

The 5th Japan-China Seminar on Hydrogen Storage Materials (Tentative)

Date 2nd March 2010
Place Tokyo International Exchange Center
http://www.tiec.jasso.go.jp/index_e.php
Organizer National Institute of Advanced Industrial Science and Technology (AIST)
Co-Organizer New Energy and Industrial Technology Development Organization (NEDO)
Registration Free of charge
Reception Time 24 Building 11F, Restaurant “Seagull”

Program

9:20 Opening

National Institute of Advanced Industrial Science and Technology

9:25 Opening address

Ministry of Economy, Trade and Industry

New Energy and Industrial Technology Development Organization

South China University of Technology Prof. Min Zhu

9:40 “Hydrogen storage in China”

Prof. Min Zhu (South China University of Technology)

10:00 “Hydrogen storage in Korea”

Prof. Jong Won Kim (KIER)

10:20 “Hydrogen Storage in Japan”

Dr. Etsuo Akiba (AIST)

10:40 “Light-metal borohydrides for reversible hydrogen storage”

Prof. Ping Wang (Institute of Metal Research)

11:00 “Basic Research of Nano-Composite Materials for Hydrogen Storage”

Prof. Yoshitsugu Kojima (Hiroshima University)

11:20 “Characterization and preparation of CoB and FeB nanochains hydrogen storage composite”

Prof. Huatang Yuan (Nankai University)

11:40 “Hydrogen permeation of Nb-TiNi alloys”

Prof. Kiyoshi Aoki (Kitami Institute of Technology)

Lunch and Poster Session (12:00 – 13:40)

13:40 “A comparative study on the gasochromic and chemochromic properties of Mg thin films”

Prof. Xingguo Li and Ms. Jianglan Qu (Peking University)

14:00 “Liquid-phase hydrogen-storage materials”

Prof. Qiang Xu (AIST)

14:20 “Correlation between the Stability of Mg-based Hydride and the Ti-containing Agent”

Prof. Dalin Sun (Fudan University)

14:40 “Thermodynamic behavior of Mg or Ti based alloys- Hydrogen systems “

Prof. Masashi Sato and Prof. Toshiro Kuji (Tokai University)

15:00 “Comparative investigation on the hydrogen storage properties of Ca-Mg-Ni and La-Mg-Ni compounds”

Prof. Qingan Zhang (Anhui University of Technology)

Break (15:20 – 15:40)

15:40 “Preparation and hydrogen storage performance of MOFs and complex hydrides”

Prof. Lixian Sun (Dalian Institute of Chemical Physics)

16:00 “High-pressure synthesis of novel hydrides $Mg_{7-x}A_xTiH_{16-x}$ (A = Li, Na, K) and their reversible hydrogen storage properties“

Prof. Tetsuo Sakai (AIST)

16:20 “Synthesis and hydrogen storage properties of mixed alanate Na_2LiAlH_6 ”

Prof. Yongfeng Liu (Zhejiang University)

16:40 “High-Density Hydrogen Storage and Lithium Super-Ionic Conductivity in Metal Borohydrides”

Prof. Shin-ichi Orimo (IMR, Tohoku University)

17:00 “Synthesis and Dehydrogenation of Amidoborane Ammoniates”

Prof. Ping Chen (National University of Singapore, Dalian Institute of Chemical Physics)

17:20 Closing remarks

Dr. Yoshiro Owadano (Research coordinator, AIST)

18:00 Reception at Time 24 Building 11F, Restaurant “Seagull” (<http://www.time24.co.jp/>)

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Poster Session

“Structural modification and hydrogen storage properties of perovskite magnesium hydride”

Prof. Hui Wang (South China University of Technology)

“Microstructure and hydrogen generation performance of aluminum alloy by splitting water”

Prof. Demin Chen (Institute of Metal Research, China Academy of Science)

“Hydrogen storage properties of metal hydride doped Li-Mg-N-H material”

Prof. Xiaopeng Liu (Beijing General Research Institute for Non-Ferrous Metals)

“Ultrafine Amorphous Co-Fe-B Catalysts for the Hydrolysis of NaBH₄ Solution to Generate Hydrogen”

Prof. Yijing Wang (Naikai University)

