

### Time Table : Thursday, 12-September

Time	Shiiki Hall	
9:00-10:00	Registration	
10:00-10:10	Opening Remarks : Tatsuro Ishibashi President of Kyushu University Akiko Imura Executive Director (NEDO)	
10:10-10:50	Plenary Session ( English / Japanese )	
	Japan's policies, R&D efforts, and NEDO's international collaboration Eiji Ohira (New Energy and Industrial Technology Development Organization (NEDO), Japan)	
10:50-11:30	Technological Options and Systemic Considerations for Achieving a Low Carbon Future Andrew John Chapman (Kyushu University (I2CNER), Japan)	
11:30-12:10	The carbon reduction policies and experience in taiwan Chen-Hsun Du (Industrial Technology Research Institute (ITRI), Taiwan)	
12:10-13:30	Lunch	
	Room 1	Room 2
13:30-14:00	Session1 :Metallic Materials	Session3: Polymer & Tribology
	Industrial challenges for hydrogen transport in Europe Mons Hauge (Equinor, Norway)	Hydrogen and ammonia related research at VTT Helena Ronkainen (VTT, Finland)
14:00-14:30	Aspects of materials evaluation under hydrogen at different scales Peter Gumbsch (Fraunhofer Institute for Mechanics of Materials IWM, Germany)	Tribology of polymer composites after exposure to cyclic aging in cryogenic temperature Nazanin Emami (Luleå University of Technology, Sweden)
14:30-15:00	The mechanism of enhanced hydrogen embrittlement of pipeline steel by CO2 in hydrogen enriched natural gas Jianfeng Shi (Zhejiang University, China)	Polymer Tribology in Cryogenic Hydrogen Géraldine Theiler (BAM, Germany)
15:00-15:20	Coffee Break	
15:20-15:50	Session2: Metallic Materials	Session4: Polymer & Tribology
	Materials Integrity of Hydrogen Transport Pipelines Bård Nyhus (SINTEF, Norway)	Water on the metallic surfaces derived from atmospheric environment and its influences on tribological properties Kanao Fukuda ( MJIT, Malaysia)
15:50-16:20	Comparison of fracture toughness of Cr-Mo steels depending on testing method Jaeyeong Park (KRISS, Korea)	Tribology Components in Hydrogen supply chain Ryutaro Okada (Kawasaki Heavy Industries, Ltd., Japan)
16:20-16:50	Mechanical properties and hydrogen compatibility of austenitic stainless steels at cryogenic temperatures Kentaro Wada (NIMS, Japan)	Fundamental study on loosening of cone and thread fittings for high pressure hydrogen systems Hiroyoshi Tanaka (Kyushu University, Japan)
17:30-19:30	Reception	

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Time	Room 1	Room 2	Foyer
9:00-12:00	Session5: Thermophysical Properties	Session8: Polymer & Tribology	
	Hydrogen Fuel Dispensing for Medium-and Heavy-Duty Vehicles Shaun Onorato (NREL, US)	Database Of Hydrogen Compatible Polymeric Materials For Hydrogen Infrastructure Shin Nishimura (Kyushu University, Japan)	
	Thermophysical Property Measurement and Modelling for the Hydrogen Liquefaction Process Xiong Xiao (The University of Western Australia (UWA), Australia)	Overview of H-Mat Activities with High-density Polyethylene, and New Rubber Compounds in High-pressure Hydrogen Kevin Simmons (PNNL, US)	
	Hydrogen Production through the Plasma-assisted Gasification with Carbon Recovery Wei-Cheng Wang (National Cheng Kung University, Taiwan)	In situ Tribometer in high pressure hydrogen Wenbin Kuang (PNNL, US) REMOTE	
	Thermodynamic Property Measurements of High-Pressure Hydrogen and Modeling of the HDV Refueling Protocol Naoya Sakoda (Kyushu University, Japan)	Recent R&D Trends in Sealing Solutions for Hydrogen Applications Towards a Carbon-Neutral Society Hikaru Hashimoto (NOK corporation, Japan)	
		Sealing products for Hydrogen service From material characterization to equipment qualification Benoit Omnes (Cetim, France)	
12:00-14:00	Lunch break		Poster Session
14:00-15:30	Session6: Metallic Materials	Session9: Polymer & Tribology	
	On the effect of hydrogen on ratcheting of austenitic steels Pierre Osmond (CETIM, France) REMOTE	Advanced technologies for the H2 value chain Emiel Dobbelaar (Freudenberg Technology Innovation SE & Co. KG, Germany)	
	Recent Atomistic Simulations at Sandia X. W. Zhou (Sandia National Laboratories, US)	Polyamide resistance to damage cumulation from fatigue loading and high-pressure hydrogen cycling (Tentative) Sylvie Castagnet (Institute P', ENSMA, France)	
	Hydrogen embrittlement in nickel alloys: some insights Xu Lu (NTNU, Norway)		
15:30-15:50	Coffee Break		
15:50-17:20	Session7: Metallic Materials	Session10: Polymer&Tribology	
	Experimental challenges in fracture toughness testing under H2 gas environment. Mihaela Cristea (Tenaris, Italy)	Hydrogen Dispensing Hose (Tentative) Tobias Schmiedl (Spir Star AG, Germany) REMOTE	
	Hydrogen gas embrittlement: elucidating mechanisms and advancing industrial applications Hisao Matsunaga (Kyushu University, Japan)	Failure mode of hydrogen dispensing hose Takashi Kuriyama (Kyushu University, Japan)	
		NREL's Hydrogen Component Reliability Program Genevieve Saur (National Renewable Energy Laboratory, US)	
17:20	General Discussion & Closing Remarks		