

**International Seminar on Maintenance Science and Technology for Nuclear Power Plants Program
- Toward the Establishment of the International Conference Focused on Plant Maintenance -**

Host : Japan Society of Maintenance

Tohoku University Global COE Program, "World Center of Education and Research for Trans-disciplinary Flow Dynamics"

Dates : November 2 (Tue.) ~ 4 (Thur.)

Venue : Sendai International Center in Sendai-City, Miyagi, Japan

Program

Nov. 2 (Tue.)

Opening

12:45

Welcome Speech

12:50-13:00 Welcome Speech

Kenzo Miya (President of JSM)

Special Speech : The Balance between Plant Safety and Availability Chairperson: Fumio Kojima (Kobe University)

13:00-13:30 U.S. Regulatory Perspective on the Relationship of Safety to Online Maintenance

Jack Grobe (U.S. Nuclear Regulatory Commission (NRC))

13:35-14:05 Balancing the Risk Between Outage and On-Line Maintenance

Peter Arthur (Institute of Nuclear Power Operations (INPO))

Session 1: Expectation for International Collaboration & Conference on Maintenance Science & Technology

Chairperson: Jean-Yves Cavaille (INSA-Lyon) Kazuyuki Demachi (the University of Tokyo)

14:10-14:40 Is a High Level of Safety Consistent with High Levels of Availability in Nuclear Power Plants?

Douglas M. Chapin (MPR Associates)

14:45-15:15 Maintenance Management for the Conventional Island of Third Qinshan Nuclear Power Plant

Tang Wenzhong (Datang International Power Generation Co., Ltd)

15:20-15:50 International collaboration for Maintenance Science and technology

Akira Omoto (The University of Tokyo, Japan Atomic Energy Commission)

15:55-16:25 Nondestructive Characterization of Neutron Induced Embrittlement in Nuclear Pressure Vessel Steel Microstructure by Using Electromagnetic T

Gerd Dobmann (Fraunhofer Institute)

16:30-17:00 Status of ISI technology and NDE R&D Programs for Nuclear Power Plants in Korea

Hyun Kyu Jung (Korea Atomic Energy Research Institute)

Informal Meeting (Open to the Public) Chairperson: Hiroshi Miyano (Hosei University)

17:00-18:20 Dialogue between NRC/INPO and Japan

(Academia, Industry, Regulatory Body)

Banquet

18:30

Nov. 3 (Wed.)

Session 2: Inspection/Material Technology as One of the Most Important Maintenance Technologies and Necessity of International R&D Collaboration

Chairperson: Gabor Vertesy (Hungarian Academy of Science) Tetsuya Uchimoto (Tohoku University)

08:30-09:00 Potential Importance of Microstructural Aspects for Better Understanding of SCC Behaviors in Stainless Steels

Yutaka Watanabe (Tohoku University)

09:05-09:35 Advances in Automatic Analysis of Eddy Current Steam Generator Tube Inspection Data

Satish Udpa (Michigan State University)

09:40-10:10 Modeling Approaches for Improvement of Ultrasonic Inspection of Austenitic Steel Weldments

Sung-Jin Song (Sungkyunkwan University)

10:10-10:25 Coffee Break (15 min.)

10:30-11:00 Nondestructive Evaluation of Pipe Wall-thinning by EMAT-EC Dual Probe Developed through Joint Research between Tohoku University and I

Tetsuya Uchimoto (Tohoku University)

11:05-11:35 HOMC Guided Ultrasonic Waves for Maintenance of Components in Process Industries

Krishnan Balasubramaniam (Indian Institute of Technology Madras)

Lunch

11:35-12:45

Special Speech : Current Status of FBR "Monju" Chairperson: Jinhao Qiu (Nanjing University of Aeronautics and Astronautics)

12:45-13:15 Current Status of FBR "Monju" - From the Viewpoint of Maintenance for Restart of Long-term Shutdown Plant -

Satoru Nakai (Japan Atomic Energy Agency)

Session 3 : Perspectives on Maintenance Science & Technology Chairperson: Masahito Mochizuki (Osaka University)

13:20-13:50 Proposal for an International Forum on Maintenance Science and Technology

Toshiyuki Takagi (Tohoku University)

13:55-14:25 Maintenance and Corrosion Monitoring of Electric Power Systems

Kenrou Takamori (Tokyo Electric Power Company)

14:30-15:00 Ageing Management and Knowledge Management for Safe Long Term Operation of Light Water Reactors in Japan

Naoto Sekimura (The University of Tokyo)

15:00-15:15 Coffee Break (15 min.)

Panel Discussion : Facilitator: Hiroko Yamashita (IBM Japan)

15:15-17:35 Panel Discussion for the Establishment of the International Conference Focused on Plant Maintenance(140 min.)

Closing Chairperson: Hidetoshi Hashizume (Tohoku University)

17:35

Closing Remark

Tetsuo Shoji (Tohoku University)

JSM Party

18:00

hosted by JSM

Nov. 4 (Thur.)

Technical Tour

08:15

Departure from Tokyu Excel Hotel

* Sendai GCC Thermal Power Station, Tohoku Electric Power Co., Inc.

* Shinkansen (Japanese bullet train) Comprehensive Maintenance Center

17:00

Closing at Sendai Station