



Max-Planck-Institut für
Eisenforschung GmbH

MPIE workshop

Hydrogen Embrittlement and Sour Gas Corrosion in Oil and Gas Industry

(with a focus on corrosion resistant alloys/nickel alloys)

Max-Planck-Institut für Eisenforschung GmbH
Düsseldorf, Germany - 27th and 28th January 2015



For more information and registration visit:

hew15.mpie.de

Registration deadline: 10th Dec. 2014

We are happy to invite you to this international workshop that brings together leading experts from academia and oil and gas industry to allow in-depth discussions of fundamental and applied research in this area.

Location:

Max-Planck-Institut für Eisenforschung GmbH
Max-Planck Straße 1
D-40237 Düsseldorf
Germany

Contributed talks include:

- **A. Aghajani (VDM Metals)**
"Effect of hardness on sour gas resistance in SSRT test"
- **A. Barnoush (NTNU)**
"Challenges in Norwegian Oil and Gas Industry to overcome Hydrogen embrittlement"
- **F. Dean (Ion Science Ltd.)**
"Incidents of hydrogen flux occurring in sour oil and gas environments, their cause, measurement and interpretation"

- **O. Golenishcheva (TU Darmstadt)**
"Impact of the heat treatment of nickel based alloy 718 on the susceptibility to hydrogen embrittlement"
- **T. Hickel (MPIE)**
"Ab initio insights into the interaction of hydrogen with precipitates in steels"
- **G. Jacob (Schlumberger Ltd.)**
"Nanostructured Materials and Design Innovations for Step Changes in Multi Stage Stimulation"
- **R. Kirchheim (Univ. Göttingen)**
"Affinity of hydrogen at the entrance site and its effect on permeation"
- **M. Koyama (Kyushu Univ.)**
"Advanced strategy of multi-scale damage evolution analysis and hydrogen mapping in complex steels"
- **G. Leyson (MPIE)**
"Multiscale modeling of hydrogen enhanced local plasticity and its application to homogeneous dislocation nucleation in Ni-H systems"
- **M. Rohwerder (MPIE)**
"Spatially resolved measurement of hydrogen uptake during corrosion"
- **I. Roy (Schlumberger Ltd.)**
"Coarse Grain Polycrystalline to Nano: Addressing Hydrogen Damage, Corrosion and Environmental Cracking in Extreme Environments"
- **H. Sarmiento-Klapper (Baker Hughes INTEQ GmbH)**
"Sour gas – The game-changing factor in drilling technology"
- **G. Schmitt (IFINKOR gGmbH)**
"Aspects of testing of sour gas corrosion resistance in CRAs"
- **G. Siegmund (ExxonMobil)**
"Experiences with CRAs in German sour gas fields"
- **O. Tassa (CSM Italy)**
"The effect of Nb content and heat treatment on mechanical properties and stress corrosion cracking behavior of Alloy IN718"
- **F. Thebault (Vallourec & Mannesmann Tubes, France)**
"Sulfide Stress Cracking of OCTG products – focus on the sources of hydrogen and the modes of charging"
- **E. Wallaert (Univ. Gent)**
"Investigation of the impact of the FeS layer on the hydrogen uptake in high strength steel under sour conditions"

Contacts:

Dr. Dirk Ponge (d.ponge@mpie.de)

Zahra Tarzimoghadam (z.tarzimoghadam@mpie.de)