

**HYDROGENIUS Polymers Division**  
**<International Symposium of Hydrogen**  
**Polymers Team, HYDROGENIUS>**

<Date> 11:00–18:00, Friday, February 2, 2018  
 <Venue> Lecture Room 3F, Shiiki Hall, Ito Campus, Kyushu University  
 <Language> English

〈Tentative Program and Speaker〉

Time	Program and Speaker
11:00-11:40	<b>Session 1</b>
11:00-11:40	Opening Remarks/ Polymeric Materials for Hydrogen Devices <b>Prof Shin NISHIMURA, Kyushu University (Japan)</b>
11:40-13:10	Lunch
13:10-14:30	<b>Session 2</b> Chairperson: Dr Hiroaki ONO, Kyushu University
13:10-13:50	High-Pressure Hydrogen Dispensing Hoses <b>Ikuma Yusa, The Yokohama Rubber Co., Ltd. (Japan)</b>
13:50-14:30	Behavior of Polymers in High Pressure Environments as Applicable to the Hydrogen Infrastructure <b>Dr Nalini Chulliyil MENON, Sandia National Laboratory (USA)</b>
14:30-15:00	Coffee Break
15:00-16:25	<b>Session 3</b> <b>Joint Symposium of Hydrogen Tribology Team and Hydrogen Polymers Team</b> Chairperson: Neha RUSTAGI, Fuel Cell Technologies Office, DOE (USA)
15:00-15:40	Hydrogen Compatible Polymeric Materials <b>Dr Kevin Simmons, Pacific Northwest National Laboratory (USA)</b>
15:40-16:20	Tribology of rubbers in hydrogen <b>Prof Joichi SUGIMURA, Kyushu University (Japan)</b>
16:20-16:25	Closing Remarks of Oral Session <b>Prof Shin NISHIMURA, Kyushu University (Japan)</b>
16:25-16:30	Break
16:30-18:00	<b>Poster Session</b>

**Poster Session (TBD)**

- 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 "Influence of Dissolved Hydrogen on the Bending Modulus of Polyamide 11"  
**Yohei FUJII, Kyushu University**
- PP04 "Cavitation during Tensile Deformation of a Hydrogen-Saturated Polyamide 11 Tube"  
**Kazuyuki ENOMOTO, Kyushu University**
- PP05 "Cavitation during Tensile Deformation of a Hydrogen-Saturated Polyamide 11 Tube: Study "  
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**Kazuyuki ENOMOTO, Kyushu University**
- PP05 Using Radiation Modification of Amorphous Phase in Polyethylene to Develop Hydrogen Compatible Resins Used in High-Pressure Hydrogen  
**Kazuyuki ENOMOTO, Kyushu University**
- PP06 "Effect of high-pressure hydrogen gas exposure on internal damage of high-density polyethylene"  
**Hiroaki ONO, Kyushu University**
- PP07 TBD  
**Mitsuteru MUTSUDA, Daicel Evonik Ltd.**
- PP08 "High-pressure Hydrogen Gas Permeation Test of Polymeric Materials"  
**Hirotsada FUJIWARA, Kyushu University**
- PP08 "Influence of Types of Fillers on Hydrogen Solubility in Acrylonitrile Butadiene Rubber"  
**Hirotsada FUJIWARA, Kyushu University**
- PP09 "The Investigation on Testing Methods for Rubber Materials Used in High-Pressure Hydrogen Gas"  
**Kazumi NAKAYAMA, Chemicals Evaluation and Research Institute, Japan**
- PP10 High-Pressure Hydrogen Sealability of EPDM rubber O-ring  
**Atsushi KOGA, NOK Corporation**
- PP11 "Wear of O-ring Exposed to Cyclic Pressurized Hydrogen"  
**Kiyohiro SUZUKI, NOK Corporation**
- PP12 TBD  
**Yoshihisa TAKEYAMA, Zeon Corporation**
- PP13 "Effect of Crosslink on Hydrogen Properties of NBR Evaluated by Gas Permeation Test"  
**Shinya YAMASAKI, Kyushu University**
- PP14 "Durability evaluation of hydrogen-resistant EPDM O-ring by high pressure hydrogen"  
**Ryo TAKAISHI, Takaishi Industry Co. Ltd.**
- PP15 "Study on higher order structure change of NBR rubber and the interaction between rubber and hydrogen molecules under the high-pressure hydrogen exposure by ab initio molecular orbital calculations"  
**Kentarou GOMA, Kogakuin University**
- PP16 "On the Inhomogeneity in Acrylonitrile Butadiene Rubber during Hydrogen Elimination Process by Small Angle X-ray Scattering"  
**Keiko OHYAMA, Kyushu University**

