Poster Session – NWTRB Workshop on Recent Advances in Repository Science and Operations from International Underground Research Laboratory Collaborations

April 24, 2019 – 5:15 p.m. to 6:15 p.m.

Diplomat A&B

Posters

1. Hydrogen Transfer Experiment
   Simon Norris, Radioactive Waste Management

1A. Sampling of Rare Earth Elements with DGT at Äspö Hard Rock Laboratory, SKB[1]
[Linda J. Alakangas (Linnæus University and SKB)]

2. Äspö Hard Rock Laboratory, SKB

3. Development of SKB Buffer Installation Method, SKB
   [David Luterkort (SKB), Lars-Erik Johannesson (SKB), Peter Eriksson (SKB), and Esther Jonsson (SKB)]

4. Verification of the Dome Plug Design Intended for Sealing of Deposition Tunnels in the Swedish Spent Fuel Repository, SKB
   [Pär Grahm (SKB), Matti Nord (SKB), and Esther Jonsson (SKB)]

5. Quality Control, Traceability and Verification of the Process for Construction of Deposition Tunnels, SKB
   [Henrik Ittner (SKB) and Rolf Christiansson (SKB)]

6. Prototype Repository – Mass Redistribution in the Buffer and the Tunnel Backfill, SKB
   [Lars-Erik Johannesson (SKB), Patrik Sellin (SKB), David Luterkort (SKB), and Peter Eriksson (SKB)]

7. Results from Hydro-Mechanical and Geochemical Analyses of the Retrieved Buffer Material from the Prototype Repository at Äspö HRL, SKB
   [Lars-Erik Johannesson (SKB), Pär Grahm (SKB), and Anders Sjöland (SKB)]

8. Thermo-Hydro-Mechanical-Chemical Modeling of Bentonite Alterations and Comparison with an International Full-scale Heater Test
   Liange Zheng, Lawrence Berkeley National Laboratory

9. Fault Slip and Permeability Increases: Potential Impacts from Fluid Pressurization
   Yves Guglielmi, Lawrence Berkeley National Laboratory

[1] Organization who provided the poster. If authors are listed on the poster, then their names are provided inside []s. Patrik Vidstrand from SKB will be at posters 1A-7.

10. Sorption and Diffusion Experiments on Thermally Altered and Unaltered Heater Test Samples
    Patricia Fox, Lawrence Berkeley National Laboratory

11. DECOVALEX19 Task C: GREET (Groundwater Recovery Experiment in Tunnel): Fracture Characterization and Modeling of Hydrology at the Mizunami Underground Research Laboratory, Japan
    Teklu Hadgu, Elena Kalinina, and Yifeng Wang, Sandia National Laboratories

12. Cement–Clay Interaction (CI) Experiment, Nagra[2]
    Mont Terri Project Poster #1

13. CI-D Experiment: Diffusion across 10-Year-Old Concrete-Claystone Interface, Nagra
    Mont Terri Project Poster #2
    [Urs Mäder, RWI, Geological Sciences, University of Bern]

14. FE-G Experiment: Gas Composition Evolution in a SF Emplacement Drift, Nagra
    Mont Terri Project Poster #3
    [N. Giroud (Nagra), Y. Tomonaga (EAWAG), P. Wersin (University of Bern), R. Kipfer (EAWAG), and N. Diomidis (Nagra)]

15. HE-E: data trend after 7 years and potential future scenarios, Nagra
    Mont Terri Project Poster #4
    [Florian Kober (NAGRA), Ursula Rösli (SOLEXPERTS), Antonio Gens (UPC), Bill Lanyon (Fracture Systems Ltd.), and the HE-E consortia (ENRESA, CIEMAT, BGR, Obayashi)]

16. Rates of H_2 and SO_4^{2-} Consumption by Microbes in a Radioactive Waste Repository, Nagra
    Mont Terri Project Poster #5
    [Niels Burzan (École Polytechnique Fédérale de Lausanne, EPFL) Olivier Leupin (Nagra), and Rizlan Bernier-Latmani (EPFL)]

17. URLs as Platforms for International Cooperation: Grimsel Test Site as a Successful Model for 35 years, Nagra
    [Ingo Blechschmidt, Raphael Schneeberger, and Stratis Vomvoris (Nagra)]

18. Meuse/Haute-Marne Underground Research Laboratory
    Daniel Delort, Andra

19. Geophysical Monitoring of Brine Migration in Rock Salt: Results from an *In Situ* Heater and Tracer Experiment at WIPP
    Yuxin Wu, Lawrence Berkeley National Laboratory

20. Field-scale Experiment and Simulations of Heat Generating Nuclear Waste in Salt (WIPP)
    Philip Stauffer and 7 co-authors, Los Alamos National Laboratory

[2] Organization who provided the poster. If authors are listed on the poster, then their names are provided inside []s. Irina Gaus from Nagra will be at posters 12-17.

21. DOE and International Efforts in Thermodynamics and Database Development for Nuclear Waste Repository Science
    Mavrik Zavarin, Lawrence Livermore National Laboratory