

Room: Gallieni 3

Workshop 4: *Prediction of Long Term Corrosion Behaviour in Nuclear Waste Systems.*
organisers: D. Crusset, D. Féron, J.-M. Gras, D. D. Macdonald

Poster Sessions **Monday 13 September: 18:00 – 19:30**
 Tuesday 14 September: 18:00 – 19:30

List of Posters: see at the end of this Workshop Program

Tuesday 14 September

Workshop 4 “Experimental”

Co-chairs: D. Féron, D.D. Macdonald

- 08:40** **04-KN-427**
Real-time monitoring of copper corrosion at the Äspö HRL.
Bo ROSBORG
- 09:20** **04-O-083**
Corrosion Behaviour of Carbon Steel in Contact with Bentonite under Anaerobic Condition.
Naoki TANIGUCHI
- 09:40** **04-O-162**
Hydrogen Induced Stress Corrosion Cracks Initiation to Propagation Process of Titanium Alloys under the Deep Underground Environments.
Gen NAKAYAMA
- 10:00** **04-O-230**
Effect of the degree of compaction of bentonite on the general corrosion rate of copper.
Timo SAARIO
- 10:20** **Coffee break**
- 10:50** **04-O-432**
Galvanic corrosion of copper cast iron couples in relation to the Swedish radioactive waste canister concept.
Nicholas SMART
- 11:10** **04-O-468**
Corrosion of several components of the “in-situ” test performed in a deep geological granite disposal site.
Virginia MADINA
- 11:30** **04-O-484**
Corrosion behaviour of carbon steel in the Tournemire clay.
François FOCT

11:50 **04-O-514**
Laboratory Corrosion Tests on Candidate High-Level Waste Container Materials:
Results from the Belgian Programme.
Frank DRUYTS

12:10 **04-O-231**
New Results on Long Term Aging Tests for Rad-Waste Container Alloy Selection.
Helena ALVES

12:30 *Lunch*

Joint Session 4 + 19

Co-chairs: D. Crusset, T. Saario

14:00 **04-KN-510**
Corrosion behaviour of low alloy steels : from ancient past to far future.
Gérard SANTARINI

14:40 **04-O-059**
Modelling carbon steels corrosion during a long period in soils: contribution of A.C. impedance spectroscopy.
Christian LEMAITRE

15:00 **19-O-498**
Corrosion of iron artefacts from '200-500 AD preserved in situ at the waterlogged site Nydam, Denmark.
Henning MATTHIESEN

15:20 **19-O-218**
A study on species transport in the corrosion products of ferrous archaeological analogues– a contribution to the modelling of iron long term corrosion behaviour.
E. VEGA

15:40 *Coffee break*

16:10 **19-O-187**
On the characterisation of the corrosion layout of ferrous archaeological analogues in binders.
Walter-John CHITTY

18:00 - 19:30 **Poster Session - List of Posters: see at the end of this Workshop Program**

Wednesday 15 September

Workshop 4 “Modelling”

Co-chairs: J.M. Gras et F. Druyts

- 08:40** **04-KN-207**
Corrosion Evaluation of Metallic HLW/Spent Fuel Disposal Containers - review.
Bruno KURSTEN
- 09:20** **04-O-277**
Electrochemical study of lepidocrocite reduction and redox cycling for the mechanistic modelling of atmospheric corrosion.
Stéphane PERRIN
- 09:40** **04-O-299**
Assessment of Risk Associated with Long-Term Corrosion of Alloy 22 and Ti-7 in the Potential Yucca Mountain High-Level Nuclear Waste Repository.
Tae AHN
- 10:00** **04-O-325**
Model for Low Temperature Oxidation during long term interim storage.
Nathalie BERTRAND
- 10:20** *Coffee break*
- 10:50** **04-O-414**
Modelling of the propagation of crevice corrosion.
Jean-Louis MOUSSON
- 11:10** **04-O-348**
Long-term prediction of reinforced concrete structures - Use of thermodynamic data to assess steel corrosion in carbonated concrete.
Bruno HUET
- 11:30** **Conclusion**

Workshop 4: List of Posters

- 04-P-225** Anticorrosion Protection of Uranium.
Ivan GONCHAROV