

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
The Society of Non-Traditional Technology <http://www.sntt.or.jp>
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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)

2nd day of MITS meeting 2004

International Symposium on NIMS Creep Data Sheet

Date: 16 March, 2004

Organisation: Materials Information Technology Station (MITS)
National Institute for Materials Science (NIMS)

Registration fee: Free (Reception : 3,000JPY)

Program

Chairperson: K. Kimura (National Institute for Materials Science)

- 10:00-10:10 **Opening Address** **K. Yoshihara (National Institute for Materials Science)**
- 10:10-10:50 **Start of the NRIM Creep Data Sheet Project**
 Japan Ultra-high Temperature Materials Research Institute **Ryohei TANAKA**
- 10:50-11:30 **Development of Creep Resistant Steels and Alloys in Japan**
 Sumitomo Metal Technology, Inc. **Yoshiatsu SAWARAGI**
- 11:30-12:10 **Development of Creep Resistant Materials in U.S.A. *(Tentative)***
 Alstom, U.S.A. **Domenic A. CANONICO**
- 12:10-13:10 <Lunch Break>

Chairperson: F. Masuyama (Kyushu Institute of Technology)

- 13:10-13:55 **The European Creep Collaborative Committee ECCC - Joint Creep Data Generation and Assessment on Steels and Superalloys in Europe since 1992 -**
 Instituto Scientifico BREDA, Italy **Gunther MERCKLING**
- 13:55-14:40 **Activity of German Creep Committee (GCC)**
 German Creep Committee, Germany **Karl Heinz MAYER and Torsten-Ulf KERN**
- 14:40-15:10 **Activity of JPVRC (Japan Pressure Vessel Research Council)**
 National Institute for Materials Science **Fujio ABE**
- 15:10-15:30 <Coffee Break>

Chairperson: F. Abe (National Institute for Materials Science)

- 15:30-16:00 **Application of Creep Data to Design and Codes**
 Kyushu Institute of Technology **Fujimitsu MASUYAMA**
- 16:00-16:30 **Life Evaluation and Weld Repair of Thermal Power Plant Components**
 Tokyo Electric Power Company **Mitsuru AOKI**
- 16:30-17:00 **Present Status and Future Prospect of NIMS Creep Data Sheet Project**
 National Institute for Materials Science **Kazuhiro KIMURA**
- 17:00-17:30 **Significance of Long-term Creep Data**
 Tokyo Institute of Technology **Takashi MATSUO**

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

Chairperson;	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>
Chairperson;	P. Auerkari (VVT)
11:30-11:50	Creep Strength of 9Cr Steel Weldments (<i>tentative</i>) 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>
Chairperson;	J. Hald (Elsam/Energy E2, TU)
13:20-13:40	High Temperature Fatigue Property of High Cr Steels (<i>tentative</i>) 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 (<i>tentative</i>) 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 (<i>tentative</i>) 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 (<i>tentative</i>) 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)