



Supplement of

EURAD School of Radioactive Waste Management

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EURAD SCHOOL OF RADIOACTIVE WASTE MANAGEMENT

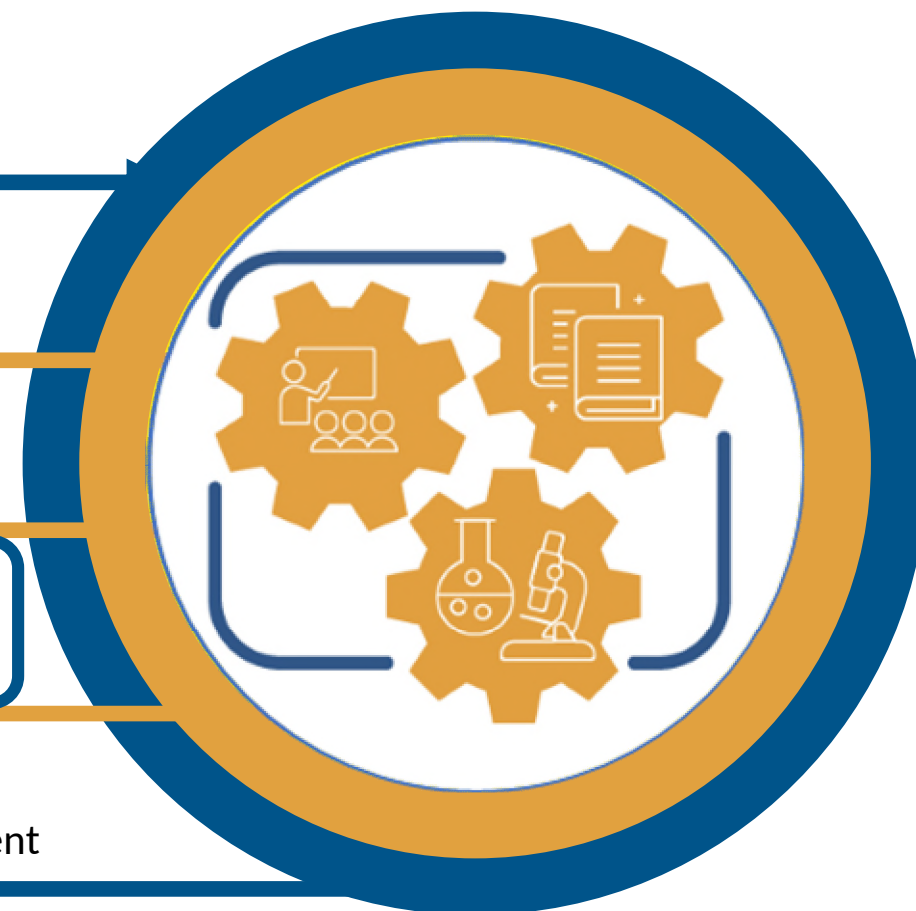
BASE Interdisciplinary Research Symposium, Session 4B
10 November 2021 • Niels Belmans



The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 847593.

EURAD KNOWLEDGE MANAGEMENT & NETWORKING PROGRAMME

- 1 Roadmap
A common framework to structure knowledge
- 2 State of Knowledge
What we know and why its important
- 3 Guidance
Best practice and lessons learned
- 4 Training & Mobility
Nuclear experience and know-how
- 5 Networking & Tools
Connecting people to people, and people to content



EURAD KNOWLEDGE MANAGEMENT & NETWORKING PROGRAMME

IAEA defines knowledge management (KM) as:

*“an integrated, systematic approach to identifying, acquiring, transforming, developing, disseminating, using, sharing and preserving knowledge, relevant to achieving specified objectives”**

→ “Enhance knowledge management and transfer” is one of EURAD’s main objectives

→ EURAD Knowledge Management & Networking Programme

- Cohesive programme
- Important for the safety of (geological) waste disposal, now and in the future

EURAD SCHOOL OF RADIOACTIVE WASTE MANAGEMENT

- The School of Radioactive Waste Management (RWM) aims to assist end-users in:
 - *“an integrated, systematic approach to identifying, **acquiring**, transforming, **developing**, **disseminating**, **using**, **sharing** and **preserving knowledge (and skills)**, relevant to achieving specified objectives”*
- To this end, the School supports competence (= knowledge, skills and attitudes) building through:
 - A portfolio of needs-driven training courses (and gaps in the Roadmap)
 - A dedicated Mobility Programme
 - Organization of webinars on broad and specific topics by subject-matter experts
 - Maintaining a library of webinar recordings
 - Support for the EURAD PhD community
 - Host a discussion forum to reinforce networking within the ‘EURAD family’

