Hydrogen Research Forum Finland
Wednesday 2nd October | Dipoli, Aalto University

0815	**Registration, coffee available**	
0845	**Opening ceremony** Kristiina Mäkelä, Provost, Aalto University Mika Järvinen, Director of Aalto Hydrogen Innovation Center, Professor, Aalto University Pertti Kauranen, Chair, Hydrogen Research Forum Finland, Professor, LUT University	
0900	**Keynote: Marco Alverà, CEO & Co-Founder of TES**	
0930	**Session 1: Proton exchange membrane electrolysis**	
	Can demand response improve the economic viability of PEM electrolysis dynamic operation?	Hassan Sayed Ahmed, Aalto University
	Operando Characterisation of the Interactions between Hydrogen and Palladium Electrocatalysts	Lilian Moumaneix, Aalto University
	TBC	
1030	**Coffee break, 30 minutes**	
1100	**Session 2: Alkaline electrolysis**	
	Stray currents and energy efficiency of atmospheric and pressurized alkaline water electrolyzers	Vesa Ruuskanen, LUT University
	Computational fluid dynamics (CFD) modeling of alkaline electrolysers in OpenFOAM	Marko Korhonen, VTT Technical Research Centre of Finland
	Linearization of alkaline electrolyzer current-voltage behavior under dynamic operation	Lauri Järvinen, LUT University
1200	**Lunch break, 60 minutes**	
1300	**Session 3: Poster session, coffee available**	
1400	**Session 4: Industry session: An exchange between project developers and electrolyzer manufacturers**	
	Heidi Bergman, Head of Investment Concepts, Renewable Hydrogen & PtX, Neste	
	Nick van Dijk, CEO, Oort Energy Ltd	
	Rainer Küngas, CTO, Stargate Hydrogen	
	Tuukka Hartikka, Vice President, Hydrogen and Power-to-X, Helen	
	Satu Sipola, VP, P2X and Project Execution, Fortum Power and Heat Oy	
	Marco Alverà, CEO & Co-Founder, TES	
1540	Panel discussion	
1620	**Programme ends**	
1830-2230 Gala dinner in Dipoli		

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0815	**Coffee available**	
0845	**Keynote: Tanja Kallio, Professor, Aalto University** High aspect ratio platinum electrocatalyst for more sustainable hydrogen conversion in PEMELs	
0915	**Session 5: Novel electrolysis technologies**	
	Efficient industrial grade hydrogen production with SO2 depolarized electrolyser	Pragya Narayana Prasad, Aalto University
	Additive manufacturing of reversible ceramic fuel cells for electricity generation and hydrogen production	Muhammad Imran Asghar, Tampere University
	Integrating biomass valorization with hydrogen production: electrocatalytic challenges and opportunities	Daniel Martin-Yerga, University of Jyväskylä
	Study on the effect of Mo on the performance and durability of PGM-free anode catalysts for AEMWE	Sepanta Dokhani, RISE Research Institutes of Sweden / KTH Royal Institute of Technology
1035	**Coffee break, 30 minutes**	
1105	**Session 6: System-level analysis**	
	Utilizing large-scale hydrogen storages for Nordic industry	Simo Pekkinen, Aalto University
	Electricity Market Optimization of Electrolysis-Based Hydrogen Production	Onni Tikkanen, Fimpec Consulting Oy
	Baseload hydrogen supply from an Off-Grid Solar PV-Wind Power-Battery-Water electrolyzer plants	Alejandro Ibanez Rioja, LUT University
	Integration of High Capacity Hydrogen and Power-to-X production in the Finnish Energy System	Yrjö Majanne, Tampere University
1225	**Closing remarks: Outi Ervasti, Advisor Innovation Business Platforms, Neste Oyj**	
1240	**Event ends**	

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List of posters

	Title	Presenter
1	Advancements in reversible ceramic fuel cells for hydrogen production	Buse Bilbey Tampere University
2	Fluorine-doped CuMn2O4 as PGM-free electrocatalyst for oxygen evolution reaction in acidic media: reaction mechanism and deactivation pathways	Lilian Moumaneix (Moritz Karl Rosenthal) Aalto University
3	COMSOL Multiphysics modelling of alkaline water electrolyzer (AWE) short stack	Muhammad Asim Sarwar LUT University
4	Effect of voltage elevation on energy efficiency of power electronics in the industrial alkaline water electrolyzer	Galdi Hysa LUT University
5	Hydrophilic treatment of porous PTFE filter membranes as a separator for intermediate temperature alkaline water electrolysis	Rubab Zahra LUT University
6	Advancements in Photocatalytic Solar Hydrogen Reactor Development	Veera Juntunen University of Oulu
7	Study of the influence of the synthesis methodology on catalytic properties of flower-like ZnIn2S4 as a promising semiconductor for H2 generation	Yousra El Jemli University of Oulu
8	Cloud-based environment for Simulation-aided testing of hydrogen production automation system	Udayanto Dwi Atmojo Aalto University
9	Large-amplitude, low-frequency dynamic parametrization method for water electrolyzer cells	Pietari Puranen LUT University
10	Low Pt content supported in urchin like W18O49 for plasmon enhanced hydrogen evolution reaction	MD MOFAKKHARULHASHAN University of Helsinki
11	Ultralow Catalytic Loading for Optimized Electrocatalytic Performance of AuPt Nanoparticles to Produce Hydrogen and Ammonia	Hugo Santos University of Helsinki
12	CFD Simulations of an Alkaline Electrolyser Cell Based on Nickel Foam Electrodes	Priit Priimägi Stargate Hydrogen Solutions
13	Strategic Research Agenda of Hydrogen Research Forum Finland	Teemu Tuomisalo LUT University Hydrogen Research Forum Finland

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