

- HYDROGEN-MATERIALS INTERACTIONS -

HYDROGENIUS, I²CNER, HYDROMATE AND SINTEF JOINT RESEARCH SYMPOSIUM 2022

< Date and hour > January 27th (Thu), 20:00—23:00 (Japan time)
January 28th (Fri), 20:00—23:00 (Japan time)
< Venue > Online (ZOOM meeting)
< Language > English

Day 1 Program (January 27th (Thu), 20:00—23:00)

Time	Presentation Title and Speaker
20:00-20:10	Opening Remarks Hisao Matsunaga (Kyushu University, Japan)

Session 1 (Chair: Hisao Matsunaga, Kyushu University)

20:10-20:50	Hydrogen embrittlement resistance of X65 pipeline steels - Results from the HyLINE project Vigdis Olden (SINTEF, Norway)
20:50-21:30	Essential strength properties for low alloy steels used in high-pressure hydrogen gas environment Hisao Matsunaga (Kyushu University, Japan)
21:30-21:40	Break

Session 2 (Chair: Alexei Vinogradov, NTNU)

21:40-22:20	Hydrogen embrittlement in multiphase TRIP steels: from fundamental understanding to H-tolerant microstructure design Binhan Sun (Max-Planck-Institut für Eisenforschung GmbH, Germany)
22:20-23:00	Hydrogen-assisted fatigue and fracture of carbon steels and the implications of blending hydrogen into natural gas transmission infrastructure Chris San Marchi (Sandia National Laboratories, USA)

Day 2 Program (January 28th (Fri), 20:00—23:00)

Time	Presentation Title and Speaker
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Session 3 (Chair: Junichiro Yamabe, Fukuoka University)

20:00-20:40	On the hydrogen embrittlement of Inconel 718 alloy produced by laser-based powder bed fusion Shuai Wang (Southern University of Science & Technology, China)
20:40-21:20	Hydrogen associated decohesion and localized plasticity in austenite-ferrite lightweight steel Xizhen Dong (Max-Planck-Institut für Eisenforschung GmbH, Germany)
21:20-21:30	Break

Session 4 (Chair: Brian Somerday, University of Illinois at Urbana Champaign)

21:30-22:10	Research progress on hydrogen embrittlement in high-entropy alloys Hong Luo (University of Science and Technology Beijing, China)
22:10-22:50	Mitigation of hydrogen embrittlement by impurities Masanobu Kubota (Kyushu University, Japan)
22:50-23:00	Closing Remarks Brian Somerday (University of Illinois at Urbana-Champaign, USA)