

# SUSTAINABLE SHIPPING DAYS

## Electrolysers & Fuel Cells for waterborne transport

Tuesday, July 2

08:00 On-site Registration & Welcome Coffee  
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  
KKL Luzern**

Title	Author(s)	Affiliation(s)
<b>P01</b> Testing Platform for SOFC Stack Modules Utilising Marine Fuels	Werner Huhtinen, Santeri Saxelin, Jeremias Hopsu	VTT Technical Research Centre of Finland Ltd., Espoo/Finland
<b>P02</b> AMON: Strategic Insights into Non-Carbon Energy: Comparative Analysis of Hydrogen and Ammonia in Solid Oxide Fuel Cell	Xinyi Wei (1, 2), Arthur Waeber (1), Shivom Sharma (1), Francois Marechal (1), Jan Van herle (2)	(1) IPESE, EPFL Valais Wallis, 1950 Sion, Switzerland; (2) GEM, EPFL Valais Wallis, 1950 Sion, Switzerland
<b>P03</b> Preliminary Estimation of Experimental Test of Short Stack Ammonia Solid Oxide Fuel Cell	Luca Praticò, Michele Rizzi, Matteo Testi	Hydrogen Technologies and Resilient Energy Systems, Center for Sustainable Energy, Fondazione Bruno Kessler
<b>P04</b> Development of ammonia fueled SOFCs - from catalyst to system level	Arash Nemati, Anders Bogh Jacobsen, Henrik Lund Frandsen	Department of Energy Conversion and Storage, Technical University of Denmark
<b>P05</b> Electrochemical processes and energy systems towards step-wise emission reduction of maritime transport	S. Salas Ventura (1), M. Metten (1), D. Fortunati (1), C. Schnegelberger (1), A. Ansar (1), A. Thomas (2), M. Zeretzke (3), J. van Herle (4), E. Pina (4), M. Šimková (5), T. Hacker (6), F. Grimm (7), D. Sahren (8), P.V. Aravind (9), A. Amladi (9), C. Ünlübayir (10), S. Diethelm (11), A. Sissinio (12), S. Modena (12), B. N. van Veldhuizen (13), L. Van Biert (13), J. Pagels (14), J. Pennanen (15), L. Hepo-oja (15)	(1) DLR Institute of Engineering Thermodynamics, Stuttgart, Germany; (2) Chantiers de l'Atlantique, Saint Nazaire, France; (3) Carnival Maritime, Hamburg, Germany; (4) École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland; (5) Grant Garant, Prague Czech Republic; (6) Lloyd's Register EMEA, London, United Kingdom; (7) MAN Energy Solutions, Augsburg, Germany; (8) Meyer Werft, Papenburg, Germany; (9) Rijksuniversiteit Groningen (RUG), Groningen, Netherlands; (10) Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen University, Aachen, Germany; (11) SolydEra SA, Yverdon-les-bains, Switzerland; (12) SolydEra SPA, Mezzolombardo, Italy; (13) Technische Universiteit Delft (TU Delft), Delft, Netherlands; (14) Lunds Universitet (ULUND), Lund, Sweden; (15) Teknologian tutkimuskeskus VTT Oy (VTT), Espoo, Finland
<b>P06</b> HELENUS: High Efficiency Low Emissions Nautical Solid Oxide Fuel Cell	Dheeraj B. Gosala	DLR Institute of Maritime Energy Systems, Geesthacht, Germany
<b>P07</b> H2MARINE: Hydrogen PEM fuel cell stacks for marine applications	K. Panopoulos (1), M. Bampaou (1), K. Papaioannou (1), J. Ihonen (2), J. Dombrovskis (3), J. Hunger (4), A. Fischer (5), P. Braun (6), M. Binder (6), M. Paetzold (7), A. Speidel (7), N. Ntavos (8), M. Schmitt (9), G. Skevis (10), S. Mamalis (10), M. Matian (11), J. van Herle (12), W. Weisenstein (13)	(1) Centre for Research and Technology Hellas (CERTH), Chemical Process and Energy Resources Institute (CPERI), 57001 Thessaloniki, Greece; (2) VTT Technical Research Centre of Finland Ltd, FI-02044 Espoo, Finland; (3) PowerCell Sweden, SE-41834 Gothenburg, Sweden; (4) Zentrum für Sonnenenergie- und Wasserstoff-Forschung, 89071 Ulm, Germany; (5) Institute of Inorganic and Analytical Chemistry, University of Freiburg, 79104 Freiburg, Germany; (6) Greenerity GmbH, 63755 Alzenau, Germany; (7) ReinZ Dichtungs GmbH, 89233 Neu-Ulm, Germany; (8) Cluster of Bioeconomy and Environment of Western Macedonia, 50100 Kozani, Greece; (9) thyssenkrupp Marine Systems GmbH, 24143 Kiel, Germany (10) CLEOS, 17564 Athens, Greece (11) EH Group Engineering AG, 1260 Nyon, Switzerland (12) Group of Energy Materials, Swiss Federal Institute of Technology, Lausanne (EPFL), 1951 Sion, Switzerland (13) Beyond Gravity Schweiz AG, 8058 Zürich, Switzerland
<b>P08</b> Reliable Dynamic Operation of SOFC Systems with Anode Off-Gas Recirculation using Multi-linear and Neural Network Model Predictive Control	Jan Hollmann, Stephan Kabelac	Institute of Thermodynamics, Leibniz University Hannover, Am Welfengarten 1, D-30167 Hannover/Germany
<b>P09</b> Assessment of SOFC-based combined cycle power plants integrated in ship heat and power networks: A trend analysis	Niek Goselink, Lindert van Biert	Department of Maritime & Transport Technology, Delft University of Technology, Delft, Netherlands
<b>P10</b> Dynamic simulation of marine SOFC power plant	Berend van Veldhuizen (1), Lindert van Biert (1), Klaas Visser (1), Hans Hopman (1), Aravind Purushothaman Vellayani (2)	(1) Delft University of Technology, Department of Maritime and Transport Technology, Delft/Netherlands; (2) University of Groningen, Energy Conversion, Energy and Sustainability Research Institute, Groningen/Netherlands
<b>P11</b> Emission Analysis and Health Benefits of Introducing SOFCs in shipping – Nautilus Project	J. Pagels(1), A. Oudin(2), R. Rittner(2), S. Ansar(3), J. Rex (1), P. Nilsson(1) and A. Kristensson(4)	(1) Dept. Design Sciences, Lund University, LTH, Lund, SE 22100 Sweden; (2) Department of Laboratory Medicine, Lund University, Lund; (3) Department of Clinical Sciences, Lund University, Lund; (4) Department of Physics, Lund University, Lund

