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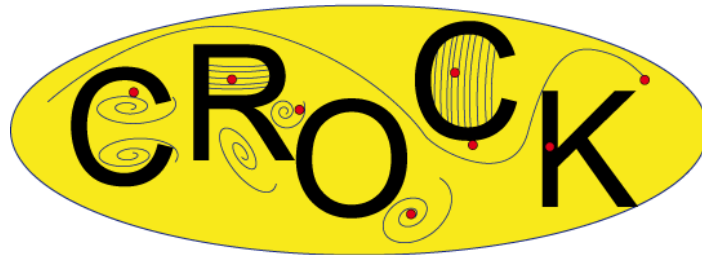


CROCK

Crystalline Rock Retention Processes

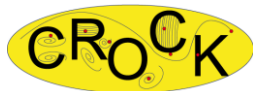
Contract Number: 269658

CROCK Final Workshop Agenda



May 14th-16th, 2013

Location: Akademie Hotel, Karlsruhe, Germany



Tuesday, 14th May 2013

Place: Akademie Hotel, Karlsruhe, Germany

09:00-09:30 **Registration / Welcome address**

Topical Session: "In situ URL experiments"

Chair: Thorsten Schäfer (KIT-INE)

09:30-10:00 **The history of RN migration studies at the Äspö HRL: Experiences of the TRUE sites**

Anders Winberg (CONTERRA)

10:00-10:30 **The CHEMLAB 2 experimental program at Äspö: Results of the actinide migration experiments**

Bernhard Kienzler (KIT-INE)

10:30-11:00 **-- C o f f e e B r e a k --**

11:00-11:30 **Microbial experiments at URL sites: Influence on radionuclide**

Evelyn Krawczyk-Bärsch (HZDR)

11:30-12:30 **Almost 30 years of tracer testing @ Grimsel Test Site**

Andrew Martin and Ingo Blechschmidt (NAGRA)

12:30-13:00 **LTD Phase I and II experiments: Study of radionuclide diffusion into crystalline rock matrix**

Vaclava Havlova (UJV Rez), Andrew Martin (NAGRA), Joerg Rueedi (NAGRA), Marja Siitari-Kauppi, (Helsinki University), Jussi Ikonen (Helsinki University), Pep Soler (CSIC) and Yukio Tachi (JAEA).

13:00-14:30 **-- L u n c h --**

14:30-15:00 **The CRR & CFM project: Colloid enhanced radionuclide migration**

M. Bouby¹, S. Büchner¹, J. Brendlé², G. Darbha¹, H. Geckeis¹, T. Kupcik¹, R. Götz¹, W. Hauser¹, S. Heck¹, F. Hüber¹, P. Höss¹, M. Lagos¹ and Th. Schäfer¹ (¹KIT-INE; ²University of Mulhouse)

15:00-15:30 **URL migration studies within the Finnish nuclear Waste repository
Research program**

Lasse Koskinen (POSIVA)

15:30-16:00 **URL research within the Russian Nuclear Waste repository
Research program**

Vladimir Petrov (MSU)

16:00-16:30 **-- C o f f e e B r e a k --**

19:30-22:00 **POSTER Session with Buffet**

Wednesday, 15th May 2013

Place: Akademie Hotel, Karlsruhe, Germany

08:40-09:40 **Reporting by the Coordination Team**

Coordination Team (Thomas Rabung (KIT-INE), David García (AMPHOS), Jorge Molinero (AMPHOS))

WP1 plenary: Experimental material and characterization

WP leader: Thomas Rabung (KIT-INE)

9:40-10:00 **Characterization of rock samples from Äspö**

Stellan Holgersson (CTH)

10:00-10:20 **Characterization of rock samples from areas of the proposed Russian HLW and SNF repository (Nizhnekansky massive)**

Vladimir G. Petrov¹, Irina E. Vlasova¹, Natalia V. Kuzmenkova², Vladislav A. Petrov³, Valery V. Poluektov³ and Stepan N. Kalmykov¹ (¹MSU; ²Vernadsky Institute of Geochemistry and Analytical Chemistry; ³IGEM RAS)

10:20-10:50 **-- Coffee Break --**

WP2 plenary: Radionuclide transport and sorption studies

WP leader: Tiziana Missana (CIEMAT)

