsuo, National Maritime Research Institute, Japan

BIG DATA PLATFORM FOR PLM (PRODUCT LIFECYCLE MANAGEMENT) SYSTEMS IN SHIPBUILDING AND OFFSHORE INDUSTRY, Seong-Hoon Kim, Myung-Il Roh, Min-Jae Oh, Seoul National University, Republic of Korea, Namkug Ku, Dong-eui University, Republic of Korea, Sehyun Myung, Youngsan University, Republic of Korea

AN ENTERPRISE MODELLING APPROACH FOR THE EARLY SHIP DESIGN, Robert Bronsart, University of Rostock, Germany, Wisam Jabary, Tischrin University, Syria

OPTIMAL ARRANGEMENT METHOD FOR NAVAL SURFACE SHIP CONSIDERING THE STABILITY, OPERABILITY, AND SURVIVABILITY, Sun-Kyung Jung, Myung-Il Roh, Seung-Min Lee, Ki-Su Kim, Seoul National University, Republic of Korea

NAVAL SHIP DESIGN RULES EMBODIMENT IN A CAD TOOL, Jesús A. Muñoz, Virginia Marcos, SENER Ingeniería y Sistemas, Spain

A STUDY ON THE SUPPORTING SYSTEM OF SHIP BASIC PLANNING BY USING MARINE LOGISTIC BIG DATA, Mohammad Danil Arifin ST.MT, Kunihiro Hamada, Noritaka Hirata, Yuki Koide, Hiroshima University, Japan

A FRAMEWORK STUDY ON PLATE FORMING CAUSED BY FLAME HEATING WITH ELASTIC FE COMPUTATION, Jiangchao Wang - University of Science and Technology, Wuhan, China, Hong Zhou - Jiangsu University of Science and Technology, Zhenjiang, China

INTENT-DRIVEN CAD VS. MECHANICAL CAD IN SHIPBUILDING - A REVIEW AND SOLUTION OUTLINE, Matthias Grau, PROSTEP, Germany

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OPTIMIZATION OF LAYOUT AND SIZE OF STIFFENER IN SHELL STRUCTURE FOR SHIPBUILDING, Zhijun Liu, Shingo Cho, Akihiro Takezawa, Mitsuru Kitamura, School of Engineering, Hiroshima University, Japan

AUTOMATIC PIPING ARRANGEMENT DESIGN CONSIDERING PIPING SUPPORTS AND CURVED SURFACES OF BUILDING BLOCKS, Hajime Kimura, Kyushu University, Japan

AS-BUILD DOCUMENTATION BASE ON SCAN DATA, Christian Barlach, R&D Manager, ISC A/S, Denmark

INTEGRATED DEVELOPMENT ENVIRONMENT OF AUTONOMIC SOFTWARE FOR USV (UNMANNED SURFACE VEHICLE) BASED ON ROS (ROBOT OPERATING SYSTEM), Hye-Won Lee, Myung-Il Roh, Luman Zhao, Seung-Ho Ham, Nakwan Kim - Seoul National University, Republic of Korea, Chan-Woo Yu - Agency for Defense Development, Republic of Korea

A STUDY ON DECISION SUPPORT METHODOLOGY FOR EVALUATING IOT TECHNOLOGIES USING SYSTEMS APPROACH, Kazuo Hiekata, Taiga Mitsuyuki, Bryan Moser, Ryuji Ueno and Ryota Wada, University of Tokyo

DEVELOPMENT OF THE UNIFIED DIRECT STRENGTH ANALYSIS (UNIFIED-DSA) SYSTEM IN CONFORMITY WITH THE MULTI-PURPOSE ANALYSIS OF SHIP HULL STRUCTURE, UTILIZING THE COMPREHENSIVE CAE MODELING APPLICATION; TECHNOSTAR SHIP MODELER TSM, Yasunori KAMIMARU, Daisuke FUJITA, Junichi FUNATSU - TechnoStar Co., Ltd, Japan