➔ Centralized on a dedicated website: <https://euradschool.eu/>

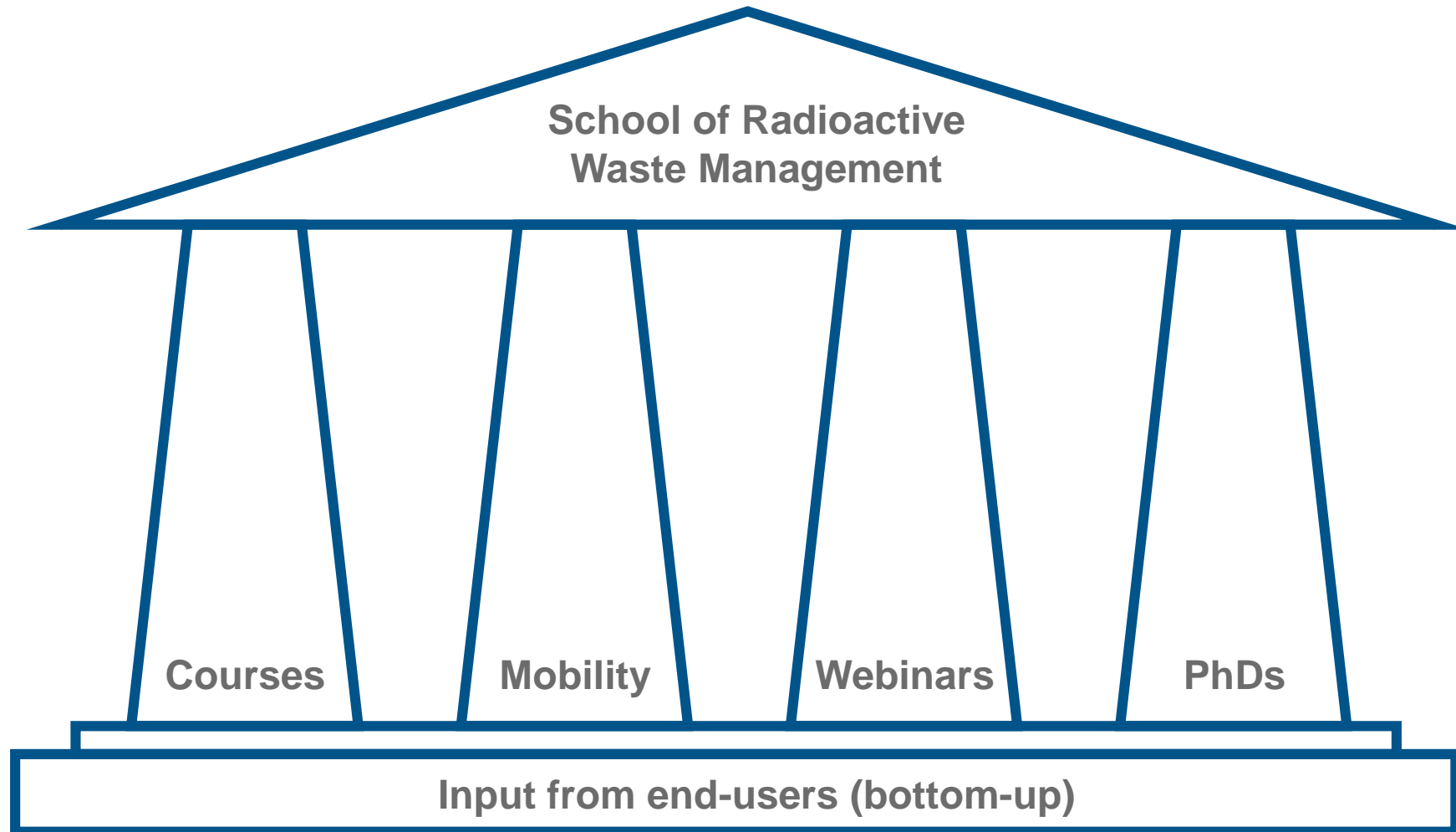


EURAD SCHOOL OF RADIOACTIVE WASTE MANAGEMENT

The School of RWM's end-users are:

