

## 2<sup>nd</sup> Announcement and Call for Posters for the IGD-TP's Eighth Exchange Forum

3<sup>rd</sup> and 4<sup>th</sup> December, BMWi, Berlin, Germany

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We are delighted to announce that the IGD-TP's eighth Exchange Forum will be hosted by BMWi in Berlin this December and is open to all IGD-TP members and stakeholders (technical or not) interested in geological disposal of radioactive waste.

For eight years now the IGD-TP Executive Group, comprising European waste management organisations (WMOs) and organisations responsible for implementation-related RD&D programmes representing eleven different nations, have been meeting three times per year to progress joint radioactive waste management RD&D. During this timeframe the IGD-TP has implemented working groups which have discussed, initiated and, in many cases, now delivered technical projects aligned around our commonly-agreed priorities that are documented in our Strategic Research Agenda (SRA). To date, achievements of our platform include:

- Following up nine FP7 projects (totalling 61M€/28M€ EC) all of which have successfully completed and the majority of which have been debriefed back to the community via previous exchange fora (e.g. PEBS, MODERN, FIRST-NUCLIDES, REDUPP, BELBaR, DOPAS and LUCOEX);
- Led scope development and needs driven alignment of four Horizon 2020 projects in WP 2014-2015 (MODERN2020, CEBAMA, MIND and JOPRAD), totalling 21M€/15M€ EC funding;
- Led scope development and needs driven alignment of a further four Horizon 2020 projects in WP 2016-2017 (~16M€ EC funding), which started in June 2017 (THERAMIN, BEACON, DISCO and CHANCE).
- Contributed towards the scope development and needs driven alignment of many of the developing European Joint Programme Work packages, particularly GAS, CORI, HITEC, SFC, UMAN and ROUTES.

### Forum Structure

The IGD-TP's eighth Exchange Forum (EF8) will be a two-day event, with a dual focus. The first day will be dedicated to the developing European Joint Programme on Radioactive Waste Management (EURAD). Representatives of the future EURAD Project Management Office (PMO) will lead sessions dedicated to:

- Presenting the R&D topics, strategic studies and knowledge management activities that

- comprise the initial scope of EURAD.
- Presenting the shared EURAD Strategic Research Agenda (SRA) and collaboratively identifying possible additional topic suggestions.
- Brainstorming possible future projects/scope for a second wave of EURAD-1 (noting that the outputs of this brainstorming session would be sent to the future EURAD Governance Team for their consideration/use).
- Updating the community on the expected EURATOM Call WP2019-2020.

The change to a Joint Programme approach for EC-funded research means that the IGD-TP Executive Group will now focus more intently on direct implementation-related opportunities for collaboration between members and their common research needs that sit outside of the scope of EURAD. Therefore, the IGD-TP Executive Group will lead sessions on the second day of EF8 that aim to:

- Communicate the changing needs and drivers for radioactive waste management research (in light of the complimentary and parallel EURAD project).
- Update IGD-TP members on the platform's activities during 2017 and 2018.
- Collectively explore collaborative opportunities for implementation-related research projects that are complementary, but separate to, the common areas of interest being addressed via EURAD. Initially, we will do this by discussing the current status, challenges and potential solutions in three specific technical topic areas (see below).

This Exchange Forum will therefore help to prepare for future collaborative implementation-related RD&D that is complimentary to EURAD activities and which can be progressed in parallel. The three technical topic areas that the Executive Group would like to focus on at EF8 are:

### ***Technical topic 1: “Technical issues in support of retrievability”***

Retrievability of waste packages is sometimes considered to support operational safety, and in particular following accident scenarios. Regardless of operational safety needs, it may also be a regulatory requirement in a number of national programmes. The session will present the scientific and technical knowledgebase and seek to highlight potential issues associated with implementing retrievability. It will also seek to discuss and highlight any associated RD&D areas, including: the ability to model and monitor the evolution of waste packages and disposal vaults over operational timeframes; the technical provisions that can be included in the design to enhance retrievability; and potential retrieval techniques. Phenomenological processes that may need to be taken into account include temperature increase, desaturation/resaturation, gas accumulation, mechanical deformations, corrosion and radiolysis.

### ***Technical topic 2: “High-heat generating waste (HHGW) containers”***

This technical topic will focus on reviewing the technology readiness and development of alternative, ‘next generation’ disposal container materials/designs. The aim will be for the session to help to support concept selection/development for earlier stage disposal programmes and also concept optimisation for the more advanced disposal programme concepts. We will seek to highlight the state-of-the-art in container materials and design, covering ceramic containers,

supercontainer concepts and alternative candidate container materials. The session will aim to develop areas of commonality in terms of future WMO RD&D needs.

### **Technical topic 3: “Advanced site characterisation techniques”**

A geological disposal site characterisation programme will need to meet the information requirements of the design and disposal system safety assessments and also contribute towards the development of a site descriptive model. Typically, a site characterisation team will need to define the parameters to be measured to provide this information. This technical session will seek to address advanced site characterisation techniques. It will cover investigation and modelling of the biosphere and geosphere according to typical higher-strength rock and lower-strength sedimentary rock repository requirements. We will also address the process for site selection before and after advanced site characterisation, and site characterisation during construction and operation phases. The session will aim to develop areas of commonality in terms of future WMO RD&D needs.

At the end of day 1, the IGD-TP will host an evening poster session that aims to showcase cutting-edge radioactive waste management RD&D that aligns to the IGD-TP’s SRA. Exchange Forum participants are strongly encouraged to submit poster applications that are consistent with this goal.

