

RIMAP<sub>Network</sub>

NIMS

Independent Administrative Institution National Institute for Materials Science



1<sup>st</sup> Announcement for the

# NIMS and RIMAP

# **Risk Based Engineering Workshop**

held in conjunction with NIMS Creep Data Sheet Symposium and NIMS-MPA Workshop

The Workshop is organized with the cooperation of European RIMAP (Risk-Based Inspection and Maintenance Procedures) project and NIMS Materials Risk Information Platform Development project Sponsored by The Society of Non-Traditional Technology, Materials-System Safety Forum

Supported by National Institute for Materials Science

#### Contact:

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#### Secretariat:

Ms. Shoko Tsuda The Society of Non-Traditional Technology 1-2-10, Toranomon, Minato-ku, Tokyo 105-0001, Japan Fax: +81-3-3597-0535, E-mail: tsuda@sntt.or.jp

Organizing and Scientific Committee:

Dr. K. Yagi, National Institute for Materials Science, chairman

Dr. A. S. Jovanovic, MPA University Stuttgart

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Prof. S. Sakai, University of Tokyo

Dr. A. Nitta, Central Research Institute of Electric Power Industry

Dr. M. Hayashi, Hitachi Ltd.

Prof. S. Yoshimura, University of Tokyo

Fees:

- Workshop: 5000 Yen
- Banquet on 16th March: 3000 Yen
- Workshop is free for RIMAP Project
  members

**Registration Deadline for Presentation: January 15, 2004**. If the workshop secretariat will receive the registration form for presentation, the format for manuscript

will be sent Manuscripts Deadline ; February 16, 2004, to Workshop Secretariat.

# Venue:

National Institute for Materials Science (NIMS) 1-2-1, Sengen, Tsukuba, Ibaraki 305-0047, Japan Tel : +81-29-859-2000

Map : <u>http://www.nims.go.jp/eng/visiting/directions.html</u>

#### Date:

March 15, 2004

#### General on this workshop:

Current practice to inspection and maintenance planning is for most industries based on tradition and prescriptive rules rather than being an optimized process where risk measures for safety and economy are integrated. New technology for making risk-based decisions is emerging within a broad range of sectors, and has proven to be a very efficient tool.

There is need to define the technical content, links to local legislation and to integrate this approach with the day-to-day plant operation. This is the main background for the RIMAP projects. On the other hand, in Japan, the development of database which is needed for risk-based engineering is conducted under the cooperation of companies and academic societies with NIMS as project core. This project aims to develop the Materials Risk Information Platform. The concept of risk-based engineering is proposed by Prof. H. Kobayashi, TIT, and the activities concerning risk-based engineering are widely carried out in Japan.

# **Objective of this workshop:**

The application of risk assessment to power plants and chemical plants is actively investigated and practiced in the world. In this workshop, the present situation and experience of risk assessment of these plants and the technological development for risk-based engineering in Europe and Japan will be presented and discussed. It is expected through the information exchange in this workshop that the mutual understanding between Europe and Japan concerning risk-based engineering will become deeper.

# General about RIMAP

The RIMAP projects have the three clustered projects:

- development (RTD)
- demonstration (DEMO)
- thematic network (TN), including extension to NAS countries

RIMAP consortium consisting of 30+ European institutions represents an important part of European industry which has joined forces to develop a guideline for making risk based decisions for maintenance and inspection planning. The guideline should provide technical basis for a European standard in this area.

#### Facts about RIMAP

"Risk" in RIMAP is understood as the combined effect of probability and consequence of failure. Safety, health, environment and economic consequences are considered.

- Project start: March 1, 2001
- Duration: 36 months (RTD+Demo), 48 month (TN)

For further information on:





- RIMAP RTD and DEMO projects see http://research.dnv.com/rimap
- RIMAP Thematic Network see <u>http://www.mpa-lifetech.de/RIMAP</u>

#### **Intended audience**

The workshop is intended for engineers and other professionals working in the areas of inspection, maintenance, life management of industrial plants (not only power!), and in particular for asset managers, risk managers and HSE managers as well authorities.

#### **RIMAP participating companies:**

AIB Vinçotte International; Allianz - Zentrum für Technik GmbH; Baylac - Consultant for Pressure Equipment; Bulgarian Academy of Sciences; Bureau Veritas; BZF Bay Zoltan Foundation; CorrOcean ASA; Corus UK Ltd., Swinden Technology Centre; DNV Det Norske Veritas; EDF Electricité de France; Electrabel MCC; EnBW Ingenieure GmbH; ERA Technology Ltd.; ESB Electricity Supply Board; Exxon Chemical Company; Facility of Materials Science and Engineering, Warsaw Univ. of Technology; FORCE Institute; GEODECO S.p.A; Health & Safety Executive; HYDRO AGRI SLUISKIL B.V.; ISIM Institute of Welding and Material Testing; ISQ Instituto de Soldadura e Qualidade; Israel Electric Corporation Ltd.; JRC Petten Joint Research Center - Institute; for Energy, Nuclear Safety Unit; MARINTEK; METALogic n.v. - Research Park Haasrode; MIT Intelligenter Technologien GmbH; Monition Ltd. (International); Petróleo Brasileiro S.A., Petrobras CENPES; Siemens AG Power Generation; Solvay; MPA Stuttgart; TECHNOLOGICA Group c.V.; TNO Institute of Industrial Technology; TotalFinaElf; TÜV Süddeutschland; TWI; University of Wales Swansea; VTT Technical Research Center of Finland, VUZ

#### **Preliminary Program (tentative)**

# March 15<sup>th</sup>

10:00 - 10:15	<b>Opening/Welcome/Introduction</b>
10:15 – 12:00	Survey of RIMAP Project
	Risk Assessment Procedure
	Damage Mechanisms
	PoF – Probability of Failure
	CoF – Consequence of Failure
	Demonstration for Power Industry and other types of industries
12:00 - 13:00	Break
13:00 - 17:00	<b>Practical aspects of Risk-Based Engineering</b> (Contributions from European and Japanese participants)

# Language

Language of the workshop is English.

# Information of Travelling and Accommodation:

The information of travelling and accommodation can be obtained from the Workshop Secretariat.

# **APPLICATION / REGISTRATION FORM:**

Send to : Ms. Shoko Tsuda, The Society of Non-Traditional Technology, 1-2-10, Toranomon, Minato-ku, Tokyo 105-0001, Japan, Fax: +81-3-3597-0535, E-mail: tsuda@sntt.or.jp

I am interested to submit a paper (title and abstract attached)

I apply herewith for participating in the RIMAP Workshop held in conjunction with NIMS Creep Data Sheet Symposium and NIMS-MPA Workshop

Name:	Company:
Address:	
Status in RIMAP :	RTD member    TN member    Registered observer      None of above, I will register for the workshop at the venue directly
Date:	Signature:
Tel.:	Fax: e-mail: