

Joint HYDROGENIUS and I2CNER International Workshop on Hydrogen-Materials Interactions 2016

Feb. 4, 2016 (Shiiki hall, Kyushu University)

Opening remarks (9:20 – 9:30)

Hisao Matsunaga (Kyushu University)

Oral session 1 (9:30 – 11:30)

Chair: Brian Somerday (Sandia National Laboratories, USA)

9:30 – 10:00 Afrooz Barnoush (NTNU, Norway)

Title: On the trail of the hydrogen embrittlement by novel critical experiments

10:00 – 10:30 Michael J. Demkowicz (MIT, USA)

Title: Grain boundary character and hydrogen-assisted intergranular fracture in Ni-base alloys

10:30 – 11:00 Joerg Neugebauer, Gerard Leyson, Blazej Grabowski, Tilmann Hickel (Max-Planck-Institut für Eisenforschung, Germany)

Title: Understanding the fundamental mechanisms behind H embrittlement in metals: An ab initio guided multiscale approach

11:00 – 11:30 Masaki Makihara (Kyushu University)

Title: Brief introduction of exhibition from industries

—Break—

Poster session and exhibition (11:50 – 12:50)

—Lunch—

Oral session 2 (13:50 – 15:20)

Chair: Akihide Nagao (JFE Steel corporation/I2CNER, Kyushu University)

13:50 – 14:20 Hisao Matsunaga (Kyushu University)

Title: Recent activities of HYDROGENIUS and the contribution to industry

14:20 – 14:50 Masanobu Kubota, Saburo Matsuoka, Ryosuke Komoda (Kyushu University)

Title: Fatigue limit in high-pressure hydrogen gas

14:50 – 15:20 Chris San Marchi, Brian Somerday (Sandia National Laboratories, USA)

Title: Pressure cycling of all steel pressure vessels with gaseous hydrogen

—Break—

Oral session 3 (15:40 – 16:40)

Chair: Shigeru Hamada (Kyushu University)

15:40 – 16:10 Junichiro Yamabe (Kyushu University)

Title: Novel criteria for determining hydrogen compatibility of austenitic stainless steels and the mechanisms for hydrogen-assisted, surface crack growth

16:10 – 16:40 Hironori Suzuki (Toyota Industries Corporation)

Title: Fuel cell forklift truck development status

Closing remarks (16:40 – 16:50)

Brian Somerday (Sandia National Laboratories, USA)