

## International Symposium of Hydrogen Polymers Team, HYDROGENIUS

### Tentative Program

Date: **Wednesday, 4th February 2015**

Venue: **Shiiki Hall, Kyushu University**

### Oral Session

Chair: Prof Shin Nishimura

- 11:00-11:40 Opening Remarks/  
"Polymeric Materials for Hydrogen Devices"  
**Prof Shin NISHIMURA, Kyushu University (Japan)**
- 11:40-14:00 Lunch/Poster Session
- 14:00-14:40 "Statistical Analysis of Cavitation Damage in EPDM during Hydrogen Decompression"  
**Dr. Sylvie CASTAGNET, Institute P', ENSMA (France)**
- 14:40-15:20 Topics in HYDROGENIUS from Poster Presentation by graduate students  
  
"Hydrogen Characteristics of the Liquid Crystal Epoxy Polymer"  
**Mr. Shuji Kawamoto, Kyushu University (Japan)**  
  
Influence of High-pressure Hydrogen Exposure on the Inhomogeneous Structure of Peroxide Crosslinked Acrylonitrile Butadiene Rubber  
**Ms. Keiko OHYAMA, Kyushu University (Japan)**
- 15:20-15:40 Coffee Break
- 15:40-16:20 "Reinforcing and Hydrogen Permeation Behaviors of Rubber Compounds"  
**Prof. Changwoon NAH, Chonbuk National University (Korea)**
- 16:20-17:00 "Acceleration effect of additives on guest exchange process of syndiotactic polystyrene cocrystals studied by FTIR, SWAXS and SANS"  
**Prof Fumitoshi KANEKO, Osaka University (Japan)**
- 17:00-17:05 Closing Remarks  
**Prof Shin NISHIMURA, Kyushu University (Japan)**
- 17:15-19:00 Banquet (ITRI ITO, Kyushu University)

*\*Lecture of Prof Takashi Kuriyama have cancelled due to his urgent necessity in the university.*

### Poster Session

- P1 Activities of Research Group on Elastomers for Hydrogen Equipment  
**Shin NISHIMURA, Kyushu University**
- P2 In situ Observation of O-ring Deformation during Pressurization Process  
**Koki, SUGITA, Kyushu University**
- P3 Local Stress Sensing of Rubber Materials by Visible Light Emission  
**Susumu YAMANE, Kyushu University**
- P4 Hydrogen Characteristics of the Liquid Crystal Epoxy Polymer  
**Shuji KAWAMOTO, Kyushu University**

- P5 Influence of High-pressure Hydrogen Exposure on the Inhomogeneous Structure of Peroxide Crosslinked Acrylonitrile Butadiene Rubber  
**Keiko OHYAMA, Kyushu University**
- P6 Study on Higher Order Structure Change of Rubber Material and Additive at High-pressure Hydrogen Exposure by FTIR Spectroscopy  
**Yuzo ITO, Ryosuke NAGANUMA, Kogakuin University**
- P7 Study on High-pressure Hydrogen Seal Durability of Rubber O-ring  
**Atsushi KOGA, NOK Corporation**
- P8 A blistering defect formation of polyamide resins under exposure to high-pressure Hydrogen  
**Kazuyuki, Enomoto, Kyushu University**
- P9 Cold Resistance Improvement of the O-ring Materials for Hydrogen Station Devices  
**Ryo TAKAHASHI, Hideyuki TAKAISHI, Takaishi Industry Corporation  
Shigeru SAKURAI, Tokiko Technology Ltd.**
- P10 Evaluation of EPDM Exposed to High-Pressure Hydrogen Gas  
~ Influence of Carbon black ~  
**Kazumi NAKAYAMA, Hiroaki KONDO, Yoshito OHTAKE,  
Chemicals Evaluation and Research Institute, Japan**
- P11 Model Compounds of Fluoroelastomers for High-temperature Hydrogen Gas Sea  
**Michiko Doi, Daikin Industries Ltd.**
- P12 Evaluation of Viscoelasticity of Rubber Materials after High-pressure Hydrogen Cyclic Exposure  
**Hirotsada Fujiwara, Kyushu University**
- P13 Effect of the Penetrated Hydrogen on Viscoelasticity of Acrylonitrile Butadiene Rubber after High-pressure Hydrogen Exposure  
**Hirotsada Fujiwara, Kyushu University**
- P14 Relationship between Hydrogen Content and Volume expansion of Filled Rubber after High-pressure Hydrogen Exposure  
**Hirotsada Fujiwara, Kyushu University**