

Formation 2024 call for projects: Funding for doctoral mobility.

AMUtech, which will be officially created on 1^{er} January 2021, aims to lead and coordinate Aix-Marseille University's forces in materials science and nanotechnology, by developing collaboration between research units, strengthening the link between education and research, stepping up the development of shared platforms and boosting the site's attractiveness and socio-economic development.

The institute is based on the synergy of the skills and resources of the site's physics and chemistry research units involved in the study of materials and nanotechnologies. The aim is to develop new materials on the meso and macroscopic scales, with a particular focus on intelligent materials and optronics.

The aim of this call for projects, which is part of **AMUtech's PhD Program**, is to fund **international mobility internships** for **PhD students from research units within the institute's scope** (internships of at least 2 months and up to 3 months). A total of 20 months of internships will be funded.

Eligibility criteria :

To be eligible for this call, you must :

- Be registered with one of the three doctoral schools associated with AMUtech (ED 250, ED 352 and ED 353)
- Be supervised by an AMUtech thesis director
- Work on a subject in line with AMUtech's objectives, i.e. **advanced materials and nanotechnologies within the** framework of one of the two areas of research, i.e. Smart materials or Optronics. These areas are listed in the form of keywords (see table below) for information purposes only and are not exclusive.
- Priority will be given to projects initiating new international collaborations and to doctoral students in the first or second year of their thesis.

Axes/Themes	Smart Materials	Optronics
Conversion and storage and storage	Micro-batteries, Nano Photovoltaics	Nano-rectenna
Functionalisation and adaptation	Modified graphene, Covalent networks,	Meta surfaces, Spintronics

	Biomaterials	
Detection	Photochemistry, Sensitive chemistry	Nano-structured surfaces, Nano-plasmonics,
Heterogeneous integration	2D stacks, Hybrid semiconductors, Flexible electronics, Nanoelectronics, Non- volatile memory	Electron/photon coupling in nano- heterostructures, Nanophotonic materials

Terms and conditions :

The mobility bonus will take the form of an assignment. AMUtech will cover transport costs (up to a maximum of 1000 euros for a return trip).

AMUtech will also pay for accommodation and meals up to a maximum of €1,200 per month. From an organisational point of view, the student will have to incur all the necessary expenses himself. To help with this, they will receive an advance of 70% of the total estimated cost of the assignment before their departure. On their return from the assignment, students must provide full proof of the expenses incurred (transport, accommodation and catering costs) so that they can be reimbursed in full for their expenses (subject to the aforementioned ceilings).

Winners will be asked to submit a brief report the following year to assess the impact of their mobility.

Preparing the file :

To apply, candidates must provide a complete file including:

- A CV
- A letter of motivation and a detailed programme specifying the planned dates of mobility
- A favourable opinion from the thesis supervisor
- A letter of acceptance or commitment from the host laboratory

Assessment :

AMUtech Institute

Training Contact: Samantha Isaia
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Applications will be evaluated by an internal evaluation committee, part of which is the AMUtech training committee.

Dates to remember:

Applications are assessed at the end of the year and should be sent to: amutech-direction@univ-amu.fr