

# SECOND ANNUAL EVENT

## Summary

28-30 March 2022 – IRSN, France

The second annual event, dedicated to new knowledge, how it can be maximized and the deepening of research cooperation to achieve the step-change, was held in a hybrid format from 28 to 30th March 2022 at IRSN. About eighty people (EURAD members, invited speakers and members of the end-user group) were physically present, as well as slightly over 200 attendees online over the three days.

The event provided a platform for interaction and integration with straight interactions between the participants, triggered new ideas for future work and once again demonstrated the importance of knowledge management.

## DAY 1 – STRATEGIC PLENARY SESSION AND PANEL SESSION

A broad range of presentations, including from external (non-EURAD) speakers were made during the first day.

The plenary session gave the opportunity to better understand the context of EURAD work (Presentations by the EC on Long-term vision of EURAD and RWM and the Waste Directive (2011/70/Euratom).

The panel session dedicated on the perspectives of programmes at different stages of advancement and how EURAD contributes to the science and technology portfolio allowed to see the diversity in the different national programmes (early-stage, intermediate and advanced programmes) and to share experience and concrete information.

## DAY 2 – BREAKOUT SESSIONS

The three breakout session allowed for technical discussion, across all work packages. A fair number of new ideas emerged and sometimes there was not enough time to go through all of them. Follow-up meetings for the breakout sessions are under preparation.

### Session 1 on impact of EURAD results / close the knowledge gap

The main input for discussion was on organisational drivers and possible drivers linked to EURAD Roadmap and development of the updated SRA and how to link to the work



packages outcomes. This session was organised in two main parts: R&D SoTA and Strategic Studies/Networking.

The next steps envisaged in this session are the following:

- Need to evaluate the dissemination of the SotA
- Have a dedicated follow-up session on Strategic Studies
- EURAD as a forum for exchange to help validate the scope of national programmes

### Session 2 on knowledge management

This session gathered around 60 attendees.

Organised with a mix of invited external speakers and EURAD community speakers the goals of this session were to improve the understanding of KM in general and EURAD KM activities and how to encourage more active involvement of the EURAD community.

This session contributed to the increase of the visibility and awareness of KM and allowed to have an extended understanding of existing KM activities outside of EURAD and a better insight into the needs of the EURAD community.

The results of this session will be developed in a follow-up meeting. The main outcomes are the need to have regular communication (workshops) and a continuous monitoring of the needs.

### Session 3 on Digital Twins

This session presented the digital twins perspectives from different angles : science (EURAD workpackages) and from Waste Management Organisations, stakeholders and the industry.

It was organised around some impulse talks on virtual reality, surrogate models, data and model integration in real-time and BIM. A special focus was made to understand how EURAD and PREDIS can assist the development and deployment of digital twins concepts and technologies.

The main outcome of this session is the need to clearly define the impact of EURAD in the frame of digital twins. For that, a task force was formed, both within interested WP but also at an individual level). This should help the prioritization of the development needs and to produce a position paper as a roadmap from EURAD to a possible future EURAD-2.

## DAY 2 – INTERACTIONS WITH CIVIL SOCIETY SESSION

This session allowed participants to see things from different angles, develop mutual trust and to have a broader perspective on the interactions between science and civil society.

The session experimented what could be the implementation of a fruitful interaction between one technical work package focused on organic matter (CORI), a strategic work package framing uncertainty management (UMAN) and members of the civil society group of EURAD. The whole collaboration between those three partners is oriented towards the perspective of safety.

Following the presentations of such on-going dialogue, this session was also the occasion to step back from technical considerations, by fostering an open discussion on uncertainties in scientific research, and an open discussion on the concept of « safety culture » as defined by INSAG4. The discussions were very rich and drew a new landscape of appropriate relationships for different actors in dialogues between ongoing scientific research and civil society, thanks to the dynamic vision given by safety culture and Aarhus convention. The outcome of this session is a confirmation of fruitfulness of dialogue framed as such, and this dialogue will be continued during next years of EURAD-1.

### DAY 3 – STUDENTS SESSION

This session aimed to form a close student group and to allow all PhD students to network among themselves and with experts in the field. The session consisted of three parts.

Firstly, 15 EURAD PhD students presented themselves and their research (two slides per student). Secondly, two PREDIS PhD students presented themselves and their work. This showed clear compatibility between research performed in EURAD and in PREDIS. Finally, there was time allocated for students to network among themselves and with experts. The students were given the option to network physically during the event and there was the opportunity to network online via an online networking tool provided by WP13.

The main outcome of this session is the willingness of the PhD students to form a ‘EURAD PhD student group’, which can serve as an end-user group for EURAD. Going forward WP13 will question the students individually on how they wish to be involved and what they want to get out of this student group.

### DAY 3 – CUTTING-EDGE SCIENCE SESSION

Five different presentations were planned to share some cutting-edge science from across EURAD work packages. Due to some IT issues, only four of them took place:

- Transport in porous media and fractures – linked to WP GAS
- Degradation of organic materials under irradiation and cementitious conditions – linked to CORI WP
- Modelling the chemical evolution at the disposal cell scale – the HLW-Clay case – linked to ACED WP
- Microfluidic experiments development in silico Digital Twins – linked to FUTURE and DONUT WPs

The various exchanges with the participants shows the large interest in sharing results from across EURAD work packages.

The recordings of the event will be made available on EURAD website.