Hierarchical & Functional Materials for health, environment & energy | HiFunMat
The interdisciplinary thematic institutes of the University of Strasbourg & cnrs & Inserm

Interdisciplinary PhD projects | 2027-2028

ITI HiFunMat **funds**
interdisciplinary PhD projects

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Objectives

Proposals for scientifically ambitious, interdisciplinary, and collaborative PhD research projects addressing scientific and societal challenges related to the themes of ITI HiFunMat (innovative materials for energy, environment, and health). Projects should incorporate training-through-research aspects and enable the student to integrate effectively into the academic or industrial research community.

The PhD candidate will participate in the HiFunMat Graduate School program and will have access to additional training opportunities (summer school, training camps), in addition to the training provided by their doctoral school.

Interdisciplinary projects

Taking into account the mid-term evaluation of HiFunMat, the executive committee has revised the “PhD” call for projects.

ITI HiFunMat invites its members to develop their vision of disciplinarity and interdisciplinarity, and to explain in this application to what extend their project is interdisciplinary. For this reason, the interdisciplinarity criterion is not eliminatory. HiFunMat primarily aims for this process to serve as an opportunity to enrich the projects carried out within the consortium.

To initiate this collective reflection, HiFunMat proposes the following starting definitions. These definitions have been written using LERU (league of European Research Universities) as guideline.

Interdisciplinarity

“A project that aims to address a scientific question common to the partners by drawing on the expertise of specialists from at least two different disciplines. The project’s goal is to generate new knowledge in both disciplines that could not have been achieved with the same level of quality and/or precision by a single discipline alone. Furthermore, the scientific contribution of the partners must be equivalent.”

Disciplinarity

« A disciplinary project is self-reliant and uses the common expertise of a community to advance scientific knowledge—whether fundamental or applied—within one field. »

Multidisciplinarity

« A multidisciplinary project addresses a problem or shared topic through sequential analyses conducted by different disciplines. Each discipline works independently, contributing its perspective in parallel with others while remaining within the boundaries of its own field. »

Funding

HiFunMat funds interdisciplinary projects up to a maximum of €130,000. This funding covers a three-year PhD contract. An additional amount of up to €2,500 may be requested to cover the student's travel expenses between partner laboratories Strasbourg-Mulhouse. Co-funding for PhD projects is possible (maximum €65,000). Credits for a co-funding will be transferred when the other funding partner has sent the co-fund confirmation. A maximum of two and a half projects will be funded in 2027. Projects must start no later than October 1, 2027.

Eligibility criteria

- The call is open to all HiFunMat members, except those who currently have a PhD funded by HiFunMat. Priority may be given to members who have not previously been awarded HiFunMat PhD grants.
- A HiFunMat member may participate in only one research project (PhD, Starting Grant, inter-ITI) per year.
- An interdisciplinary project must be submitted by at least two researchers/teacher-researchers/research engineers from two different disciplines and two different laboratories.
- One of the project partners must hold an HDR (Habilitation à Diriger des Recherches) at the start of the doctoral contract (October).
- Each partner commits to supervising the selected PhD student.
- Submitted projects must take into account the Training by Research aspect and be presented as a thesis project.

Submission of applications

Applicants must submit this application form in PDF format only via email to caitlyn.dussart@unistra.fr by no later than **December 18, 2026**. The file name should follow the format: *projets-HFM-PhDID-2027_name of partner 1*. The subject line of the email should be: *AAP PhD ID HiFunMat*.

Selection procedure

After verification by the Directory Committee that eligibility criteria are met, the interdisciplinary PhD project will be sent to two external experts appointed by the Executive Committee. The external experts will evaluate Part I (*Scientific Description*) of the application based on the criteria outlined in the application form, using an evaluation grid. Parts II and III (*Interdisciplinarity* and *Training-through-Research*) will be evaluated in the same manner by at least two members of the Executive Committee.

On the day of the jury, all members of the Executive Committee will have access to the full applications and evaluations, except in cases of conflict of interest. The jury will discuss all submitted projects to establish a final ranking.

