## *RBE Workshop December 12-13, 2005* 2nd International Workshop on Risk-based Engineering

- Next Steps for Risk Engineering Development -

# Program

#### Dec. 12th, 2005

9:00 Regstration at Reception Hall, Tower 75, Meijo Univ.

Chair: Prof. Kee Bong Yoon

- 9:30 Welcome Speech Prof. Ken Kanematsu (President of Meijo University, Japan) Opening Remark Dr. Koichi Yagi (NIMS, Japan)
- 9:45 Prof. Hideo Kobayashi (Yokohama National University, Japan)
- <40> Risk Associated with Materials -Lessons from Case Study of Failure Accidents-
- 10:25 Mr. Gregory C. Alvarado (The Equity Engineering Group, Inc., U.S.A)
- <40> Managing the Risks Associated with Pressure Vessels, Piping and Tanks in Process Plants – Lessons Learned and Future Direction
- 11:05 Coffee Break 25min.

Chair: Dr Ahmed Shibli

11:30 Dr. Aleksandar. S. Jovanovic (MPA Stuttgart, Germany)

- <40> CEN Workshop Agreement for the European Risk Based Inspection & Maintenance Procedure
- 12:10 Prof. Kee Bong Yoon (Chung Ang University, Korea)
- <40> Development Status of RBI Methodology for Process and Power Plants in Korea
- 12:50 Lunch Break 70min.

### Chair: Dr. Takayasu Tahara

- 14:00 Dr. Ji Yoon Kim (Korea Gas Safety Corporation, Korea)
- <40> Application of RBI for Petrochemical Plants
- 14:40 Prof. Joon Hyun Lee (Pusan National University, Korea)
  <40> Present and Future of NDE Techniques at Nuclear Power Plants in Korea
- 15:20 Coffee Break 20min.

Chair: Dr. Makoto Hayashi

15:40 Dr. Jun Nobe (Mitsubishi Research Institute Inc., Japan)

<30> Activities in NIMS Material Risk Information Platform Development Project

16:10 Dr. Fujio Abe (NIMS, Japan)

- <30> Heat-to-Heat Variation in Creep Life for Stainless Steels Based on NIMS Metallographic Atlas
- 16:40 Dr. Nobuyoshi Komai (Mitsubishi Heavy Industries, Ltd., Japan)
- <30> Considerations of Material Risk in Creep Rupture Tests of mod.9Cr-1Mo Steel Weldments

17:15 Mixcer at Observatory, Tower 75, Meijo Univ. | 19:30

#### Dec. 13th, 2005

8:30 Regstration at Reception Hall, Tower 75, Meijo Univ.

Chair: Dr. Aleksandar. S. Jovanovic

- 9:00 Prof. Shinsuke Sakai (University of Tokyo, Japan)
- <40> Current Status of Developing RBI Guideline in Japan
- 9:40 Dr. Ahmed Shibli (European Technology Development, U.K.)
- <40> Development of 'Risk Based Maintenance' Framework for Power Plant Boilers
- 10:20 Dr. Masataka Yatomi (Ishikawajima-Harima Heavy Industries Co., Ltd., Japan)
   <30> Application of RBM for Fossil Power Plant Boiler and Others
- 10:50 Dr. Seiji Yamaoka (IDEMITSU Engineering Co., Ltd., Japan)
- <30> Proactive Maintenance Management in Process and Plant Industries
- 11:20 Coffee Break 20min.

Chair: Dr. Kazunari Fujiyama

11:40 Dr. Nobuyoshi Satoh (Asahi Kasei Engineering Co., Ltd., Japan)

<30> The History and Present Condition of Risk-based Engineering Application in ASAHI KASEI Co., Ltd.

- 12:10 Dr. Kunio Onizawa (Japan Atomic Energy Agency, Japan)
- <30> Failure Probability Analyses of Nuclear Reactor Components Using Probabilistic Fracture Mechanics
- 12:40 Dr. Takeru Sano (The High Pressure Gas Safety Institute of Japan, Japan)
   <30> Web-based Database for Maintenance Engineering of Oil Refinery and Petrochemical Plants – KHK Database for Maintenance Engineering -
- 13:10 Lunch Break 60min.

Chair: Prof. Shinsuke Sakai

14:10 Dr. Yun Jae Kim (Korea University, Korea)

<30> Significance of Accurate J Estimates in Failure Probability Prediction

- 14:40 Mr. Bum Shin Kim (Korea Electric Power Research Institute, Korea)
- <30> Development of Risk Based Outrage Inspection and Maintenance Process for Fossil Power Plant
- 15:10 Mr. Jin Sang Lee (Chung Ang University, Korea)
- <30> Evaluation of Failure Probability for High Temperature Components Using Monte Catlo Simulation
- 15:40 Coffee Break 20min.

<u>Chair: Dr. Koichi Yagi</u>

16:00 Dr. Makoto Hayashi (Hitachi, Ltd., Japan)

- <30> The Points on Issue of Application of Risk-based Engineering to Thermal and Nuclear Power Plants
- 16:30 Prof. Kazunari Fujiyama (Meijo University, Japan)
- <30> Risk-based Engineering for the Quality Management of Plant Maintenance and Operation
- 17:00 Closing Remark Prof. Kazunari Fujiyama (Meijo University, Japan)

<Cancellation> Prof. Sun Dong Bai (University of Science and technology Beijing, China) Project Review and Multi Scale Problem in the Safety Evaluation of Engineering Material