

## Thursday 6<sup>th</sup> June 2024

Time	Speaker	Organization	Title	
08.30-08.35		WELCOME		
08.35-09.00	Director general for energy Riku Huttunen	Ministry of Economic Affairs and Employment of Finland	The Role of Hydrogen in the Finnish Energy and Climate Strategy	
09.00-09.25	TBD	Helen Ltd	TBD	
09.25-09.50	Vice president, Industrial energy and hydrogen Antti Arasto	VTT	Technology insights to Green H2 investments	
09.50-10.15	Senior officer, Industrial processes Anna Pääkkönen	Finnish Safety and Chemicals Agency	Safety aspects in hydrogen facility siting	
10.15-11.05	Professor Yoshinori Sawae	Kyushu University, Japan	Research on Science and Technology for Hydrogen Utilization – Challenge of Kyushu University and HYDROGENIUS	
11.05-11.30	Senior scientist Ville Saarinen	VTT	Water Electrolysis for Green Hydrogen Production: Technical Challenges, Materials and Research Activities at VTT	
11.30-13.00	LUNCH & POSTERS			
13.00-13.25	R&D Manager Jouni Puranen	Elcogen Ltd	TBD	
13.25-13.50	Manager, Materials engineering Matias Ahonen	Neste Ltd	Hydrogen effects on process equipment failures	
13.50-14.15	Research scientist Sofia Ojasalo	VTT	Power Generation by Ammonia: High Temperature Corrosion of Steels by Nitridation	
14.15-14.40	Senior research scientist Vigdis Olden	SINTEF, Norway	Safe pipelines for hydrogen transport	
14.40-15.05	Leading advisor, Metallic materials and welding Lars Magne Haldorsen	Equinor, Norway	Development of design criteria for re-purposing of existing natural gas pipelines to hydrogen transport pipelines	
15.05-15.30	Post-doctoral researcher Renata Latypova	University of Oulu	The effect of low-temperature tempering on hydrogen diffusion and trapping in direct-quenched martensitic steel	
15.30-16.00	COFFEE BREAK			
16.00-16.25	Dr. Geraldine Theiler	BAM, Germany	Overview of tribology in gaseous hydrogen	
16.25-16.50	Professor Yoshinori Sawae	Kyushu University, Japan	Polymer tribology in hydrogen utilization	
16.50-17.15	Principal scientist Helena Ronkainen	VTT	Influence of ammonia on the lubricant properties and performance	
17.15-17.40	Professor Nazanin Emami	Luleå University of Technology, Sweden	Cryogenic tribology	
17.40-17.45	Concludin	g remarks and instruc	tions for the dinner	









## Friday 7<sup>th</sup> June 2024

Time	Speaker	Organization	Title
09.00-09.25	Research professor	VTT	Fatigue of steels in hydrogen
	Elina Huttunen-Saarivirta		
09.25-09.50	Professor	NTNU, Norway	A void-based predictive model for
	Zhiliang Zhang		hydrogen embrittlement
09.50-10.15	Assistant professor	Uppsala	Discrete dislocation dynamics
	Hayang Yu	University,	based simulation of the interplay
		Sweden	between hydrogen and localized
			plasticity
10.15-10.40	Lecturer	Ruhr University	Atomistic modelling of hydrogen
	Thomas Hammerschmidt	Bochum,	in transition metal alloys
		Germany	
10.40-11.05	Senior scientist	VTT	Multiscale Characterisation and
	Napat Vajragupta		Simulation for Hydrogen
			Embrittlement Assessment
11.05-11.30	Professor	University of	Hydrogen effects in copper under
	Fluyra Djurabekova	Helsinki	ion irradiation condition
11.30-11.55	Professor	University of	Towards a Virtual Hydrogen Lab:
	Emilio Martinez-Paneda	Oxford, UK	electro-chemo-mechanical
	(remote)		predictions of hydrogen uptake,
			transport and embrittlement
11.55-12.00	Concluding remarks		
12.00-13.00	LUNCH		
13.00-13.15	Walk to VTT labs, safety instructions etc.		
13.15-15.00	Lab tours (2*45) + 15 min for change		
15.00	End & good-bye		





