

NAWGW-17 Workshop

Monday, 8th to Thursday, 11th May, 2023, Hotel Kolovare, Zadar, Croatia

Monday 8 th May		
	Travel to the venue	
17:00 – 18:00	Registration at the hotel pool	
18:00 – 20:00	Icebreaker and finger food at the swimming pool	
Tuesday 9 th May		
	Introduction and registration	
09:00 – 09:10	Opening of the workshop and organisational aspects	Russell Alexander, NAWG chairman
09:10 – 09:20	Welcome to Zadar	Zelimir Veinovic, University of Zagreb
09:20 – 09:40	Current status of the Croatian national programme	Galla Uroic, Croatian Decommissioning Fund
Session I	Exploring the current use of natural analogues in developing and supporting the safety case	Chair: Erika
09:40 – 10:25	Natural Analogues – A proposed strategy for	Simon Norris, NWS, UK

	implementation within the Nuclear Waste Services (UK) programme of geological disposal	
10:25 – 10:55	<i>Coffee/tea (with cakes)</i>	
10:55 – 11:25	A critically reviewed catalogue of NAs to support the Nuclear Waste Services (UK) programme of geological disposal	Russell Alexander, Bedrock Geosciences, Switzerland
11:25 – 11:45	Use of NAs in the Finnish safety case – the Complementary Considerations approach	Heini Reijonen, GTK, Finland
11:45 – 12:15	NAs and long-term evolution: upscaling towards repository relevant space and time scales	Venessa Montoya, SCK-CEN, Belgium
12:15 – 13:45	<i>Lunch</i>	
Session IIa	EBS – waste forms	Chair: Simon
13:45-14:15	Natural glass alteration under hyperalkaline conditions for about 4000 years	Ryosuke Kikuchi, University of Hokkaido, Japan
Session IIb	EBS - canisters	Chair: Simon
14:15 – 14:45	Multi-scale and isotopic analyses to understand the corrosion mechanisms of 400 year old archaeological iron analogues	Delphine Neff, CEA Saclay, France
14:45 – 15:15	MICA: overview of Phase I of the Michigan International Copper Analogue project	Ismo Aaltonen, GTK, Finland
15:15-15:45	A potential NA for the longevity of iron and steel in a clay from NW Scotland	Tony Milodowski, Independent, UK
15:45 – 16:15	<i>Coffee/tea (with cakes)</i>	
16:15 – 16:35	Archaeological analogues – an essential contribution to canister lifetime modelling	Vlatislav Kaspar, UJV Rez, Czech Republic

16:35 – 17:05	The use of NA information in assessing the chemical evolution of HLW disposal cells	Erika Neeft, COVRA, The Netherlands
17:05	Close of Day 1	
19:00	Dinner in the hotel	
Session III Posters: will be on display throughout the workshop		
An application of research for buffer/backfill materials through estimation of Cs diffusion in compacted Taiwan bentonite	Chuan-Pin Lee, National Tsing Hua University, Taiwan	
Bioreduction of aqueous uranium(VI) under conditions relevant for deep geological repository of nuclear waste	Dawoon Jeong, KAERI, South Korea	
Advances in the understanding of radionuclides migration processes in natural analogues systems	Olga Riba, Amphos 21, Spain	
Batch experiments for determining uranium dissolution kinetics using uranium-containing coaly slate and groundwater from a natural analogue site in Korea	Hakyung Cho, Jeonbuk National University, South Korea	
Wednesday 10th May		
Session IIc	EBS - bentonite	Chair: Andree
09:00 – 09:30	The ongoing IBL project - recent results	Heini Reijonen, GTK, Finland
09:30 – 10:00	Microbiology of barrier component analogues of a deep geological repository	Rachel Beaver, University of Waterloo, Canada
10:00 – 10:30	Microbial occurrence and their growth in compacted bentonite in subsurface environments	Yuki Amano, JAEA, Japan

10:30 – 11:00	<i>Coffee/tea (with cakes)</i>	
11:00 – 11:30	Cigar Lake: behaviour of ^{129}I and implications for transport in clay barriers	Zhenze Li, CNSC, Canada
11:30 – 12:00	Fracture filling smectites as NAs for the bentonite buffer - case studies from Finland	Heini Reijonen, GTK, Finland
12:00 – 13:30	<i>Lunch</i>	
Session IIc (cont.)	EBS - bentonite	Chair: Andree
13:30-14:00	Thermal alteration of bentonite: an overview	Russell Alexander, Bedrock Geosciences, Switzerland
14:00-14:30	Experimental and geochemical modelling investigations of Cs, Sr and Co sorption on Zhisin Clay, Taiwan	Polly Tsai, INER, Taiwan
Session IVa	Far-field studies - radionuclides in natural systems	Chair: Russell
14:30 – 15:00	A natural analogue study in uranium deposits of the Okcheon Metamorphic Belt, Korea: basic investigations and future prospects	Min-Hoon Baik, KAERI, South Korea
15:00 – 15:30	<i>Coffee/tea (with cakes)</i>	
15:30 -16:00	Water-rock interactions of uranium deposits: a field study in the Okchoen Metamorphic Belt, Korea and laboratory batch experiments	Sung-Wook Jeon, Jeonbuk National University, South Korea
Session IVb	Far-field studies - climatic evolution	Chair: Russell
16:00-16:30	NAs for long-term climato-tectonic evolution scenarios	Koen Beerten, SCK-CEN, Belgium
16:30	Close of Day 2	
	Free evening – enjoy Zadar	

Thursday 11 th May		
Session IVc	Far-field studies - rock matrix diffusion	Chair: Polly
09:00-09:30	Analogue Studies of Rock Matrix Diffusion in Higher Strength Rocks	Simon Norris, NWS, UK
09:30-10:00	Matrix diffusion at the small scale and the role of heterogeneity	Marja Siitari-Kauppi, University of Helsinki, Finland
10:00 – 10:20	To be confirmed	To be confirmed
Session VI	General studies	Chair: Stephane
10:20 – 10:50	Ultra-trace analysis with AMS in the frame of experiments relevant for nuclear waste disposal	Francesca Quinto, INE-KIT, Germany
10:50-11:20	<i>Coffee/tea (with cakes)</i>	
11:20 – 11:50	Recent activities on NA studies in Japan	Satoru Suzuki, NUMO, Japan
Session VII	Excursion	Chair: Stephane
11:50 – 12:10	Concrete longevity studies: current status and future potential	Russell Alexander, Bedrock Geosciences, Switzerland
12:10 – 12:30	Introduction to the excursion sites	Jagor Blazic, Independent, Croatia
12:30	Close of the workshop	Russell
12:45	Leave from the front of the hotel by bus	Packed lunch will be provided on the bus
ca. 18:00	Return to the hotel	
19:30	Workshop dinner in a local restaurant	Details to be confirmed