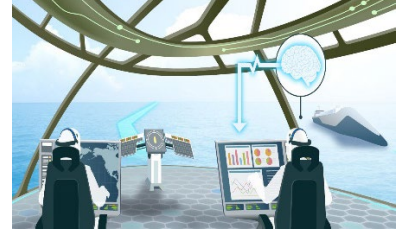


12th Symposium on
High-Performance Marine Vehicles – “Technologies for the Ship of the Future”



Cortona / Italy, 12-14 October 2020



Topics: ultra-efficient ships / alternative fuels / 2030 target technologies / electric ships / renewables
advanced design & production technology / shipyard 4.0 / future materials /
future use of oceans / blue economy / future shipping scenarios / intelligent & connected ships /
unconventional designs & propulsion concepts / biomimetic marine technologies

Organiser: Volker Bertram (volker@vb-conferences.com)

Advisory Committee:

Catherine Austin	I-Tech	Robert Dane	Ocius	Kohei Matsuo	NMRI
Carlo Bertorello	Naples University	Stefan Harries	Friendship Systems	Christian Oldendorff	Amplifier
Carsten Bullemer	Maritime Data Systems	Robert Hekkenberg	TU Delft	Prasanta Sahoo	FIT
Emilio Campana	CNR	Thomas Hildebrandt	Numeca	Pierre Sames	DNV GL
Roy Campe	CMB	Jan Kelling	Hasytec	Noah Silberschmidt	Silverstream Technologies
Andrea Coraddu	Strathclyde University	Jiulun Liu	Wuhan Univ Technology	Teus van Beek	Wärtsilä

Venue: The conference will be held at the Oasi Neumann hotel in Cortona

Format: Papers to the above topics are invited and will be selected by a selection committee.
Proceedings will be electronic pdf version in colour.

Deadlines: anytime Optional “early warning” of interest to submit paper
15.6.2020 First round of abstract selection (1/3 of available slots)
15.7.2020 Second round of abstract selection (remaining 2/3 of slots)
15.9.2020 Payment due for authors
15.9.2020 Final papers due (50 € surcharge for late submission)

Fees: **600 € / 300 €** regular / PhD student – early registration (by 15.9.2020)
700 € / 350 € regular / PhD student – late registration

Fees are subject to VAT
Fees include proceedings, lunches and coffee breaks
Fees apply also to authors

Sponsors: Becker Marine Systems, Econowind, Numeca, Tutech Innovation – further to be announced

Media Partner: Hansa

Information: www.hiper-conf.info

Sessions

Future Antifouling Solutions I+II

Sustainable propulsion technology I+II

Pushing the frontier of 3d technologies

Alternative fuels

Electric drive

Robotic & autonomous technology

Designing Future Designs

Smart design methods

Yesterday's Sci-Fi, tomorrow's Reality (focus on AI)

Selection of accepted abstracts

Oeffner, Hagemeister, Jahn (Fraunhofer CML), Bretschneider, Schmale (HSVA) – *Reducing Friction with Passive Air Lubrication: Initial Experimental Results and the Numerical Validation Concept of AIRCOAT*

Kelling (Hasytec Electronics) - *The Silent Revolution in Biocide-Free Antifouling*

Salters, Jongerius, Wijnen, Hietbrink (Philips), Reynolds (AkzoNobel) - *UVC Anti-Fouling Solution: Design, Experiments and Results of Next-Generation Samples*

Ratti, Maggiulli (Politecnico di Milano), Veronesi (ISTEC-CNR), Bighetti, Garofoli (Boero Group) - *Antifouling treatment with nano-ceramic-based coatings*

Berglin, Stenlund (RISE), Granhag (CTU) - *Antifouling Efficacy of 3D Printed Micro-Structured Surfaces*

Boeckmann (Wavefoil) - *Full-Scale Experience with Retractable Bow Foils*

Bles (Conoship), Nieuwenhuis (Econowind) - *Wind Assisted Ship Propulsion Enabling Zero Emission Shipping*

Hensel, Hagemeister, Jahn (Fraunhofer CML) - *Performance Prediction and Weather Routing of Wind Assisted Ships*

Hoffmeister (DNV GL) - *Wind Propulsion: Assessment, Certification and Classification Services*

Lehmann (Becker Marine Systems) - *Maritime applications of Hydrogen as a Fuel*

Leites (TKMS) – *MultiSchIBZ: The Evolution of a Large Fuel Cell System*

Erell (Phoenician Energy) - *Aluminum-Air Battery Technology to Electric Vessels*

Van Veldhuizen (Damen) – *Fuel-Cell Systems Applied in Expedition Cruise Ships: An Impact Analysis*

Liu, Yang, Li, Ma, Chen, Yan (Wuhan University of Technology) - *Virtual-Real Interaction Test for Functions of Smart Ships*

Lagemann (NTNU) - *Computer-Aided, Interactive Exploration of Future-Proof Ship System Concepts*

De Vos, Visser (TU Delft), Volger, Boonen (Damen Shipyards) - *A Novel Design Impact Tool to Assess Impact of Alternative Fuels on Three Cruise Vessel Concept Designs*

Albert, Hildebrandt (Numeca) – *An Electrified RIVA Powerboat Optimised*

Danese (Syrrkle), Vannas (Alleantia) - *Intelligent Industrial Internet of Things & Services (IIoT&S)*

Perez, Munoz (Sener) - *A.I. Technologies Applied to Ship Design and Production*

Bertram (DNV GL) - *Artificial Intelligence: Maritime Industries' Next Useful Idiot*

Matsuo (NMRI) - *On Future Strategy and Technology Roadmap of Maritime Industry*