In the period 2021-2025, approximately five thesis projects were submitted per year, with two possible funding opportunities. The success rate is 38.5%.

Calendar

16 Oct. 2026	Launch of the Starting Grant call
18 Dec. 2026 – 17h	Deadline to submit projects
23 March 2027 – 9h30	Jury
18 Mai 2027 - 9h30	Admission interviews PhD candidates
July 2027	Transfer of credits
01 Oct. 2027	Start of the PhD project

Partner 1 *- must be affiliated with a HiFunMat laboratory or team.*

SURNAME, first name	
Position (PR, DR, MCF, CR, …)	
HDR	
E-mail	
Unité de Recherche	
Area of expertise	
List of ongoing PhDs + start dates	
Disciplinary core skills *Describe areas of expertise and/or significant (academic) projects.* *Maximum 5 lines.*	

Partner 2 *- must be affiliated with a laboratory or team different from that of partner 1.*

SURNAME, first name	
Position (PR, DR, MCF, CR, …)	
HDR	
E-mail	
Unité de Recherche	
Area of expertise	
List of ongoing PhDs + start dates	
Disciplinary core skills *Describe areas of expertise and/or significant (academic) projects.* *Maximum 5 lines.*	

(Tableaux à reproduire si plus que 2 partenaires)

Financial presentation

The funding will be transferred in full to one partner.

HiFunMat funding requested	
Amount	☐ 130.000,- € PhD contract (100% HiFunMat) ☐ * 65.000,- € Co-funding for a PhD contract ☐ 2.500,- € Travel expenses for students that need to travel between laboratories Mulhouse - Strasbourg

Funding available for expenses other than PhD contract	
Source(s) of funding and amounts	
Intended use of funding	

*** Co-funded PhD projects**	
Source of funding and amount	

Laboratory where the potential funding will be transferred	
First name, SURNAME of the partner	
First name SURNAME of the gestionnaire financier	
Unité de Recherche	

Projet de recherche PhD interdisciplinaire

Titre du projet interdisciplinaire
Acronyme du projet interdisciplinaire

Abstract of the project in English (non-confidential) *Describe the project, its objectives and expected results.* | environ 1.000 caractère maximum
Graphical abstract

Part I – Scientific description

4 pages maximum, not including citations **Font: Times New Roman, size 11, interline 1.5**
Context | *Describe the context of the project as well as the scientific / technological /economic / social challenges. Specify how the project is relevant to this context and these issues, as well as its innovative character.*
State of the art | *Indicate the positioning of the subject with regard to the national and international state of the art, cite some key bibliographical references on the subject.*
Objectives | *Describe the objectives and methodologies of the project. Show the originality and relevance of the project to the state of the art. Specify the scientific and technological locks to be lifted as well as its expected impact*
References |

2 pages maximum **Font: Times New Roman, size 11, interline 1.5**
Describe the planned work program | *Identify for each step, 1) where the student will conduct the work, 2) the time planning (will he work at both in parallel or have specific periods in each laboratory), 3) what are the objectives and what does it mean if the expected deliverables are not met? What impact would this have on the rest of the project and collaboration? 4) who will supervise the student and who will train the student if needed*

Part II - Interdisciplinarity

Maximum 1 page **Font: Times New Roman, size 11, interline 1.5**
Interdisciplinary character of the project | *e.g., justification of the partnership, expected reciprocal contributions & role of each partner, integration of knowledge and/or methodologies from one field into another, development or integration of new knowledge and/or methodologies.*
Project organization and management | *e.g., What mechanisms will be put in place to allow the exchange and incorporation of (new) ideas and information between disciplines? How will communication between partners be handled? What challenges may be anticipated, and how do the partners plan to address them?*

Part III – Training for and by research

Interdisciplinary research projects often present increased complexity, particularly for the student. HiFunMat aims to support you both in identifying the most suitable candidate and in establishing effective guidance and follow-up.