- (Junior/Senior) Professionals
- PhD students
- Post-docs
- Students
- Civil Society

THE EURAD SCHOOL OF RADIOACTIVE WASTE MANAGEMENT





EURAD SCHOOL OF RWM – NEEDS-DRIVEN TRAINING COURSES

“Education and training are the totality of actions of increasing the knowledge, skills and attitudes of people to prepare them for doing a particular job”

- **Needs-driven**
 - End-user feedback was gathered (March – May 2020)
 - **Training needs** were identified (April 2021)
- **Training courses organized in EURAD are:**
 - Based on end-user needs (and identified gaps in the Roadmap)
 - In collaboration with RD&D and Strategic Studies WPs
 - Provide access to nuclear experience and know-how of the EURAD subject matter experts
- **Main goal: effective knowledge transfer and competence building towards end-users**

EURAD SCHOOL OF RWM – NEEDS-DRIVEN TRAINING COURSES

- Implementation of training courses varies depending on the:

- Training needs
- Target audience
- Type of knowledge to be transferred (explicit vs implicit vs tacit)
- Desired competences to be acquired
- Learning outcomes

➔ **Guidance document: ‘Quality criteria and training specifications as a reference guide of requirements and expectations of the training courses to be developed’**





EURAD SCHOOL OF RWM – NEEDS-DRIVEN TRAINING COURSES

The Schools aims to provide context to its training course portfolio

- **The field of RWM is very diverse and transdisciplinary**
 - E.g. chemistry, social interactions, long-term commitment, interactions with governments, etc.
 - **Each individual training course = 1 piece of the puzzle**
 - Focus on one specific topic (e.g. deep geological disposal)
 - **The School's portfolio of training courses = collection of courses and topics:**
 - Deep geological disposal
 - Interaction with Civil Society
 - Legislation
 - ...
- ➔ **Portfolio provides context to help learners see 'the big picture'**
- ➔ **Ultimately leads to a higher level of competence of the learners**



EURAD SCHOOL OF RWM – MOBILITY PROGRAMME

- The EURAD Mobility Programme supports PhDs, post-docs and junior professionals in performing:
 - Internships
 - Technical visits
- Focussed mostly on implicit and tacit knowledge
- Based on learner needs
 - Applicants can contact EURAD partners directly with specific questions
 - List of infrastructures is available on School website: <https://euradschool.eu/infrastructures/>
- EURAD partners can offer internships on the School website

EURAD SCHOOL OF RWM – MOBILITY PROGRAMME

- Applications and evaluations via an online platform (Evalato)
 - <https://pro.evalato.com/2185>
- Intra-WP and cross-WP mobility actions
- Beneficiaries submit a detailed mission report
 - Important for KM within EURAD and radioactive waste management in general
 - Knowledge gained and created during mobility actions is recorded
 - Mission reports are shared via the School's website, to assure access to the knowledge therein
 - <https://euradschool.eu/previous-mobility-actions/>



The image shows a screenshot of a 'MOBILITY MISSION REPORT' form. At the top left is a logo with the letters 'J' and 'R' in blue and yellow. At the top right is the 'eurad' logo with the text 'European Joint Programme on Radioactive Waste Management'. The title 'MOBILITY MISSION REPORT' is centered. Below it is a paragraph of text: 'The information included in this mission report consists of personal data of applicants, and in the frame of GDPR we ask you place emphasis on its integrity; the personal data in this mission report cannot be used for purposes other than the evaluation and the management of EURAD Mobility Programme. For the avoidance of doubt, this information – out of its nature – is confidential information as mentioned in Article 22.1 of the EURAD Consortium Agreement Version (17/09/2019) with effective date of 1 June 2019 (although it might not be explicitly marked as such)'. The form has several sections: 'MISSION TITLE' with the text 'Multiscale simulation of ion diffusion in unsaturated nanoscale porous media'; 'MISSION BENEFICIARY' with the text 'Yuanhai YANG, Postdoc, Institute for Energy and Climate Research (IEK-6): Nuclear Waste Management and Reactor Safety, Forschungszentrum Jülich, Germany'; 'STANDARD DESCRIPTION' with the text 'Concerned organisations, Research entities, Concerned infrastructures or facilities, High-performance computing, Concerned phases'; and 'Phase 1: Site evaluation and site selection, Phase 2: Site characterisation, Phase 5: Post-closure'. At the bottom right is the 'eurad' logo and the number '1'.

