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A.5 Deputy HoU, CDMA Brussels, 5 February 2019

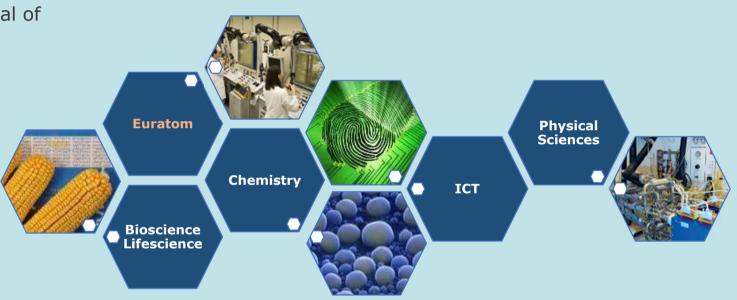


## Landscape of JRC Research Infrastructures

JRC hosts **38 physical research infrastructures** with a potential of opening to external users

(out of a total of 58 facilities)







## Rationale

Opening up access to JRC Research Infrastructures 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 to Enlargement and Integration countries
- 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



## 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: Scientific implementation, collaboration and access to new users, strategic relevance to the JRC, strategic importance for Europe
- Mainly targeted to academia and research institutions, as well as to SMEs
- Users charged the additional costs associated (18% overheads); nuclear RIs free of charge
- Open dissemination after an 18 month embargo period

#### Market-driven

- Selection by the JRC
- 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





## Research Infrastructure Access Agreement

## Rights and obligations of JRC and the user(s) concerning:

- Health and safety
- Security rules
- Data protection
- Confidentiality
- Liability and financial aspects
- User access assessment

### **In-kind contributions:**

- Human resources, i.e. for running all or parts of the experimental work or assisting the experimental campaign
- Provision of consumables and equipment









## Dedicated portal at JRC Science Hub

- All supporting documents: Framework and related annexes (template for proposals, agreement documents, IP rules, etc.)
- 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)

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





## Facilities opening up access

European Laboratory for Structural Assessment (ELSA) (Ispra, IT)

Reaction Wall

HopLab

Consumer Products Safety (Ispra, IT)

Nanobiotechnology Laboratory

Energy Storage Facilities (Petten, NL)

**BESTEST** – Battery Energy Storage Testing for Safe Electric Transport

FCTEST — Fuel Cells and Electrolyser Testing facilities

GASTEF - Gas Tank Testing Facility

European research infrastructure for nuclear reaction, radioactivity, radiation and technology studies in science and applications (EUFRAT) (Geel, BE)

**GELINA** – Neutron time-of-flight facility for high-resolution neutron measurements

**HADES** – Underground laboratory for ultra-low level gamma-ray spectrometry

**MONNET** – Tandem accelerator based fast neutron source

RADMET - Radionuclide Metrology laboratories

Actinide User Laboratory (ActUsLab) (Karlsruhe, DE)

PAMEC – Properties of Actinide Materials under Extreme Conditions

FMR - Fuels and Materials Research







# Calls for Access / Statistics

#### GELINA, Neutron time-of-flight facility for high-resolution neutron measurements. Closed



Geel, Belgium. GELINA is a 150 MeV electron accelerator 27 | 15 serving as strong white neutron source for high resolution acce acce neutron time-of-flight measurements.

Details of the call #2018-1-RD-EUFRAT-GELINA



#### HADES, Underground laboratory for ultra-low level gamma-ray spectrometry Closed



Geel, Belgium. JRC operates a laboratory for

27 | 15 ultralow-level radioactivity measurements inside the 225 m 3018 deep underground laboratory HADES, which is located at

the premises of the Belgian Nuclear Research Centre. In HADES, the muon flux (secondary cosmic rays) is a factor of 5000 lower compared to above ground and the flux of protons, neutrons and electrons is reduced to an incionificant lavel

Details of the call #2018-1-RD-EUFRAT-HADES



## MONNET, Tandem accelerator based fast neutron source



Geel, Belgium. MONNET is a high-intensity quasi 27 > 15 mono-energetic fast neutron source, driven by a vertical 3008 3018 3.5 MV Tandem accelerator producing either continuous or

pulsed beams of protons, deuterons or helium ions. Details of the call #2018-I-RD-EUFRAT-MONNET

#### RADMET, Radionuclide Metrology laboratories Closed



Geel, Belgium. The Radionuclide Metrology laboratories (RADMET) are equipped with a broad set of instruments used for nuclear decay measurements, determination of

related nuclear data and radiological characterisation of samples and

Details of the call #2016-1-RD-EUFRAT-RADMET



## 18 calls since June 2017

- Research Infrastructures
- Eligible proposals
- **58** Accepted proposals
- Countries (3 from AC H2020)

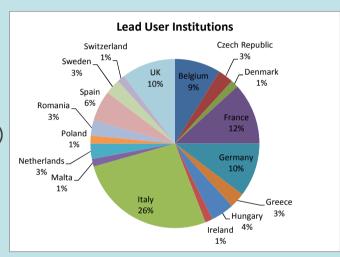
## **User Selection Committees**



- Members Appointed
- Meetings

## **Accepted proposals**

- **User Institutions**
- **199** Users
- **Completed Projects**



#### Other countries as User Institutions

Bulgaria, Denmark, former Yugoslav Republic of Macedonia, Greece, Poland, Portugal, Romania, Slovenia, Spain, Ukraine, CERN



## Results

## **ELSA - HOPLAB**

Ispra, Italy

Delft University of Technology

# **Dynamic Performance of Adobe** masonry components







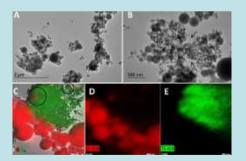


## **Nanobiotechnology Laboratory**

Ispra, Italy

University of Brescia Italy

Characterisation of air particulate matter (PM) trapped by a new material coming from industrial waste









# Any questions?

You can find me

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