Below you will find (non-exhaustive):

- Questions worth considering during the search and interview process with candidates,
- Potential difficulties that students may encounter when working on interdisciplinary projects,
- Elements to help ensure the smooth progress of an interdisciplinary doctoral project.

This section is not an eligibility criterion, but rather a reflection aid to help you ensure that all aspects of an interdisciplinary PhD project have been considered.

Selection the right candidate

- *What student profile are you looking to recruit? For example: expertise or training in both disciplines, strong expertise in one field with basic knowledge in the other, or simply a strong curiosity for the other discipline? What transversal skills are required?*
- *What skills or level of expertise would you like the student to develop in each discipline?*
- *What motivates the candidate to pursue an interdisciplinary project?*
- *Has the candidate reflected on the specific challenges that an interdisciplinary PhD may involve?*
- *What are the candidate's expectations regarding the skills they wish to acquire, and in which field(s)?*

Potential difficulties students may encounter in interdisciplinary projects

- ***Communication**: How can ideas be effectively translated from one discipline to another so that all stakeholders can understand and collaborate? How can key concepts be adapted to the language of each field while maintaining scientific precision?*
- ***Communication / Time management**: Communication is often more difficult and slower when the student is not located in the same laboratory as their supervisor, since most exchanges are carried out by email.*
- ***Time management**: Bridging gaps between disciplines, aligning objectives, and co-developing solutions generally requires more time and effort than within a single-discipline project.*
- ***Teamwork**: Interdisciplinary projects rely heavily on collective work, requiring greater human interaction for brainstorming, problem-solving, and decision-making.*
- ***Clarity of results**: Interdisciplinarity can sometimes blur boundaries and lead to confusing or misinterpreted findings, particularly in emerging or loosely defined fields. Instead of providing clarity, it may introduce confusion and dilute the focus of the research.*
- ***Training needs**: The student may require additional training (laboratory practice, conferences, workshops, online courses via Amethis, Coursera or YouTube, etc.) to acquire or strengthen knowledge from other disciplines (methodologies, characterization techniques, data collection and interpretation, etc.). Can these needs be identified in advance with the student? Are suitable training opportunities already available within the team?*
- ***Transversal skills**: Will the PhD student need—and receive—specific support to develop transversal skills (adaptability, interdisciplinary communication, collaborative problem-solving) that are essential in an interdisciplinary environment?*

Project management and student supervision

- ***Communication**: How will communication between the partners and the student be organized? Should there be separate or joint meetings, and how frequently will collective meetings take place?*
- ***Teamwork**: How can the student's full integration into each of the involved laboratories be ensured?*
- ***Laboratory activities**: Will the student be invited to team meetings and activities in both laboratories? Is this necessary for the successful progress of the project? Is it compatible with their workload and schedule? To what extent does this participation promote their integration within both teams?*
- ***Project direction**: Who will be responsible for the scientific orientation of the project (a main project leader, or the partners jointly)? What would be the role of the student, who ideally would have the most complete overview of all parts of the project?*
- ***Student supervision**: Will both partners be present during the Individual Follow-up Committee (CSI)?*
- ***Project monitoring**: Will each work package be supervised by a permanent team member? What are the implications for integrating knowledge across the overall project?*

- ***Time management**: How will the student's time be divided between the laboratories? What consequences might this have for the student? If activities in one laboratory do not proceed as planned, what impact could this have on the work scheduled in the other laboratory?*

Font : Times New Roman, size 11, interline 1.5

Training by and for research | *If you wish, you are free to briefly describe your vision of research-based training in the context of interdisciplinary projects.*

Signatures

Partners		
	Partner 1	Partner 2
SURNAME and name		
"I hereby certify that the amounts indicated in the financial presentation are available as (co-)funding, and that all information provided in this application is accurate." *"I certify that I am responsible for supervising the student."* *"I certify that I am responsible for ensuring the progress of the project, monitoring its implementation, and overseeing the final report at the end of the project."*	Date : Signature :	Date : Signature :