EFFICIENT MODEL DATA REUSE THROUGH ADVANCED COPY TECHNIQUES, Joseph Baumer, Intergraph PP&M, USA

LEVERAGING ENGINEERING 3D DESIGN MODELS FOR PRODUCTION PLANNING THROUGH THE SHIPBUILDING PROJECT LIFECYCLE, Stalin Ybiernas, Keppel Singmarine, Singapore Najaf Bashir, Intergraph PP&M, Singapore

A CASE STUDY IN OPTIMIZING 3D EARLY DESIGN FOR SHIPBUILDING, Jinsup Cheong, Samsung Heavy Industries, South Korea, Kristin Cochran, Intergraph PP&M, United States, HeeWon Lee, Intergraph Marine Center, South Korea

SMARTER PRODUCTION, PANEL LINE OPTIMIZATION, Kimmo Salmi, Intergraph PP&M, Singapore

SMARTER PRODUCTION, INDUSTRY 4.0: DREAM OR REALITY? Marcel Veldhuizen, Intergraph PP&M, Netherlands

EXTENDING THE 'LIFE' OF A DESIGN 3D MODEL TO DELIVER DETAILED AND RELIABLE INFORMATION TO THE SHOP FLOOR AND IMPROVE PRODUCTION PLANNING, Davide Guzzi, Intergraph PP&M, USA

INVESTIGATING THE IMPACT OF DISTRIBUTED SYSTEM ROUTING DENSITIES ON VESSEL OPERABILITY, Conner J. Goodrum, Colin P. F. Shields, and David J. Singer - The University of Michigan, USA

AUTO-FINE MESH GENERATION FOR LOCAL ANALYSIS BASED ON THE CONSISTENT FINITE ELEMENT MODEL, Myeong-Jo Son, Jeong-jae Woo, Ho Gyun Park, Jeong-Youl Lee, KR; Korean Register, Republic of Korea

CYBER PHYSICAL SYSTEM IN SHIPBUILDING TOWARD REALIZE SMART SHIPYARD: INTEGRATION OF MONITORING SYSTEM AND SHIPYARD SIMULATION SYSTEM, Kazuhiro Aoyama, Mayuna Hoshi, Yusei Hiro, Ryo Kitamura and Kazuya Oizumi, The University of Tokyo, Japan

HIGH PERFORMANCE VIRTUAL REALITY FOR MASSIVELY COMPLEX 3D MODELS, Ken Goh, Knud E Hansen Australia, Australia

THE NEXT GENERATION OF ASSET INTEGRITY MANAGEMENT SYSTEM, Jose Esteve, Bureau Veritas Marine & Offshore, France

EXPERIENCE CAPTURE IN SHIPBUILDING USING MICROSOFT SHARE POINT, Yashwant R. Kamath, K. Sivaprasad, Department of Ship Technology, Cochin University of Science and Technology, Kerala, India

THE CONCEPT OF SPEEDS (SMART PLATFORM OF ENHANCED ENGINEERING DATA FOR SHIPPING AND SHIPBUILDING) AND INNOVATIVE USE OF SHIP 3D DATA, Kunihiro Hamada, Hiroshima University, Japan

EMD-BASED NATURAL EXCITATION TECHNIQUE FOR MODAL PARAMETERS IDENTIFICATION FOR SHIP STRUCTURE, Hongyu Cui, Dalian University of Technology, China

EVENT DRIVEN SHIPYARD PRACTICE: A PLATFORM FOR DEPARTMENT AND SUB-DEPARTMENT LEVEL COMMUNICATION, S.K Jha, Gandhi Institute of Science & Technology, India, Khandoba Rao Miriskar, Vidyut Bhaskar, Intergraph, India

RESEARCH ON LARGE-SCALE MARINE PROPULSION SHAFTING LOAD TEST AND ADJUSTMENT TECHNOLOGY, Wang Ji, Liu Zhongchi, Xue Dongxin, Zhang Shengjun, Wang Feixiang, Dalian University of Technology, China