### **Why you should attend**

There are many reasons why you should attend including:

- Find out the latest information on the EURAD proposal and other EC calls.
- Explore the potential for future collaborative research with IGD-TP members.
- Informally discuss new issues and the current status of WMO programmes.
- See what is happening at the EU level.
- Discover emerging RD&D developments.
- Take advantage of great networking opportunities.

### **Draft Agenda**

Time	Item	Lead
<b>Monday 3<sup>rd</sup> December – EURAD Morning Session</b>		
08:30	<b>Registration</b>	
09:00	<b>Opening Session</b> Welcome, opening remarks and meeting objectives	EURAD PMO
09:15	<b>National policy in Germany</b>	BMWi
09:30	<b>EURAD Overview and Organisation</b>	EURAD PMO
10:00	<b>RD&amp;D WP: Development and Improvement Of</b> NUmerical methods and Tools for modelling coupled processes (DONUT)	DONUT Representative
10:20	<b>RD&amp;D WP: Assessment of Chemical Evolution of ILW</b> and HLW Disposal Cells (ACED)	ACED Representative
10:40	<b>RD&amp;D WP: Mechanistic understanding of gas transport</b> in clay materials (Gas)	Gas Representative

11:00	Tea/coffee break	
11:30	<b>RD&amp;D WP:</b> Influence of temperature on clay-based material behaviour (HITEC)	HITEC Representative
11:50	<b>RD&amp;D WP:</b> Cement-Organics-Radionuclides-Interactions (CORI)	CORI Representative
12:10	<b>RD&amp;D WP:</b> Fundamental understanding of radionuclide retention (FUTuRE)	FUTuRE Representative
12:30	<b>RD&amp;D WP:</b> Spent Fuel Characterization and Evolution Until Disposal (SFC)	SFC Representative
12:50	Lunch	
<b>Monday 3<sup>rd</sup> December – EURAD Afternoon Session</b>		
14:30	<b>SS WP:</b> Uncertainty Management multi-Actor Network (UMAN)	UMAN Representative
14:50	<b>SS WP:</b> Waste management routes in Europe from cradle to grave (ROUTES)	ROUTES Representative
15:10	<b>Knowledge Management Activities</b>	KM Representative(s)
15:30	<b>EURAD Strategic Research Agenda and discussion of possible future topics</b>	EURAD PMO
16:45	<b>WMO areas of interest outside of the EURAD scope</b>	IGD-TP Secretariat/Chair
17:00	Close of the first day	
<b>Monday 3<sup>rd</sup> December – Evening Poster Session</b>		
17:00-19:00	<b>IGD-TP Poster Session</b> Showcasing cutting edge RD&D that aligns to the IGD-TP's Strategic Research Agenda	All
<b>Tuesday 4<sup>th</sup> December – IGD-TP Morning Session</b>		
08:45	<b>Opening Session</b> Welcome, opening remarks and meeting objectives	IGD-TP Chair
09:00	<b>Vision for the IGD-TP</b> Reflecting current needs, research drivers and changing approaches	IGD-TP Secretariat
09:30	<b>Technical session 1</b> - Technical issues in support of retrievability	Andra
11:00	Tea/coffee break	
11:30	<b>Technical session 2</b> - High-heat generating waste (HHGW) containers	RWM
13:00	Lunch	
<b>Tuesday 4<sup>th</sup> December – IGD-TP Afternoon Session</b>		
14:30	<b>Technical session 3</b> - Advanced site characterisation techniques	SKB
16:00	<b>Conclusion and way forward for IGD-TP</b>	Jon Martin (RWM) and Irina Gaus (Nagra)
16:30	<b>IGD-TP EF8 closing remarks</b>	IGD-TP Chair and BMWi representative
16:45	Meeting close	

## Practical Information and Key Dates

**Registration:** Participation is free of charge, but registration of participants is mandatory. Registration is open via the IGD-TP website ([www.igdtp.eu](http://www.igdtp.eu)).

**Venue:** German Federal Ministry for Economic Affairs and Energy (BMWi), Invalidenstraße 48, 10115 Berlin (for directions see <https://www.bmwi.de/Navigation/EN/Ministry/Getting-to-the-Ministry/getting-to-the-ministry.html>)

**Hotels:** There are many hotel options in the proximity of BMWi's office, including the following possibilities:

- Mercure Hotel Berlin City (<https://www.accorhotels.com/gb/hotel-5341-mercure-hotel-berlin-city/index.shtml>)
- Hotel ibis Berlin Hauptbahnhof (<https://www.accorhotels.com/gb/hotel-8601-ibis-berlin-hauptbahnhof/index.shtml>)
- IntercityHotel Berlin Hauptbahnhof (<https://www.intercityhotel.com/en/hotels/all-hotels/germany/berlin/intercityhotel-berlin-hauptbahnhof>)
- Hotel Motel One Berlin Hauptbahnhof (<https://www.motel-one.com/en/hotels/berlin/hotel-berlin-hauptbahnhof/>)
- Hotel Augustinenhof (<https://www.hotel-augustinenhof.de/en/>)
- Hotel Grenzfall (<http://en.hotel-grenzfall.de/bernauer-strasse/>)

## Key Dates:

11 July 2018 – First announcement

1 August 2018 – Registration opens

12 September 2018 – Second announcement

30 September 2018 – Poster abstract submission deadline

31 October 2018 – Registration deadline and final agenda published

3-4 December 2018 – Exchange Forum 8

Further information will be added to the IGD-TP website as it becomes available ([www.igdtp.eu](http://www.igdtp.eu)).  
For any other questions please contact [secretariat@igdtp.eu](mailto:secretariat@igdtp.eu)