

# The 23rd KIM-JIMM Symposium

Room: Meadow Hall (2F), Date: 10/29 (Tue.)

Time	Title	Speaker	Affiliation
09:00-09:05	Welcome Address	Jae-Hyeok Shim	Korea Institute of Science and Technology (KIST)
<b>Session1</b> (Chair: Jae-Hyeok Shim, Korea Institute of Science and Technology (KIST))			
09:05-09:25	Carbon Neutral Society: Challenges and Strategies of the Korean Steel Industry	Joonho Lee	Korea University
09:25-09:45	Ammonia Synthesis via Catalytic and Chemical Looping Process by Alkali Metal Compounds	Hiroki Miyaoka	Hiroshima University
09:45-10:05	Technology to prohibit hydrogen embrittlement in metals and welds	Namhyun Kang	Pusan National University
10:05-10:25	Room Temperature Hydride Ion Conduction in Rare-Earth Metal Oxyhydrides	Soshi Iimura	National Institute for Materials Science (NIMS)
Break time (10:25-10:40)			
<b>Session2</b> (Chair: Hiroyuki Saitoh, National Institutes for Quantum Science and Technology (QST))			
10:40-11:00	Structural and chemical affinity engineering for improved hydrogen trapping and embrittlement behavior	Seok Su Sohn	Korea University
11:00-11:20	Synthesis of Lightweight High-Entropy Alloys and Their Application to Hydrogen Storage	Shigehito Isobe	Hokkaido University
11:20-11:40	Vanadium-based metallic membranes for hydrogen separation	Jin-Yoo Suh	Korea Institute of Science and Technology (KIST)
11:40-12:00	Temperature and Pressure Dependent Solubility of Hydrogen in Hydrogen Permeable Alloys: A First-Principles Description	Akihiro Mitsuhashi	Nagoya University
Lunch (~13:00)			
<b>Session3</b> (Chair: Namhyun Kang, Pusan National University)			
13:00-13:20	I knew you were trouble: analyzing hydrogen	Se-Ho Kim	Korea University
13:20-13:40	Hydrogenation Reactions of Aluminum-Based Alloys Under High Pressure	Hiroyuki Saitoh	National Institutes for Quantum Science and Technology (QST)
14:00-14:20	Metastable Hexagonal Close-packed Palladium-hydride through radiation chemistry	Dong Won Chun	Korea Institute of Science and Technology (KIST)
14:20-14:40	Customizing of Additional Functions of Hydrogen Storage Materials: Compression and Purification of Hydrogen	Kohta Asano	National Institute of Advanced Industrial Science and Technology (AIST)
Break time (14:40-14:55)			
<b>Session4</b> (Chair: Kohta Asano, National Institute of Advanced Industrial Science and Technology (AIST))			
14:55-15:15	Surface-Engineered Metal Hydride for Low-Purity Hydrogen Storage	Eun Seon Cho	Korea Advanced Institute of Science and Technology (KAIST)
15:15-15:35	Local Structures in Hydrogen Storage Materials and Their Hydrides	Kouji Sakaki	National Institute of Advanced Industrial Science and Technology (AIST)
15:35-15:55	Industrial applications and technology trends of hydrogen storage alloys	Tae-Wook Na	Korea Institute of Industrial Technology (KITECH)
15:55-16:15	Hydrogen Absorption Reactions on an AB <sub>3</sub> -Based Intermetallic Compound, (Y, Mg)Co <sub>3</sub>	Toyoto Sato	Tohoku University