

ANNOUNCEMENT

SSD 2024
1 – 2 July

Lucerne, Switzerland 

SUSTAINABLE SHIPPING DAYS

Electrolysers & Fuel Cells for waterborne transport

Conference
Exhibition
Network



Fuel Cells



Batteries



Fuel Tanks

Chaired by:

Dr. Syed Asif Ansar

ESI – Energy System Integration

DLR – German Aerospace Center

Featuring

- Marine fuel cell technology
- Advanced propulsion systems
- Electrolysis & green marine fuels
- Ship integration & port eco systems



Ports

Fuel Delivery & Production
with Electrolysers



Organised by

www.EFCE.com

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Scope

The Sustainable Shipping Days 2024 (SSD) aim to explore and promote advancements in maritime sustainability through the integration of fuel cell-based onboard energy systems and electrolysis technology at ports for fuel supply. Over one and a half days, this event will facilitate connecting experts, industry leaders, and researchers in these vital fields. It will focus on presenting and fostering in-depth discussions about the latest developments in maritime fuel cell technology, showcasing its potential to power ships, enhance energy efficiency, and reduce emissions. Furthermore, the conference will emphasize the pivotal role of electrolysis in green hydrogen production for sustainable fuel supply at ports for ambitions of net-zero. It will encourage dialogues regarding the integration of these technologies into the shipping industry, with a keen eye on their broader impacts on environmental conservation, energy security, and market dynamics.

Program

The Sustainable Shipping Days 2024 (SSD) program offers an engaging and dynamic agenda, including high-level keynotes, focused invited talks, and the unveiling of results from national and EU projects. Designed to facilitate the exchange of knowledge and foster meaningful connections, the program sets the stage through pre-event gatherings, including an inviting aperitif and an enjoyable dinner, fostering an atmosphere conducive to enriching interactions. SSD extend an invitation to partake in a comprehensive exchange with the Electrolyser & Fuel Cell Forum (EFCF) 2024 community at the EFCF-Welcome Reception. EFCF, spanning the ensuing three days amidst the picturesque backdrop of Lucerne, gathers the world's foremost experts in the field. The combined SSD and EFCF experience offers an exclusive opportunity to propel sustainable shipping forward, with a primary focus on the integration of maritime fuel cells and integrated electrolysis plants within ports.

Who should join:

- OEMs of Fuel Cells, Electrolysers & Storage Systems
- Marine Fuel Suppliers
- Marine Genset Manufactures
- Ship Yards, Ship Owners & Ship Operators
- Port Builders, Integrators, Operators & Authorities
- Investors, Banks, Scouts
- Marine Safety & Classification Organisations
- Regulators, Consultants
- R&D specialists in the related fields

Chair of the Conference



Dr. Syed Asif Ansar currently holds the position of Head of the Department of Energy System Integration (ESI) at the German Aerospace Center (DLR). His primary focus centers around the development of technologies aimed at reducing carbon intensity in both waterborne and airborne transport sectors. To achieve this, his department, comprising a dedicated team of over 70 professionals, concentrates on advancing the domains of Fuel Cell and Battery powertrains, as well as the generation of hydrogen and its derivatives through cutting-edge Electrolyser technologies. The laboratories are equipped with comprehensive experimental facilities spanning both laboratory to pilot-scale operations. Dr. Ansar's has also served as a member of the Roadmap Leaders Committee of the EU Clean Hydrogen Partnership and a steering board member of the EERA Fuel Cell and Hydrogen. He has authored over 80 published papers, multiple book chapters, and secured 10 patents. He attained his doctorate from the University of Limoges, France in 2004.

Head of Department ESI / DLR

Partnership with:



Organised by the European Fuel Cell Forum

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forum@efcf.com, www.EFCF.com

Olivier Bucheli & Michael Spirig

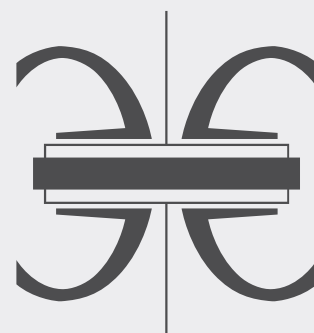
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www.EFCF.com/SSDboard

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Malte Zeretzke	Head of R&D	Carnival Maritime	www.carnival-maritime.com

Program Overview

www.EFCF.com/SSDprogram

MONDAY, 1 July 2024

19.30 – 22.30 **SSD Networking Dinner**

TUESDAY, 2 July 2024

08.00	Registration
09.00	Welcome & Opening
09.10	Keynote Lecture
09.40	Lecture 1: Demonstrators and Operations
10.50	Lecture 2: Green marine fuels production
12.10	Lunch & Poster Session
14.00	Lecture 3: Advanced propulsion systems
15.50	Lecture 4: Marine Fuel Cell Technology
17.10	Interactive Summary
18.00	End of the meeting
18.00 – 19.00	EFCF Welcome Reception

The Sustainable Shipping Days 2024 (SSD) will be held alongside the already well established and highly respected European Electrolyser & Fuel Cell Forum established 1994, with 400 - 500 experts attending, 20-30 exhibitors, tutorials, ... see www.EFCF.com.

This offers further opportunities with researchers and industry members in the field of high temperature Fuel Cells, Electrolysers, & H₂ Processing research from around the world as well as to visit the accompanying exhibition or to join attractive networking events.

Registration is open. Attractive combination tickets and group rebates are available.

