HEmS Early Career Researcher group

Hydrogen embrittlement: Industrial problems and the HEmS grant research

Wednesday 30 September, 2015

AGENDA

2pm Arrival - coffee/tea [St Anne's College]

Session 1 – Steels Chair – Dr Olga Barrera (HEmS grant, University of Oxford)

2.00 – 2.25 Welcome and HEmS overview
Dr Olga Barrera (HEmS grant researcher, University of Oxford)

2.25 – 2.50 Characterisation of the hydrogen transport and the hydrogen induced damage of (ultra) high strength steel concepts
Tobias Schaffner (Ruhr-University Bochum/ ThyssenKrupp Steel Europe)

2.50 – 3.15 Atomistic simulations of Hydrogen in bearing steels
Dr Sebastián Echeverri Restrepo (Researcher, SKF Engineering & Research Centre)

3.15 – 3.40 Hydrogen embrittlement of subsea welded joints: failure mechanisms and opportunities for mitigation
Dr Michael Dodge (Senior Project Leader, The Welding Institute Ltd)

3.40 – 4.00 Tea break

Session 2 - Other Metals

Chair – Dr James Kermode
(University of Warwick, HEmS grant Associate)

4.00 – 4.25 The Role of Hydrogen and Hydrides in Zirconium Alloy Performance
Dr Peter Honniball (Metallurgist, Core Design and Performance, NNPPI, Rolls-Royce)

4.25 – 4.50 Multiscale Modelling of Delayed Hydride Cracking
Mitesh Patel (PhD Student, Dept. Physics, Imperial College London)

4.50 – 5.15 Hydrogen in titanium – the role of stress, temperature, time and microstructure
Professor David Rugg (Rolls-Royce Senior Fellow)

Discussion

http://www.hems.ox.ac.uk/