**3D DIGITAL CLASSIFICATION**, Christophe Chauviere, Olivier Degrand, Bureau Veritas, France, Thierry Le Gal, Lionel Le Guennic, Cédric Cheylan, DCNS, France, Alexandre Tew Kai, Glenn Dutrieux, Dassault Systèmes, France

SYNCHRONISED MONITORING OF SUSTAINABILITY AND LIFE CYCLE COSTS WITH A MODULAR MARITIME IT - PLATFORM, Reinhard Ahlers, Christian Norden, BALance Technology Consulting GmbH, Germany, Alessandro Fontana, Donatella Corti, SUPSI, Italy, Maurizio Petrucciani, Dassault Systèmes Italia Srl, Italy, Jacopo Cassina, Holonix S.r.L, Italy

METHODOLOGY FOR EFFICIENT APPLICATION OF 3D SHIP MODELLING SOFTWARE, Damir J. Kolich, Armin Becirevic, Niksa Fafanjel, University of Rijeka, Croatia, Richard Lee Storch, University of Washington, USA

NUMERICAL SIMULATION OF HYDRODYNAMIC IMPACT ON AN OFFSHORE WIND TURBINE STRUCTURE, E. Smith, S. Olgun - PLM Technology, Denmark, C. Barlach, E. Tsakadze - ISC A/S, Denmark

SHIP CONCEPT DESIGN BASED ON A 3D-CAD-SYSTEM INCLUDING A REQUIREMENT VERIFICATION, Hannes Lindner, Robert Bronsart, University of Rostock, Germany

A STUDY ON THE IMPROVEMENT AND APPLICATION OF SYSTEM DYNAMICS MODEL FOR DEMAND FORECASTING OF SHIPS, *Yujiro Wada, Hiroshima University, Japan* 

APPLICATION OF NUMERICAL SIMULATION OF CORROSION IN SHIP AND MARINE STRUCTURES, Zhu Shengqing, Yang Rui, Xiao Gang, GLB, China

EFFECTIVE UTILIZATION OF DIGITAL DESIGN ASSETS DURING THE POST-DESIGN PHASES IN MODERN SHIPBUILDING, Mikko Yllikäinen, CADMATIC, Finland

PROTECTING INTELLECTUAL PROPERTY RIGHTS IN DISTRIBUTED CAD ENVIRONMENTS, Ludmila Seppälä, CADMATIC, Finland

INTEGRATION OF SHIP HULL FORM MODELING BASED ON SUBDIVISION SURFACES WITH OTHER SHIP DESIGN TOOLS, Sebastian H. Greshake, Robert Bronsart, University of Rostock, Chair of Ship Design, Germany

ENHANCEMENT OF THE SHIP NOISE PREDICTION PROGRAM, Shinichi Tanaka, Japan Marine United Corporation, Japan

BOW SHAPE OPTIMIZATION OF A CRUISE SHIP FOR MINIMUM ADDED RESISTANCE BASED ON ACTUAL OPERATIONAL PROFILE, FENG Pei-yuan, HE Jia-yi, Fan She-ming, Wang Jin-bao, Marine Design & Research Institute of China (MARIC), China

IMPLEMENTATION OF WEARABLE COMPUTING IN SHIPBUILDING, Rogero Fernando, Patel Micro Data, India

EFFICIENT HULL FORM DESIGN OPTIMIZATION USING HYBRID EVOLUTIONARY ALGORITHM-MORHING APPROACH, Joo Hock Ang, Cindy Goh, Vijay P. Jirafe, Yun Li, Sembcorp Marine Ltd, Singapore, University of Glasgow, UK

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THE EXAMINATION REPORT, THE EFFECTIVE INFORMATION COLLABORATION BETWEEN DIFFERENT SEVERAL DESIGN STAGES, Taisuke Kunisada, Sanoyas Shipbuilding Corporation, Japan

MODELLING AND SIMULATION OF ORGANIC RANKIE CYCLE FOR WASTE HEAT RECOVERY OF AN OFFSHORE SUPPLY VESSEL, ChunWee Ng, I C K Tam and D Wu, Newcastle University, UK