Services & Fees

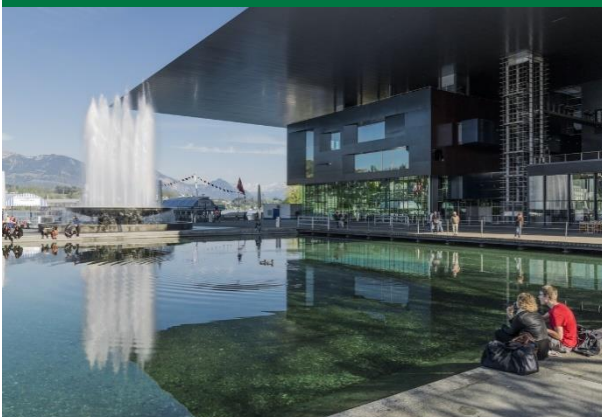
www.EFCF.com/SSDfee

Conference	Registration deadlines	Physical			Virtual	
		Early - 31 March	Regular from 1 April	Late from 15 May	Regular - 14 May	Late from 15 May
• Students, trainees and unemployed person etc. with valid identification		300	+150	+100 CHF	270	+50 CHF
• Academic staff, Government, Industry, Trade		690	+150	+100 CHF	450	+50 CHF

Attractive rebates are offered: In combination with an EFCF registration; For group registration (starting from 3 attendees); For exhibitors/sponsors, contact SSD@efcf.com. **Physical fees include:** Access to conference, plus all advantages of the virtual access as well as business lunch, all refreshments and the SSD Networking Evening on July 1. **Virtual fees include:** Virtual live and on-demand access as well as access to the virtual community rooms during and to the member zone after the conference.

Venue & Access

www.EFCF.com/Lucerne



The Sustainable Shipping Days SSD 2024 is held at the Culture and Convention Centre Lucerne (KKL) in conjunction with the Fuel Cell, Electrolyser & H₂ Technology and Supplier Exhibition.

The KKL conference centre is a well-known location on the picturesque waterfront of the Lake Lucerne, easy to reach by plane and train, and within a short walk from charming hotels and the historical town centre.

SSD 2024 will take place as a physical and virtual event, offering participants from all continents regardless of restrictions and origin the opportunity to contribute and participate. However, being present in Lucerne in person is an unbeatable win-win situation for all.

Lecture Program



Lucerne, Switzerland 

SUSTAINABLE SHIPPING DAYS

Electrolysers & Fuel Cells for waterborne transport

Monday, July 1

19:30-22:30 SSD Networking Dinner

Tuesday, July 2

08:00

On-site Registration

Warm-up: Possibility to view & discuss mounted posters

Poster Presenters

are asked to arrive early to put up their posters so that they can be seen by those stakeholders already at the venue

Auditorium

09:00 S00 Welcome / Keynote

S0001	Welcome by the Organizers	Olivier Bucheli	European Electrolyser & Fuel Cell Forum, Lucerne/Switzerland
S0002	Welcome by the Chair	Syed Asif Ansar	German Aerospace Center (DLR), Stuttgart/Germany
S0003	Fuel cells and batteries as alternative power conversion technologies for sustainable shipping	Peter Lystrup Christensen	Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping, Copenhagen/Denmark

09:40 S01 Lecture 1: Demonstrators and Operations

S0101	Integration projects PaXell- NAUTILUS	Herrmann-Josef Mammes	Meyer Werft, Papenburg/Germany
S0102	The role of H2-based technologies for maritime decarbonization	Paolo Guglia	Fincantieri, Trieste/Italy

10:20 Coffee break in the poster area

10:50 S02 Lecture 2: Green marine fuels production

S0201	Challenges and perspectives of (drop-in) synthetic fuels for net-zero Shipping	Srikanth Santhanam	Shell, Amsterdam/Netherlands
S0202	Clean Ammonia as Marine fuel. Opportunities and Challenges	Rob Stevens	Topsoe A/S, Lyngby/Denmark
S0203	Fuel-Electrolyser & LH2 (tbc)	Chris Rial / Julien Saleix	Plug Power, Lyon/France
S0204	On-site Water Electrolysis and Supply of Pressurized Hydrogen to Maritime Applications (tbc)	Morten Watle	GreenH, Oslo/Norway

12:10 Lunch & Poster Session

14:00 S03 Lecture 3: Advanced propulsion systems

S0301	Decarbonization with future fuels and new technologies in the maritime industry	Mathias Moser	MAN, Aschaffenburg/Germany
S0302	Advanced propulsion systems; ABB Dynafin™, a revolutionary propulsion concept to significantly increase ship efficiency	Janne Pohjalainen	ABB Oy, Helsinki/Finland
S0303	Powering the depth: the singular challenges in advancing submersible fuel cell propulsion systems	Jessica Lueck	thyssenkrupp Marine Systems GmbH, Kiel/Germany

**Paralell Session:
AMON Workshop**

13:30-15:00
Ammonia FC System for Maritime Application

More information:
www.EFCF.com/AMONws

15:20 Coffee break in the poster area

15:50 S04 Lecture 4: Marine Fuel Cell Technology

S0401	SOFC-based generators from SolydEra with high power density and improved serviceability	Massimo Bertoldi	Solydera, Trento/Italy
S0402	Multifuel Solid Oxide Fuel Cell systems for Maritime use – Recent Advancements by Alma Clean Power	Tjale Svendsen	Alma Clean Power, Bergen/Norway
S0403	Fuel Cell Hybrid Electric Energy for Shipping	Manfred Stefener	Freudenberg, Munich/Germany
S0404	Ready for the Marine Future: Harnessing Advanced Fuel Cell Systems with Renewable Fuels	Andreas Bodén	PowerCell, Gothenburg/Sweden
S0405	Interactive Summary	Syed Asif Ansar	German Aerospace Center (DLR), Stuttgart/Germany

18:00 End of the meeting

18:00-19:00 EFCF Welcome Reception

www.EFCF.com/SSD

www.EFCF.com/Registration

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