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# JRC Open access to Nuclear Research Infrastructures

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# Landscape of JRC Research Infrastructures (RI)

Joint Research Centre

- A total of 56 RI with **20 nuclear RI**
- Nuclear, Chemistry, Physic, Bioscience & Life science, ICT
- **12 nuclear RI in an Open Access frame for external users**

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# Rationale

## Opening up access to JRC RI is part of the **JRC Strategy 2030**

### Benefits to users and the ERA

- **Fair** and **transparent** method for allocating access
- Make JRC RIs available to external users in view of the **limited resources** in Europe
- Provide **capacity building in science and technical field**
- Bridge the **gap between science and Industry**
- **Dissemination** of knowledge, education and training, foster collaboration in Europe

### Benefits to the JRC

- Expand JRC **networking** capabilities
- Enter into **new key areas** of research
- Maintain JRC **scientific excellence**
- Raise the **value and visibility** of JRC RIs

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# Pilot Project “Open Access” Administrative Arrangement JRC-RTD

- Objectives: to offer third parties **free (of charge) access to JRC research facilities,** promoting **training and mobility,** activities between academic institutions, research centres and industry, as well as support for **maintaining multi-disciplinary nuclear competences** and **broaden the availability** of suitably **qualified nuclear researchers**, engineers and **employees in the EU**.
- Signed: 07/02/2020
- Duration: 48 months
- Budget: 750 000 €

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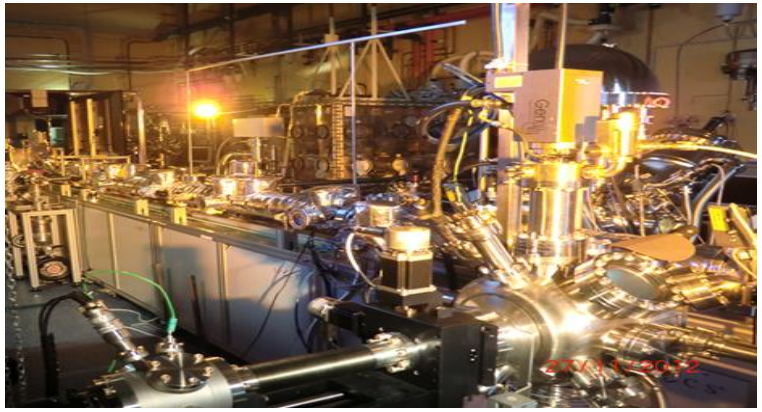
# Nuclear Open Access facilities (3 sites – 5 units)

- ☞ **Located at JRC-Karlsruhe (Germany) _ ActUsLab**
- 1. PAMEC: Properties of actinide materials under extreme conditions
- 2. FMR: Fuel and materials research
- 3. HC-KA: Hot cell



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# Nuclear Open Access facilities (3 sites – 5 units)

- ☞ **Located at JRC-Geel (Belgium) _ EUFRAT**
- 1. GELINA: Neutron time-of-flight for high resolution neutron measurements
- 2. MONNET: Tandem accelerator based fast neutron source
- 3. RADMET: Radionuclide metrology laboratories
- 4. HADES: Underground laboratory for ultra-low level gamma-ray spectrometry

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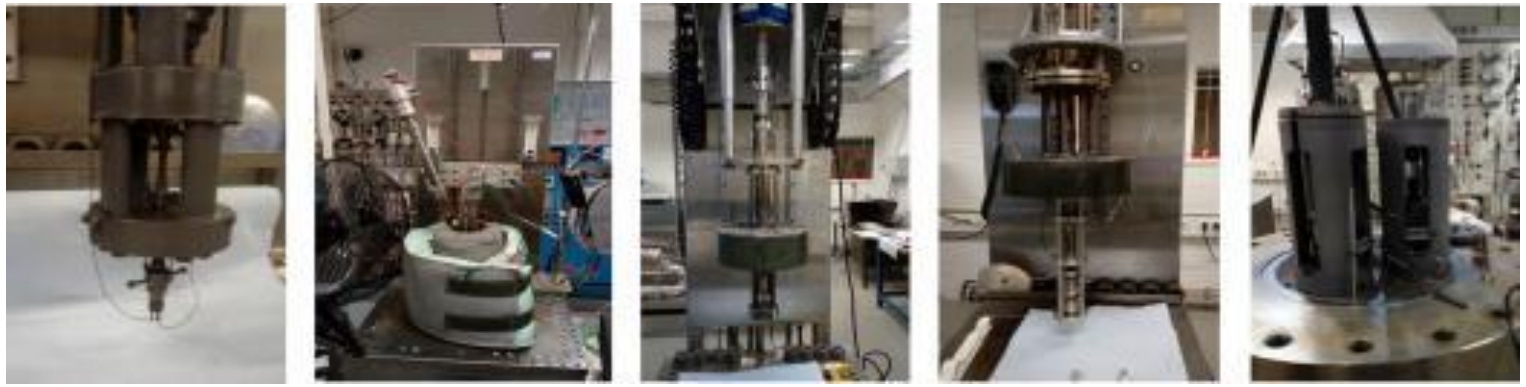
# Nuclear Open Access facilities (3 sites – 5 units)

