

Post-doctoral fellow in physics

Study of the electronic properties of functionalized graphene transistors

The project:

In the context of an Initiative d'excellence (IdEx) grant from the A*Midex foundation of Aix Marseille University, we are seeking for a highly motivated post-doctoral fellow to join our nanotechnology research team at CINAM in collaboration with iSm2 and IM2NP. The focus of this position will be the study of the electronic properties of functionalized graphene transistors. The candidate will carry out innovative research to design, characterize, and evaluate the performance of novel graphene-based transistors. We are looking for enthusiastic researchers with expertise in the fabrication and characterization of graphene-based electronic components, who wish to contribute significantly to the advancement of nanoscale electronics.

The position:

- Design and implement the experimental set-up for in situ electrical and optoelectronic measurements during the graphene chemical functionalization stage.
- Fabricate and characterize graphene transistors from Scotch-exfoliated graphene
- Characterize functionalized transistors using advanced structural and electronic analysis techniques.
- Evaluate and quantify the impact of functionalization on transistor electronic performance.
- Collaborate with other researchers to integrate results into the creation of new electronic devices.
- Regularly report the research progress the multidisciplinary consortium involved in this project.
- Write scientific papers for publication in specialized journals and present results at scientific conferences.

Join our team if you like challenges and want to be a part of a young, scientifically dynamic, inclusive and supporting research group.

The candidate:

- Recently pass a PhD in a relevant field such as applied physics, nanotechnology or similar discipline.
- Proven expertise in the manipulation and characterization of graphene and graphene-based transistors.
- Advanced skills in materials characterization, including the use of advanced imaging and spectroscopy techniques.
- Strong problem-solving skills, critical analysis, and interpretation of experimental data.
- Ability to work independently and collaboratively in a multidisciplinary team.
- Relevant academic publications in leading journals.

Terms and conditions:

- 12-month non-renewable post-doctoral contract.
- Competitive remuneration according to experience and qualifications (approx. €2500 net).
- Access to state-of-the-art equipment and a stimulating research environment.

Localization:

- Aix Marseille Université, France
- Institute: Centre Interdisciplinaire de Nanoscience de Marseille ([CINAM](#), UMR 7325 CNRS)
- Department: NanoMatériaux ([NM](#))

How to apply:

Send CV, cover letter and two letters of recommendation to Dr. Romain Parret (CINAM, romain.parret@univ-amu.fr), Dr. Olivier Chuzel (iSm2, olivier.chuzel@univ-amu.fr), and Dr. Sandrine Bernardini (IM2NP, sandrine.bernardini@univ-amu.fr).