EURAD SCHOOL OF RWM – WEBINARS

- **The School organizes webinars on broad and specific topics by subject-matter experts, e.g.:**
 - Nuclear Knowledge Management
 - PREDIS
 - The US Nuclear Waste Management and Disposal Strategy
 - ...
- **Sharing knowledge with the entire EURAD community and beyond (e.g. PREDIS, IAEA, OECD-NEA, ...)**
- **Recorded in order to preserve knowledge and facilitate dissemination**
(<https://www.youtube.com/playlist?list=PLahXOQn-bremN911IEn0w8yAzQyuUR3ky>)

EURAD SCHOOL OF RWM – WEBINARS

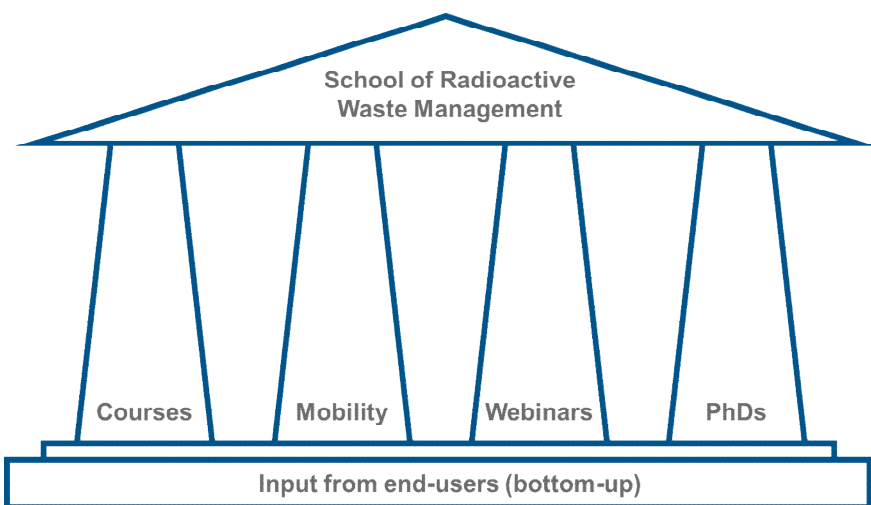
Title	# attendees	# views (YouTube)*
Synergies of EURAD with the PREDIS project addressing pre-disposal waste treatment	30	55
News from the German Site Selection Procedure	19	74
Celebrating 20 years of the IGSC	45	31
Knowledge Management in Nuclear Organizations	22	20
The IGD-TP: European waste management organisations coordinating international R&D activities	19	52
The next-generation scientific research for the safe management of radwaste - EURADSCIENCE	75	5
Steps for Sharing (ERDO Association)	44	16
The SITEX.Network	53	8
EC-JRC activities on RWM and decommissioning	51	10
US Nuclear Waste Management and Disposal Strategies	107	14
* As of October 14 th 2021		



EURAD SCHOOL OF RWM – SUPPORT THE PHD COMMUNITY

- **The School wants to support the EURAD PhD community by providing:**
 - Information on available/upcoming courses
 - The possibility to perform mobility actions
 - An overview of all PhD research performed in EURAD (<https://euradschool.eu/overview-of-phds/>)
 - A list of events of interest for PhD students
 - A discussion forum (<https://forum.euradschool.eu/>)
- **The aim is to foster a community between the PhD students**

EURAD SCHOOL OF RWM AND KNOWLEDGE MANAGEMENT & NETWORKING PROGRAMME



- **Training courses:**
 - Signposted on the Roadmap and **fulfil end-users' needs**
 - **State-of-the-Art knowledge** and **expertise** as input (WP11 + 12)
- **Mobility Programme:**
 - **Sharing and obtaining tacit and implicit knowledge** in the EURAD community (e.g. through access to dedicated infrastructures)
 - Mission reports are made **publically available** and are linked to EURAD WPs, Themes and phases of a disposal programme
- **Webinars:**
 - **Open to all**, on a wide variety of topics
 - Recordings are **publically available**
- **PhDs**
 - Foster a **community** and stimulate **interactions** between students and experts

QUESTIONS?

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