

Welcome



Welcome to the workshop

Mechanical properties of bentonite barriers

This project receives funding from the Euratom
research and training programme 2014-2018 under
grant agreement No 745942



Thank you
Lithuanian Energy Institute, LEI
for hosting this workshop
Ačiū!



Bentonite mechanical evolution

25 partners – 10 countries

Radioactive Waste Repository Authority
(SURAO)

Posiva OY (POSIVA)

Agence Nationale pour la Gestion des
Dechets Radioactifs (ANDRA)

Nationale Genossenschaft fuer die Lagerung
Radioactiver Abfaelle (NAGRA)

Empresa Nacional de Residuos Radioactivos
S.A. (ENRESA)

Radioactive Waste Management Limited
(RWM)

Miljöorganisationernas Kärnavfallsgranskning
(MKG)

Universitat Politècnica de Catalunya (UPC)

Gesellschaft für Anlagen und
Reaktorsicherheit (GRS) gGmbH (GRS)

Ceske Vysoké Učení Technické v Praze (CTU)

Univerzita Karlova v Praze (CU)

Commissariat à l'Énergie Atomique et aux
Énergies alternatives (CEA)

Teknologian tutkimuskeskus VTT Oy (VTT)

Université de Liège (ULg)

Bundesanstalt fuer Geowissenschaften und
Rohstoffe (BGR)

Karlsruher Institut fuer Technologie (KIT INE)

Lietuvos Energetikos Institutas (LEI)

Centro de Investigaciones Energeticas,
Medioambientales y Tecnologicas (CIEMAT)

Clay Technology AB (Clay Tech)

Ecole Polytechnique federale de Lausanne
(EPFL)

Imperial College of Science Technology and
Medicine (ICL)

Quintessa Limited

Natural Environment Research Council /British
Geological Survey (NERC/BGS)

Jyväskylän Yliopisto (JYU)

and Coordinator

Svensk Kärnbränslehantering (SKB)



Today's Workshop Agenda

10:00-10:10	Workshop starts, Welcome to the workshop and practicalities	
10:10-10:25	EC information Athanasios Petridis	
10:25-11:45	Introduction to the Beacon project: background, objectives planned activities	
10:25-10:35	WP2 – Collection and compilation of existing data and available models	Simon Norris
10:35-10:45	WP1 – Definition of assessment case/Application to the assessment cases	Olivier Leupin
10:45-10:55	WP3 – Model development	Antonio Gens
10:55-11:05	WP4 – Laboratory testing	Klaus Wieczorek
11:05-11:25	Coffee	
11:25-11:35	WP5 – Testing, verification and validation of models	Jean Talandier
11:35-11:45	WP6 – Civil society interaction	Johan Swahn
11:45-12:45	Invited talks	
11:45-12:15	On the mechanical behavior of bentonite – why Beacon	Antonio Gens, UPC
12:15-12:45	Considerations on the significance of the pre-hydration state on the long-term safety functions of bentonite from the implementer's perspective	Paul Marschall, Nagra
12:45-14:00	Lunch	
14:00-16:20	Plenary presentations	
14:00-14:20	EB - Engineered Barrier Emplacement Experiment	Gens (for Mayor, ENRESA)
14:20-14:40	Homogenisation of bentonite- Laboratory test results	Dueck, Clay Tech
14:40-15:00	Research activities at RWMC on the bentonite re-saturation process – (3) A box-type cell experiment to evaluate buffer material homogenization during the process of saturation	Kobayashi, Kajima RWMC
15:00-15:20	Coffee	
15:20-15:40	Some insights on the swelling pressure development of compacted bentonite upon wetting and its long term evolution	Cuisinier, Un. de Lorraine
15:40-16:00	Homogenisation of laboratory scale plugs: development of porewater pressure and stress	Harrington, BGS
16:00-16:20	Swelling pressure acting to the constraining material with slight deformability	Watanabe, Criepi
16:20-17:30	Poster introductions	
17:30-20:00	Extensive poster session (finger food/buffet served)	



Workshop Agenda

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The Consortium Agreement

When agreed:

The last partners can sign the Accession to the Grant Agreement.

A copy of the CA sent to each partner . Partners sign their signature page.

CA + all the signature pages are put together to a signed agreement



Calendar

M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
June 2017	July 2017	August 2017	Sept 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	March 2018	April 2018	May 2018
Kick off, WP2 WS, Kaunas			Consortium Plan D6.1 Report		D1.1 SoA report D2.2 WP2 report		Preliminary date Training Course	D3.1 WP3 report			1st Annual D5.1.1 Specifications
M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
June 2018	July 2018	August 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	March 2019	April 2019	May 2019
Preliminary reporting for second payment of pre-financing		D6.2 Report				1st periodic report	1st periodic report				2nd Annual
M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	M35	M36
June 2019	July 2019	August 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	March 2020	April 2020	May 2020
		D4.1 Report									3rd Annual
M37	M38	M39	M40	M41	M42	M43	M44	M45	M46	M47	M48
June 2020	July 2020	August 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	March 2021	April 2021	May 2021
2nd periodic report	2nd periodic report								Beacon Final Conference		END of Beacon Preparation for 3rd periodic report and final report
M49	M50	M51	M52	M53	M54	M55	M56	M57	M58	M59	M60
June 2020	July 2020	August 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	March 2021	April 2021	May 2021
3rd periodic, and the final report	3rd periodic, and the final report			This project receives funding from the Euratom research and training programme 2014-2018 under grant agreement No 745942							



Beacon official meetings

- 1st Annual meeting, M12/13, May/June 2018, location?
- 2nd Annual meeting, M24/25, May/June 2019, location?
- 3rd Annual meeting, M36, May 2020, location?
- Final Workshop, \approx M46, March 2021, location Brussels/Luxembourg?
- Work package meetings arranged by appropriate partner



≈ Project Plan

- Based on the Grant Agreement
- Developed to an appropriate extent with more detailed timeplans
- Vad mer?? Titta i WP-planerna, vad behöver detaljeras?



- WP2 templates to beacon@skb.se before 31 July

