

## **ANNUAL EVENT**

Date: March 16<sup>th</sup> to March 18<sup>th</sup>

Link for registration:

https://docs.google.com/forms/d/e/1FAIpQLSdliZ7lvKSG LZCUJGN I868hv YBmrZpyLFTYuTAWAnNLF4Kw/viewform?usp=sf link

Day 1 – Tuesday 16 <sup>th</sup> March			
Introduction			
09.00-09.15	Welcoming		
Plenary Session – Science supporting implementation			
09.15-09.30	Key characteristics of deep geological repositories and what the implementation of the EURAD vision will offer Piet Zuidema, EURAD Chief Scientific Officer		
09.30-10.50	What will the implementation require?  Cherry Tweed, RWM Johan Andersson, Senior Advisor Dirk Bosbach, JUELICH Christophe Debayle, IRSN		
Break – 15 min			
11.05-12.00	Priorities and vision of the EC regarding research on radiaoctive waste management (provisional title) Rosalinde Van der Vlies, Directorate-General for Research and Innovation, European Commission  EURAD: integrated science for deep radioactive waste repositories Pierre Toulhoat, Chair of EURAD External Advisory Board		
12.00-12.20	The EURAD Roadmap: A generic roadmap for implementing radioactive waste management, leading to geological disposal Tara Beattie, PMO		

Day 2 – Wednesday 17th March				
Parallel breakout sessions – Cross-cutting work in EURAD				
	<ul> <li>Influences of organics and other wastes on redox and RN transport processes in geological disposal facilities in different programmes (WPs CORI, FUTURE, ROUTES and KM)</li> </ul>			
09.00-12.00	- Thermal consequences and uncertainties in a geological repository (WPs UMAN, HITEC, SFC and KM)			
	<ul> <li>Repository-induced coupled processes: understanding, integration &amp; numerical challenges (WPs ACED, DONUT, HITEC, GAS, KM)</li> </ul>			
School of RWM, Mobility and PhDs / post-docs presentations				
14.00-14.20	Presentation of School of RWM	Michèle Coeck and Niels Belmans (SCK- CEN- Training and Mobility)		
14.20-14.40	1st Mobility : Pore-scale modelling of ion diffusion in variably saturated clays	Yuankai Yang (FZJ- DONUT)		
	Scientific highlights on PhD-level			
14.40-15.40	« Validation and uncertainty analyses of SNF decay heat calculations based on SCALE code system » — Ahmed Shama	Ahmed Shama (NAGRA-SFC)		
	"Sorption of low molecular weight organics on the main hydrated cement paste phases and CEM I" – Rosa Ester Guidone	Rosa Ester Guidone (EMPA and KIT-CORI)		
	« Coupled HM effects induced by gas injection and transport processes - modelling and validation against experiments » - Michael Pitz	Michael Pitz (BGR-GAS)		
	"Investigations on Np interaction with Fe containing minerals applying in situ high-energy resolution X-Ray emission/absorption spectroscopy" - Bianca Schacherl	Bianca Schacherl (KIT – FUTURE)		
	"Nuclear Glass-Iron-Claystone interactions : characterizations of a long-term mockup experiment" - Alexis Delanoe	Alexis DELANOE (CEA- ACED)		
	"Observation of water transport in a swelling material using X-ray tomography and 4D image analysis" - Janne Yliharju	Janne Yliharju (UJyväskylä-HITEC)		
15.40-16.00	Debate with the students			



2

Day 3 - Thursday 18 <sup>th</sup> March				
Plenary Session – Spotlight on cutting-edge science from across EURAD WPs				
09.00-09.10	Neutrons as a signature for the characterisation of spent nuclear fuel	Peter Schillebeeckx (JRC-SFC)		
09.10-09.20	Development of Machine learning techniques for the modelling coupled processes	Nikolaos Prasianakis (PSI- DONUT)		
09.20-09.30	New insights into radionuclide-cement-organic interactions	Tiziana Missana (CIEMAT- CORI)		
09.30-09.40	Beyond the management of known scientific and technical unknowns	Frank Lemy (Bel V- UMAN)		
09.40-09.50	Modelling the impact of gas migration in the near field: which consequences on damage?	Gilles Corman (Université de Liège - GAS)		
09.50-10.00	Cutting edge synchrotron based characterization of RN retention	Rainer Daehn et al. (PSI - FUTURE)		
Break – 10 min				
10.10-10.20	A new CASH+ solid solution model for cation uptake in C-S-H up to 100 C	Dan Miron (PSI - ACED)		
10.20-10.30	Lessons learnt from waste management sharing experiences: from pre-disposal to disposal	Marja VUORIO (COVRA- ROUTES)		
10.30-10.40	Crack Self-sealing in Callovo-Oxfordian Claystone Monitored With Multimodal X-Ray and Neutron Tomography	Pierre Besuelle (UGrenoble - HITEC)		
Findings from the breakout sessions and conclusion				
10.45-12.00	Findings from the breakout sessions	Rapporteur by each breakout session		
12.00-12.30	Conclusion	Piet Zuidema, EURAD Chief Scientific Officer		

