

CALL FOR APPLICATIONS

Funding for Interdisciplinary Postdoctoral Fellowships

Research Program CIRSET

Circular Economy for Sustainable Resources in the Energy and Digital Transitions

1. About CIRSET

CIRSET program (Circular Economy for Sustainable Resources in the Energy and Digital Transitions) is an ambitious initiative of the Initiative d'Excellence Lorraine (UNYS, I-SITE). It addresses critical challenges related to the sustainable management of primary raw materials and secondary resources in the context of energy and digital transitions.

With its deeply rooted interdisciplinary approach, CIRSET bridges together complementary expertise from different fields:

Field	Key topics covered
Geosciences	Understanding of geological deposits and geochemical cycles of critical metals
Processing	Development of innovative extraction and recycling processes
Environmental Sciences	Environmental impact assessment and remediation techniques
Materials Sciences	Sustainable materials design
Economics and Management	Economic models for the circular economy
Human and Social Sciences	Societal, psychosocial, educational, and digital aspects

CIRSET focuses on the entire material value chain, from responsible extraction and processing to recycling and stakeholder engagement, integrating societal and environmental perspectives at every stage.

2. Objectives of the Postdoctoral Program

This call aims to fund interdisciplinary postdoctoral fellowships that will directly contribute to CIRSET's scientific priorities. Proposed projects must adopt an interdisciplinary approach, operating at the interface of at least two of the following fields:

Field	Key topics
1. Geosciences & Resources	Ore genesis, assessment of primary and secondary resources, characterization techniques, geopolitics of critical metals
2. Processes & Raw Materials	Metallurgical extraction, mineral processing, recycling, management of plastics from electronic waste
3. Environment & Society	Environmental impacts, remediation of metal-polluted soils, life cycle assessment, social acceptance, governance
4. Economics & Management	Circular economy, business models, green finance, metal value chains, management
5. Social Sciences & Education	Scientific outreach, pedagogical innovation, behavioral change, training

Applications must demonstrate true interdisciplinarity and propose innovative approaches to address the challenges of the circular economy applied to mineral resources.

3. Eligibility Conditions

3.1. Candidate Profile

This call is open to researchers who:

- Have defended their PhD thesis within the last 3 years (before the closing date of the call)
- Hold a PhD in a discipline related to CIRSET fields/topics (geosciences, chemistry, physics, materials science, environmental science, economics, management, humanities and social sciences, educational science, computer science, etc.)
- Demonstrate a clear aptitude for interdisciplinary approaches
- Show a strong interest in European funding and the building of international consortia.

3.2. Scientific Conditions

The submitted projects must:

- (i) Be directly related to the priorities of the CIRSET interdisciplinary program as described in the reference document;
- (ii) Operate at the interface of at least two disciplinary fields listed in the section 2;
- (iii) Fit into at least one of the four Work Packages (WP) of the program.

4. Funding Information

4.1. Conditions and duration

- Duration of the postdoctoral fellowship: 24 months
- Salary: In accordance with the current salary scale for postdoctoral researchers at the Université de Lorraine
- Starting date: To be agreed upon with the host laboratory and the CIRSET steering committee

4.2. Host Laboratory

Two options are possible:

Option A – Application with an identified host laboratory: The candidate has already identified a researcher at the Université de Lorraine with whom they wish to collaborate and will include this information in their funding application. If the application is selected by the committee, the candidate and the reference researcher can then refine the project together. Funding will be definitively approved once the reference researcher confirms that the project is sufficiently advanced. The candidate will then carry out their postdoctoral fellowship under the supervision of the reference researcher.

Option B – Review & referral by the Selection Committee: If the candidate has not identified a host laboratory at Université de Lorraine prior to their application, the CIRSET selection committee will review the project – and, if selected, connect the candidate with a reference researcher whose expertise and research activities align with the proposed project. The selected candidate can then discuss the project with the reference researcher to refine it further. Funding will be approved once the reference researcher from the Université de Lorraine confirms that the project is sufficiently advanced. The candidate will then carry out their postdoctoral fellowship under the supervision of the reference researcher.

4.3. Commitments following the project acceptance

Selected candidates will be required to:

- Join Université de Lorraine to conduct their research work;
- Actively participate in scientific activities of CIRSET program (seminars, workshops, conferences);
- Develop—with the support of the reference researcher—a proposal for European funding (e.g., Horizon Europe, EIT RawMaterials, ERAMIN, etc.) with an aim of building a European consortium that will secure the funding allowing to continue applicant's research work at Université de Lorraine for the duration of the European project.

5. Application Process

5.1. Required application documents

Applicants must submit an application form containing the project description along with a complete set of documents via the following application link:

<https://enquetes.univ-lorraine.fr/index.php/388424?lang=en>

The candidate will be asked to upload the following documents:

- Detailed curriculum vitae (including list of publications and conference presentations)
- Copy of PhD diploma or certificate confirming the fact of successful defense
- Recommendation letters (minimum 2)
- A motivation letter explaining why the candidate is interested in joining CIRSET and how they fit the profile
- If applicable: letter of agreement from the hosting laboratory of the Université de Lorraine and/or from a reference researcher

5.2. Evaluation Criteria

Applications will be evaluated based on the following criteria:

Criteria	Weight
Scientific excellence of the project	25%
Alignment with CIRSET priorities	20%
Interdisciplinary nature of the project	20%
Expected project impacts	10%
Candidate's academic and professional background	15%
Potential for European funding and valorization	10%

5.3. Call Timeline

Phase	Date
Call opening	1 October 2026
Application deadline	31 December 2026
Review by scientific committee	Starting from January 2027
Publication of the results	31 March 2027
Project start date	Upon candidate's availability

6. Additional Information

6.1. Contact

For any questions related to this call for applications, please contact: Prof. Alexandre Chagnes (alexandre.chagnes@univ-lorraine.fr) and Dr. Olga Chernoburova (olga.chernoburova@univ-lorraine.fr)

6.2. Reference Documentation

Candidates are encouraged to consult the following documents:

- The CIRSET program's detailed description "Reference Document for CFA Postdoc CIRSET 2027.pdf"
- Information on Université de Lorraine laboratories involved in the CIRSET consortium
- Strategic guidelines of UNYS, I-SITE, Initiative d'Excellence Lorraine, and Université de Lorraine (<https://www.univ-lorraine.fr/isite-lorraine/en/lorraine-excellence-initiative/our-6-societal-challenges/>)

6.3. Open Science Commitment

CIRSET adheres to the Open Science principles. Selected candidates shall commit to upholding these principles in their research and dissemination practices, including open-access publishing and depositing research data in public repositories.

I-SITE, Université de Lorraine and the CIRSET program strongly encourage international applications.