

Programme of 10th International NIMS-MPA-IfW Workshop

Monday 6th July, 2015

9:00-9:10 Opening of Workshop

Kotobu Nagai, Director, Research Center for Structural Materials, NIMS

Chairperson : A. Klenk, K. Kimura

9:10-9:40 1. Andreas Klenk, Magdalena Speicher, Daniel Hüggenberg, MPA Stuttgart
"Material investigations for advanced high efficiency power plants"

9:40-10:10 2. Matthias Oechsner, Christian Kontermann, Alfred Scholz, TU Darmstadt
"Lifetime Assessment of Notched Components under LCF-Loading"

10:10-10:40 3. Kazuhiro Kimura, NIMS
"Possibility of improvement in creep rupture ductility of Grade 92 steel"

10:40-11:00 Break

11:00-11:30 4. Karl Michael Kraemer, Falk Mueller, Alfred Scholz, Matthias Oechsner, TU Darmstadt
"Estimation of thermo-mechanical fatigue crack growth using an accumulative approach based on isothermal test data"

11:30-12:00 5. Martin Frommherz, Alfred Scholz, Matthias Oechsner, Mario Rudolphi, Michael Schütze, TU Darmstadt
"Modern double layer thermal barrier coatings : fundamental properties lifetime assessment"

12:00-13:20 Lunch

Chairperson : M. Oechsner, F. Abe

13:20-13:50 6. Donth, Saarschmiede AG
"Nickel-Base Alloy Forgings For Advanced Ultra Super Critical Power Plants"

13:50-14:20 7. Klaus Metzger, Großkraftwerk Mannheim AG
"On the way to 700 °C Power Plant Needs for R&D from the Prospective of an End-User"

14:20-14:50 8. Magdalena Speicher, Daniel Hüggenberg, Andreas Klenk, MPA Stuttgart
"Application of fracture mechanics methods for the assessment of components with defects "

14:50-15:20 Break

Chairperson : Y. Yamamoto, M. Tabuchi

15:20-15:50 9. Fujio Abe, Masaaki Tabuchi and Susumu Tsukamoto, NIMS
"Effect of boron on creep strength and microstructure of a 9Cr steel MARBN for A-USC boilers at 650 °C "

- 15:50-16:20 10. A. Hobt, Andreas Klenk, MPA Stuttgart
"Assessment of crack initiation in the creep regime"
- 16:20-16:50 11. Yukinori Yamamoto and Peter F. Tortorelli, Oak Ridge National Laboratory
"Recent progress on Structural Materials Development for Fossil Energy
Applications at Oak Ridge National Laboratory"
- 16:50-17:20 12. Keiji Kubushiro, IHI corporation, Kota Sawada, Kazuhiro Kimura, NIMS
"Creep rupture strength of repair welds for Gr.91"
- 17:20-17:30 Closing remark
- 18:00-20:00 Reception