AN INTEGRATED OPTIMIZATION SYSTEM FOR REDUCTION OF CALM WATER RESISTANCE AND ADDED RESISTANCE IN WAVES OF A CRUISE SHIP, Jiayi He, Marine Design and Research Institute of China, China

THE IMPLICATIONS OF UNINHABITED VEHICLE TECHNOLOGY ON FLEET STRUCTURES AND SHIP DESIGN, N. Kouriampalis, R. J. Pawling and D. J. Andrews, Design Research Centre, Department of Mechanical Engineering, University College, London, UK

VARIATION OF ASYMMETRIC SIDE HULL STAGGERED AND SEPARATION OF PENTAMARAN HULL RESISTANCE BY COMPUTATIONAL FLUID DYNAMICS (CFD), Yanuar, Firman A. Nugroho, Zulfah Zikrina, Universitas Indonesia, Indonesia

DEVELOPMENT OF AN EFFICIENT INSTALLATION METHOD FOR VERTICAL PRESSURE VESSELS IN OFFSHORE PLANTS WITH 3D SCANNING TECHNOLOGIES, Mingyu KIM, SAMSUNG Heavy industries, Republic of Korea

PRE-PROCESSING MODULE FOR THE WELDING DISTORTION ANALYSIS ACCORDING TO THE DIFFERENT ASSEMBLY SEQUENCES, Minseok Kang, Hyun Chung, KAIST, Republic of Korea

TECHNOLOGICAL ADVANCEMENTS MADE IN NAKILAT'S FLEET, Fairuz Aledroos, Nakilat, Qatar

POWER WITH SIMPLICITY TO VISUALIZE YOUR DIGITAL ASSET - A REVOLUTION FOR DECISION MAKING, Gauthier Stonestreet, AVEVA Solutions Ltd, UK (co-written and co-presented with Lundin Norway)

ADVANCED REPORTING AS A TOOL IN COMPLEX MULTIDISCIPLINARY ANALYSIS - CASE GENERIC SURVIVABILITY ASSESSMENT, Roope Kotiranta, Surma Ltd. Finland

DESIGN OF CARGO HOLD VENTILATION SYSTEM FOR ENERGY-SAVING PCTC USING CFD, Woorim Lee, Hyundai Heavy Industries, Korea

STUDIES OF DEVELOPMENT OF RISK MANAGEMENT SYSTEM BASED ON COMPUTER TO SHIPBUILDING, Ilham Salo Arta, Sepuluh Nopember Institute of Technology, Indonesia

RHINOPIPING, INNOVATIVE PIPING SOFTWARE, Arnold Matthieu, Navinn, France

INFLUENCE OF COMPUTER APPLICATIONS IN RESISTANCE PREDICTION OF VESSELS, Sri Harish Kalidass, Blue Bear Systems and research Limited, UK

ESCAPE & EVACUATION (E&E) ASSESSMENT - AN ALTERNATIVE USE OF E&E SOFTWARE DURING SHIP CONSTRUCTION, Mark Way, Babcock International Group, UK

ANDROID - BASED APPLICATION DESIGN FOR WELDING INSPECTION OF THE NEW SHIPBUILDING, Sufian Imam Wahidi, Sepuluh Nopember Institute of Technology, Indonesia

AUTOMATED GENERATION OF DETAILED CABLING DOCUMENTATION FOR CRUISE SHIPS', PASSENGER AND COMMERCIAL VESSELS' ACCOMMODATION, Antonios-Vassilios Lalechos, Electrical, Electronic & Control Systems R&D, LePlan, Greece

DEVELOPMENT OF A CODE FOR POWER PREDICTION OF A SHIP AT PRELIMINARY DESIGN STAGE, Mashiur Rahman, Bangladesh University of Engineering and Technology (BUET), Bangladesh, Md. Mesbah Uddin, Chittagong Dry Dock Limited (Bangladesh NAVY), Bangladesh, Ahammad Abdullah, Chittagong Dry Dock Limited (Bangladesh NAVY), Bangladesh, Md. Maksudul Alam, Bangladesh University of Engineering and Technology (BUET), Bangladesh

