

International Symposium of Hydrogen Polymers Team, HYDROGENIUS

Tentative Program (11/1/2017)

Date: **Thursday, 3th February 2017**

Venue: **Shiiki Hall, Kyushu University**

Oral Session

11:00-11:40 **Session 1**

11:00-11:40 Opening Remarks/

"Polymeric Materials for Hydrogen Devices"

Prof Shin NISHIMURA, Kyushu University (Japan)

11:40-13:10 Lunch

13:10-14:30 **Session 2**

Chairperson: Dr Hiroaki ONO, Kyushu University

13:10-13:50 "Radiation Cross-Linked Polyethylene as Hydrogen Polymer Materials"

Prof Kazuyuki ENOMOTO, Kyushu University (Japan)

13:50-14:30 "In-situ X-ray tomography of damage during pressure release in highpressure hydrogen exposed rubbers"

Dr Sylvie Castagnet, Institute P', ENSMA (France)

14:30-15:00 Coffee Break

15:00-16:50 **Session 3**

Joint Symposium of Hydrogen Tribology Team and Hydrogen Polymers Team

Chairperson: Prof Shin Nishimura, Kyushu University

15:00-15:40 TBD

Dr Kevin Simmons, Pacific Northwest National Laboratory (USA)

15:40-16:10 "Polymer Tribology in Hydrogen"

Prof Yoshinori SAWAE, Kyushu University (Japan)

16:10-16:20 Closing Remarks of Oral Session

Prof Joichi SUGIMURA, Kyushu University (Japan)

16:20-16:30 Break

16:30-18:00 **Poster Session**

PP01 "Activities of Research Group on Elastomers for Hydrogen Equipment"

Shin NISHIMURA, Kyushu University

PP02 "High-pressure Hydrogen Hose Evaluation Method"

Shin NISHIMURA, Kyushu University

PP03 TBD

Mitsuteru MUTSUDA, Daicel-Evonic LTD (Japan)

PP04 "Influence of Dissolved Hydrogen on the Bending Modulus of Polyamide 11"

Yohei FUJII, Kyushu University

PP05 "Properties of polyamide 11 and various long chain polyamides"

Shintaro OGATA, Arkema K.K.

- PP06 "Radiation Cross-Linked Polyethylene as Hydrogen Polymer Materials"
Kazuyuki ENOMOTO, Kyushu University
- PP07 "Morphological Change in High-Density Polyethylene caused by Rapid Decompression of High-Pressure Hydrogen: A Pulse NMR Study"
Kazuyuki ENOMOTO, Kyushu University
- PP08 TBD
Shuji KAWAMOTO, Kyushu University
- PP09 "On the Inhomogeneity in Acrylonitrile Butadiene Rubber during Hydrogen Elimination Process by Small Angle X-ray Scattering"
Keiko OHYAMA, Kyushu University
- PP10 "Influence of Soft Segment of Polyurethane derived from poriols on the property to High-pressure Hydrogen"
Hirotsada FUJIWARA, Kyushu University
- PP11 "High-pressure Hydrogen Gas Permeation Test of Polymeric Materials"
Hirotsada FUJIWARA, Kyushu University
- PP12 "The Investigation on Testing Methods for Rubber Materials Used in High-Pressure Hydrogen Gas"
Kazumi NAKAYAMA, Chemicals Evaluation and Research Institute, Japan
- PP13 "Fracture Model Analysis of Rubber O-ring for High-Pressure Gas Seal"
Atsushi KOGA, NOK Corporation
- PP14 "Effects of cyclic hydrogen pressure on failure and sealing properties of O-ring"
Masashi TAKEKOSHI, NOK Corporation
- PP15 "Compound Design of the O-ring materials for Hydrogen Station Devices"
Ryo TAKAHASHI, Takaishi Industry Corporation
- PP16 "Effect of Crosslink on Hydrogen Properties of NBR Evaluated by Gas Permeation Test"
Shinya YAMASAKI, Kyushu University
- PP17 "Internal Damage Quantification of HDPE Induced by Repeated High-Pressure Hydrogen Exposure using Light Extinction"
Hiroaki ONO, Kyushu University