10:50-11:10 **Cs, Ra and U Sorption on rock samples from Äspö**

Stellan Holgersson (CTH)

11:10-11:30 **Tc(VII) sorption on natural granitic rocks and synthetic magnetite**

Yury Totskiy¹, Thorsten Schäfer^{1,2}, Florian Huber¹, Dieter Schild¹, Horst Geckeis¹ and Stepan Kalmykov³ (¹KIT-INE; ²Freie Universität Berlin; ³MSU)

- 11:30-11:50 **Interaction of Uranium(VI) and Neptunium(V) with Äspö diorite under anoxic conditions**
K. Schmeide, S. Gürtler, F. Bok and V. Brendler (HZDR)
- 11:50-12:10 **CIEMAT activity in the project (WP2)**
Tiziana Missana (CIEMAT)
- 12:10-12:30 **U, Cs and Eu sorption onto rock samples from areas of the proposed Russian HLW and SNF repository (Nizhnekansky massive)**
Vladimir G. Petrov¹, Irina E. Vlasova¹, Natalia V. Kuzmenkova², Vladislav A. Petrov³, Valery V. Poluektov³ and Stepan N. Kalmykov¹ (¹MSU; ²Vernadsky Institute of Geochemistry and Analytical Chemistry; ³IGEM RAS)
- 12:30-12:50 **NRI experimental studies on Äspö derived material**
Venda Havlová, Kateřina Videnská, Jani Vejsadú and Petr Večerník (UJV Rez)
- 12:50-14:20 **- - L u n c h - -**
- 14:20-14:50 **Study of selenium sorption on Äspö diorite**
Kateřina Videnská, Venda Havlová, Jani Vejsadú, Michaela G. Vašínová and Petr Sajdl (UJV Rez)
- WP3 plenary: Real system analysis**
WP leader: John Smellie (CONTERRA)
- 14:50-15:20 **On the relevance of matrix diffusion for understanding hydrogeological behaviour in crystalline rocks**
Jorge Molinero, Jordi Bruno, Paolo Trinchero and Luis Manuel de Vries (AMPHOS)

WP4 plenary: Conceptualization and modeling

WP leader: James Crawford (KEMAKTA)

- 15:20-15:50 **Approaches to modelling surface complexation sorption on complex geological materials with limited data**
James Crawford (KEMAKTA)
- 15:50-16:20 **-- C o f f e e B r e a k --**
- 16:20-16:50 **Decreasing K_d uncertainty through the application of mechanistic retention models**
David García¹, Marek Peřkala¹ and Cristina Domènech^{1,2} (¹AMPHOS; ²University of Barcelona)
- 16:50-17:20 **Biotite sorption by molecular level and surface complexation modelling**
Aku Itälä, Eini Puhakka, Markus Olin and Merja Tanhua-Tyrkkö (VTT)
- 17:20-17:40 **Radionuclide migration in a single fracture from Äspö, Sweden: Experiments and reactive transport modeling**
Florian Huber¹, Paolo Tricherò², Jorge Molinero² and Thorsten Schäfer¹ (¹KIT-INE; ²AMPHOS)
- 19:00-22:00 **Workshop Dinner: Badische Weinstuben**

Thursday, 16th May 2013

Place: Akademie Hotel, Karlsruhe, Germany

08:30-09:30 **EUG meeting**

(Restricted to EUG members)

WP5 plenary: Application to the Safety Case

WP leader: Jorge Molinero (AMPHOS)

09:30-10:00 **Modelling radionuclide migration in crystalline media: From effective K_d distributions to reactive transport**

Paolo Trinchero, Jorge Molinero and Luis Manuel de Vries (AMPHOS)

10:00-10:30 **Reactive transport modelling support to PA analysis in fractured bedrock**

Veli-Matti Pulkkanen, Anniina Seppälä and Markus Olin (VTT)

10:30-11:00 **-- C o f f e e B r e a k --**

11:00-11:30 **A simplified approach for reactive transport modelling involving strongly non-linear sorption and remobilisation**

James Crawford (KEMAKTA)

WP6 plenary: Documentation

WP leader: Andrés Idiart (AMPHOS)

11:30-12:00 **Documentation – State of the art**

Andrés Idiart, Marek Peřkala, Jorge Molinero and David García (AMPHOS)

12:00-12:30 **General Assembly**

12:30-14:00 **-- L u n c h --**