ANDROID-BASED APPLICATION DESIGN FOR PROJECT MANAGEMENT OF SHIPBUILDING IN INDONESIA, M. Sholikhan Arif, Triwilaswandio W.P, Loudrian Yudharana, Ridho Pahlevi Wachid, Dept. Naval Architecture & Shipbuilding Engineering / Marine Technology Institut, Teknologi Sepuluh Nopember Surabaya, Indonesia

MINIMIZING THE DESIGNER / END USER GAP USING VIRTUAL REALITY, Winston Pynn, Marine Institute of Memorial University, Canada

A BAYESIAN-NETWORK-BASED RISK MODEL FOR OIL SPILL FROM TANKER COLLISION ACCIDENTS, Xiang Tan, Research Fellow, Nanyang Technological University, Singapore, Jidong Tao, Research Associate, Nanyang Technological University, Singapore, Dimitrios Konovessis, Associate Professor, Singapore Institute of Technology

ENABLING A PARADIGM SHIFT IN SHIP STRUCTURAL DESIGN WITH A 3D APPROACH, Tapio Hulkkonen, Senior Product Manager, NAPA, Finland Dr. Shin Hyung Cheol, Basic Hull Design Dept., Shipbuilding Division, HHI, Nak Hoon Yi, Basic Hull Design Dept., Shipbuilding Division, HHI, Korea Deok-Hoon Jang, Business Development Manager, NAPA Abstract, Finland

HOLISTIC SHIP DESIGN - HOW TO UTILIZE A DIGITAL TWIN IN CONCEPT DESIGN THROUGH BASIC DESIGN AND DETAILED DESIGN, *Torben-H. Stachowski*, *Digitread*, *Norway* 

CAD/CAE ON INTEGRATED SYSTEM OF SHIP STRUCTURE CUSTOM DEVELOPED BASED ON NX PLATFORM, LR Wang, China Classification Society, China

ACOUSTIC SIMULATION FOR CABIN ON SHIP BY FINITE ELEMENT METHOD, Yasuaki Ohtsuki, Tsuneishi Shipbuiding Co., Ltd., Japan, Yohei Wakisaka, Altair Engineering, Inc., Japan

PREDICTIVE ENGINEERING ANALYTICS FOR THE MARINE INDUSTRY, Wim Cardoen, Siemens Industry Software, Belgium

CONCEPTUAL DESIGN OF TRIMARAN UNMANNED SURFACE VEHICLE (USV) FOR MANEUVERABILITY AND HIGH SPEED TESTING, Zulfah Zikrina, Aqil.A Reksoprodjo, Fereizqo A. Sulaiman, Ida B. Krishna, Aldwin A. Hermanudin, Universitas Indonesia, Indonesia

TOOLS FOR PREDICTING PARAMETRIC ROLLING AND ITS APPLICATION FOR SECOND GENERATION INTACT STABILITY CRITERIA, Jesús A. Muñoz, SENER Ingeniería y Sistemas, Spain

A MODEL BASED APPROVAL PROCESS FOR BASIC HULL DESIGN, Ole Christian Astrup, DNV GL, Norway

MARINE PROPULSION SHAFTING SIMULATION INTERFACES Mohamed Zeid, Caterpillar Propulsion, Sweden

BIG DATA ANALYTICS TO PREDICT SYSTEM'S BEHAVIOR: THE RAAS (RADAR AS A SERVICE) CONCEPT

Alessandro Garibbo, Leonardo S.p.A., Italy

OFFSHORE SUB-STATIONS

C. Barlach, R&D Manager ISC A/S, Denmark

This is a preliminary programme, stating only the papers that have been accepted by the Committee. The complete selection of abstracts, and a full programme detailing the three concurrent streams, will be available on the event's website: www.rina.org.uk/ICCAS-2017

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