

## International Symposium of Hydrogen Polymers Team:2nd February 2012

- 10:00           Introductory Remarks  
Activities of Hydrogen Polymers Team, HYDROGENIUS AIST  
**Prof. Shin NISHIMURA**  
Kyushu University/HYDROGENIUS, AIST, Japan
- 10:10           Study on fracture mechanism of hydrogen-induced decompression failure of rubber seal  
**Dr. Junichiro YAMABE**  
Kyushu University
- 10:35           Influence of Mechanical Loading and Gas Pressure on the Cavitation of Rubber  
**Dr. Sylvie CASTAGNET**  
Institute P', Department of Physics and Mechanics of Materials, France
- 11:05           Visualizing O-ring Behavior with High-pressure Gas Decompression  
**Mr. Atsushi KOGA**  
NOK Corporation, Co., Ltd., Japan
- 11:30           Lunch Break and Poster Session
- 13:30           Rapid Gas Decompression on Elastomer Seals and Hoses for the Oilfiled Industry  
**Prof. Zoltan MAJOR**  
Johannes Kepler University in Linz, Austria
- 14:00           Thermal Expansion Behavior of Rubber Materials for High-Pressure Hydrogen Gas Seal  
**Mr. Hiroshi YAMADA**  
Kyushu University (Graduate Student), Japan
- 14:20           High-Pressure Hydrogen Gas Barrier Materials  
**Mr. Mitsuo SHIBUTANI**  
The Nippon Synthetic Chemical Industry Co., Ltd., Japan
- 14:45           Coffee Break
- 15:00           Evaluation of Hydrogen Dissolved in Rubber for High-Pressure Hydrogen Sealing using NMR  
**Dr. Hirotada FUJIWARA**  
HYDROGENIUS, AIST, Japan
- 15:25           Evaluation of Molecular Mobility of Rubber Materials for High-pressure Hydrogen Seal by Pulsed-NMR  
**Mr. Hiroaki ONO**  
Kyushu University (Graduate Student), Japan
- 15:45           Study on the Effect of Filler Materials on the Higher Order Structure of Rubber Materials by FT-IR Spectroscopy  
**Prof. Yuzo ITOH**  
Kogakuin University, Japan
- 16:10           Influence of Supercritical Carbon Dioxide and Organic Solvents on the Mobility of Polystyrene - A Study by Quasielastic Neutron Scattering  
**Prof. Fumitoshi Kaneko**  
Osaka University, Japan
- 16:35           Closing Remarks  
**Prof. Shin NISHIMURA**  
Kyushu University/HYDROGENIUS, AIST, Japan

\*Program and speakers may change without prior notice.