“Hydrogen Storage Characteristics of TiVNi-Quasicrystal and AB₃-Type Composite Materials”

Prof. Limin Wang (Chang Chun Institute of Applied Chemistry, China Academy of Science)

“The microstructure and hydrolysis behavior of MH-ammonia borane”

Prof. Chaoling Wu (Sichuan University)

“Phase transformation and hydrogen adsorption in LaMg₂Cu_{1-x}Ni_x alloys”

Prof. Shumin Han (Yanshan University)

“Structure Prediction of Li-N-H System from Ab-initio Evolutionary Simulations”

Prof. Chaohao Hu (Guilin University of Electronic Technology)

“Mg-based hydrogen storage materials prepared by HCS+MM”

Prof. Liquan Li (Nanjing University of Technology)

“Effects of substituting Ni with Co on structure and hydrogen storage characteristics of melt spun Mg₂Ni-type alloy”

Prof. Yanghuan Zhang (Inner Mongolia University of Science and Technology)

“Investigation on the structural and electrochemical properties of new La₈Fe₂₈B₂₄-type hydrogen storage alloy”

Prof. Huizhong Yan (Baotou Research Institute of Rare Earths)

“Microstructure evolution of Ti-V-Mn BCC alloys before and after hydrogen absorption-desorption cycles”

Prof. Junko Matsuda, Prof. Kohta Asano, Prof. Yumiko Nakamura and Prof. Etsuo Akiba (AIST)

“Hydrogen exchange effect in MgH₂-LiBH₄ system”

Prof. Liang Zeng (Hiroshima University)

“The synthesis and thermal decomposition of alkali-metal amidoboranes: A potential hydrogen storage material”

Prof. Yu Zhang (Hiroshima University)

“Structural and Compositional Changes During Dehydrogenation of the Li-Mg-N-H System”

Prof. Yunlei Teng (Hiroshima University)

“Room-Temperature Hydrogen Generation by Core-Shell Catalysts for Chemical Hydrogen Storage”

Prof. Hai-Long Jiang and Dr. Qiang Xu (AIST)

“Selective hydrogen generation by complete decomposition of hydrous hydrazine at room temperature for

chemical hydrogen storage”

Prof. Sanjay Kumar Singh and Dr. Qiang Xu (AIST)

“Theoretical study on hydrogen adsorption to N-substituted graphene-like compounds”

Prof. Megumi Kayanuma, Prof. Tamio Ikeshoji and Prof. Hiroshi Ogawa (AIST)

“Theoretical study of hydrogen storage materials by all-electron mixed-basis method”

Prof. Ryoji Sawara, Prof. Hiroshi Mizuseki, Prof. Marcel Sluiter, Prof. Kaoru Ohno and Prof. Yoshiyuki Kawazoe (IMR, Tohoku University)

“Theoretical Study on Alkali Atom Doping to Enhance the Storage Capacity of Materials”

Prof. Hiroshi Mizuseki, Prof. Natarajan S. Venkataramanan, Prof. Gang Chen, Prof. Ryoji Sahara and Prof. Yoshiyuki Kawazoe (IMR, Tohoku University)

“Hydrogen Storage Properties of $Y(BH_4)_3$ ”

Prof. Yigang Yan, Prof. Toyoto Sato, Prof. Hai-Wen Li and Prof. Shin-ichi Orimo (IMR, Tohoku University)

Dr. Kazutoshi Miwa and Dr. Shin-ichi Towata (Toyota Central R&D Laboratories)

“Dehydriding and Rehydriding Properties of $Mg(BH_4)_2$ ”

Prof. Hai-Wen Li, Prof. Naoyoshi Umeda, Prof. Yigang Yan and Prof. Shin-ichi Orimo (IMR, Tohoku University)

Dr. Kazutoshi Miwa and Dr. Shin-ichi Towata (Toyota Central R&D Laboratories)

“Hydrogen Storage Properties and Crystal Structural for novel FCC-type Mg-based Hydrides Prepared by Gigapascal Hydrogen Pressure Method”

Dr. Xiao Yang, Dr. Nobuhiko Takeichi, Dr. Hideaki Tanaka, Dr. Nobuhiko Kuriyama and Prof. Tetsuo Sakai (AIST)