

# Program of MITS 2004

- 15 March, 2004** NIMS-RIMAP Risk Based Engineering Workshop
- 16 March, 2004** International Symposium on NIMS Creep Data Sheet
- 17 March, 2004** NIMS-MPA Workshop on Long-term Strength and Reliability of High Cr Ferritic Creep Resistant Steels

Organized by

Materials Information Technology Station (MITS)

National Institute for Materials Science (NIMS)

Venue: National Institute for Materials Science  
1-2-1 Sengen, Tsukuba-shi, Ibaraki 305-0047, Japan  
<http://www.nims.go.jp/eng/visiting/directions.html>

Secretariat: Ms Shoko Tsuda  
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## 1st day of MITS meeting 2004

### NIMS-RIMAP Risk Based Engineering Workshop

Date: 15 March, 2004

Organisation: NIMS Materials Risk Information Platform Development project &  
RIMAP (Risk-Based Inspection and Maintenance  
Procedures for European Industry) project

Support: National Institute for Materials Science (NIMS) &  
The Society of Non-Traditional Technology, Materials-System Safety Forum

Registration fee: 5,000JPY (Free for RIMAP Project member)

#### Program

**Chairperson: T. Fujioka (Central Research Institute of Electric Power Industry)**

10:00-10:10 **Opening Address** **K. Yagi (National Institute for Materials Science)**

10:10-10:30 **Concept of Risk Based Engineering**  
**Tokyo Institute of Technology Hideo KOBAYASHI**

10:30-11:50 **Survey of RIMAP Project**  
**MPA Stuttgart, Germany Aleksandar. S. JOVANOVIC**

11:50-12:20 **Activity of RBI Guideline Development for Non-Nuclear Industries by HPI  
Committee**  
**The University of Tokyo Shinsuke SAKAI**

12:20-13:20 <Lunch Break>

**Chairperson: M. Hayashi (Hitachi)**

13:20-13:50 **Application of RBM(Risk Based Maintenance) for Industrial Equipments, Boiler,  
LNG Tank, Crane etc.**  
**Best Materia Co.Ltd. Shigemitsu KIHARA**

13:50-14:20 **Risk Based Maintenance of Aged Power Plants**  
**Hitachi Ltd. Shigeo SAKURAI**

14:20-14:50 **Risk Based Maintenance of Chemical Plant**  
**Sumitomo Chemical, Hiroshi ISHIMARU and Hiroaki MASATOMO**

14:50-15:20 **The Activity of Tuv concerning Risk-Based Management**  
**TUV Industry Service, TUV SUD Group, Germany R. KAUER**

15:20-15:50 **Integrated Evaluation of Maintenance Strategies for Steam Generator Tubes  
Considering Failure Probabilities, Financial Index and Social Acceptance**  
**The University of Tokyo, Shinobu YOSHIMURA**

15:50-16:10 <Coffee Break>

**Chairperson: S. Sakai (University of Tokyo)**

16:10-16:30 **Development of Materials Risk Information Platform Main System (tentative)**  
**Mitsubishi Research Institute Jun NOBE**

16:30-16:50 **Development of Risk Management Techniques by Creep Tests of Simulated Boiler**

**Thick Weldment**

Mitsubishi Heavy Industries **Nobuyoshi KOMAI**

16:50-17:10 **Creep Life Assessment Based on NIMS Metallographic Atlas**

National Institute for Materials Science **H. TANAKA**

17:10-17:30 **Risk-based Maintenance Planning Support System for Power Boilers**

Central Research Institute of Electric Power Industry **Terutaka FUJIOKA**

17:30-17:40 **Closing**

**A. S. Jovanovic (MPA Stuttgart)**



17:30-17:35

**Closing**

**K. Yagi (National Institute for Materials Science)**

17:45-19:30

**Reception**

3rd day of MITS meeting 2004

## NIMS-MPA Workshop on Long-term Strength and Reliability of High Cr Ferritic Creep Resistant Steels

Date: 17 March, 2004

Organisations: Materials Information Technology Station & Steel Research Center  
National Institute for Materials Science (NIMS)

Registration fee: Free

### Program

- Chairpaerson:** F. Abe (National Institute for Materials Science)
- 10:00-10:10 **Opening Address** K. Yagi (National Institute for Materials Science)
- 10:10-10:30 **Long-term Creep Strength Prediction of 9Cr Steels**  
National Institute for Materials Science **Kazuhiro KIMURA**
- 10:30-10:50 **Models and Methods for Predicting Creep Life and Creep Strength of Ferritic Steels**  
VTT, Finland **Pertti AUERKARI**
- 10:50-11:10 **Influence of Heat Treatment on Microstructure**  
MPA Stuttgart, Germany **Karl MAILE**
- 11:10-11:30 <Coffee Break>
- Chairpaerson:** P. Auerkari (VVT)
- 11:30-11:50 **Creep Strength of 9Cr Steel Weldments** (*tentative*)  
National Institute for Materials Science **Masaaki TABUCHI**
- 11:50-12:10 **Evaluation of Cross Weld Creep Strength of 9-11 Cr Steels**  
MPA Stuttgart, Germany **Andreas KLENK**
- 12:10-13:20 <Lunch Break>
- Chairpaerson:** J. Hald (Elsam/Energy E2, TU)
- 13:20-13:40 **High Temperature Fatigue Property of High Cr Steels** (*tentative*)  
National Institute for Materials Science **Koji YAMAGUCHI**
- 13:40-14:00 **Damage Evaluation in P91 Under Multiaxial Loading Conditions**  
MPA Stuttgart, Germany **Karl MAILE**
- 14:00-14:20 **Simulated Internal Pressure Creep Test of 9Cr Steels** (*tentative*)  
IHI **Isamu NONAKA**
- 14:20-14:40 **Calculation of Deformation and Damage in High Temperature Components**  
MPA Stuttgart, Germany **Andreas KLENK**
- 14:40-15:00 <Coffee Break>

**Chairpaerson;** **K. Nagai (National Institute for Materials Science)**

15:00-15:20 **Alloy Design of Ferritic Creep Resistant Steels (*tentative*)**  
Sumitomo Metal **Masaaki IGARASHI**

15:20-15:40 **Long Term Stability of 9-12%Cr Steels**  
Elsam/Energy E2, TU, Denmark **John HALD**

15:40-16:00 **Development of High Cr Ferritic Creep Resistant Steels (*tentative*)**  
National Institute for Materials Science **Fujio ABE**

16:00-16:30 **Progress in Heat Resistant Steels**  
The University of Tokyo **Toshio FUJITA**

16:30-16:40 **Closing** **K. Nagai (National Institute for Materials Science)**