- ☞ **Located at JRC-Petten (the Netherlands) _ EMMA**
- 1. AMALIA: Ageing of Materials under the effect of environmentally assisted stress corrosion cracking
- 2. LILLA: Liquid lead Laboratory
- 3. SMPA: Structural Materials Performance Assessment Laboratories
- 4. MCL: Micro-Characterization Laboratory



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# Framework for Access

**Based on the Charter of Access to RIs of DG RTD**

**Principles and guidelines when defining Access policies for RIs**

**Access Modes**

- **Relevance-driven**
  - Peer-review selection following a call for proposals
  - **Mainly targeted to academia and research institutions**, as well as to SMEs
  - Nuclear RIs free of charge
  - Open dissemination after an 18 month embargo period

- **Market-driven**
  - **Mainly targeted to industry**
  - Users charged the full costs
  - Data not disseminated via open schemes

**Open to**

✓EU Member States

✓Countries associated to Horizon 2020

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# Dedicated portal at JRC Science Hub

https://ec.europa.eu/jrc/en/research-facility/open-access

- All supporting documents: Framework and related annexes
- Eligibility Criteria
- Call for proposals per Research Infrastructure
  - ✓ Estimated total number of Access Units allocated to the call
  - ✓ Average number of Access Units per project
  - ✓ Estimated additional costs per Access Unit
  - ✓ Priority topics of the Research Infrastructure
- Selected Projects
- User Access Report / link to databases (after embargo period)


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# User Selection Committee and eligibility

## Peer review

- Scientific implementation (50 pts)
- Collaboration and access to new Users (20 pts)
- Strategic relevance to the JRC (15 pts)
- Strategic importance for Europe (15 pts)


## Eligibility

- The Lead User Institution and User Institutions must be from an EU Member State or a country associated to the EURATOM R&T programme.
- Ethical considerations in accordance with EU Law

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# Key outputs (H2020, 2014-2020)

158 projects

140 research papers

53 PhD & 11 Master students

Execution about 65%

- On average 3 year to finalization
- Delays due to covid

Geographical spread of projects

- 19 EU Member States
- 4 associated countries + UK

Organisations

- 35 Universities
- 47 Research institutes

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# Open Access to JRC Nuclear Research Infrastructure … And beyond

- Open access is a dynamic way to interact with stakeholders.
  - Flexible project-based tackling of stakeholder interests
  - Good scientific technical output – directly available to stakeholders and beyond
  - Clear competence building component
  - Natural bridge to non-energy applications

- Need for **consolidation within OFFERR** and **European User Facility Network (EUFN)**
  - To optimise the use and increase the visibility
  - To increase the trans border collaboration at EU-based facilities
  - to maintain a high-level infrastructure.
  - to maintain a high-standing in the field.
  - **Long & rich experience of JRC Open Access to RI to serve the new EUFN**

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# Thanks

## Any questions?

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Karl-Fredrik.nilsson@ec.europa.eu (Petten, EMMA)

**https://ec.europa.eu/jrc/en/research-facility/open-access**

stakeholders.

The SNETP association with support of the Euratom Programme initiates the creation of the **European User Facility Network (EUFN)**. The EUFN network will gather EU based research infrastructures that can offer facilities, capacities and equipment relevant to nuclear R&D (technology development, radiation protection, health, digital, modelling, decommissioning, etc.)

The aim of the EUFN is to develop a network coordinating optimised use of existing nuclear research infrastructures and to increase visibility of key experimental facilities, for instance materials testing research reactors in operation or hot cells and laboratories. The EUFN also aims to promote the substantial increase of trans border collaboration at EU-based facilities and thus facilitate access **for researchers and research teams from Euratom and Associated Countries to nuclear research infrastructures.** To express your interest in joining the network, we invite you to provide general information on the user facility that you represent.

Click on **this link** to access directly the online form and initiate the interaction
For any additional information or questions, **contact the SNETP Secretariat**

We would highly appreciate filling the online form by **1st July 2022.** Please follow-up the SNETP social media to be informed on the next steps regarding network consolidation.

# Contact us

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