

| JOB OFFER |

Maturation engineer

Direction of Investment - engineering and numerical hub

SATT Paris-Saclay is located at the heart of the Paris-Saclay Cluster, the flagship of French scientific and industrial excellence. The main purpose of SATT Paris-Saclay is to finance the maturation of innovative projects issued from member laboratories of the Paris-Saclay Cluster and to enable, at the end of the maturation phase, to carry out a technological transfer.

With an investment capacity of €79M over 11 years, SATT Paris-Saclay has the objective of having created 50 start-ups, supported more than 200 maturation projects and submitted 100 patents by 2025.

As part of the LUNA project (development project of a new generation of LEDs on low-cost substrates, carried out at the Center for Nanosciences and Nanotechnologies (C2N)), SATT Paris Saclay is recruiting a maturation engineer with a PhD in physics or Materials Science on a fixed-term contract for a period of 12 months.

JOB DESCRIPTION

Main mission

Within the Materials and Photonics departments of the Center for Nanosciences and Nanotechnologies, you will participate in the development of a new generation of LEDs on low-cost substrates. This work will be carried out as part of a collaboration with a startup.

The candidate will work in close collaboration with the two research directors leading this project and will participate to the discussions and the definition of the architecture of the LEDs.

Please note that this research project being carried out in connection with the activities of a Startup, the discussions and developments will be subject to a confidentiality agreement. The success of this project will open up the possibility of filing one or more patents as well as the possibility of longer-term cooperation.

Description of tasks and activities:

The role of the maturation engineer will be to:

- Development of the growth of III-Nitride nanowires by plasma-assisted molecular beam epitaxy to achieve the specificities of LEDs, specificities defined in agreement with the startup. The combination of different techniques for characterizing nanostructures will be used to adjust the growth conditions;
- Manufacturing of the LEDs in response to specifications. This manufacturing will be carried out in the C2N clean room, combining different micro-nano-manufacturing techniques;
- Characterization of the manufactured LEDs.

CANDIDATE'S PROFILE

PhD in Physics or in Material Sciences, you have already had initial experience in molecular beam epitaxy, and if possible in the growth of Nitride Nanowires. Experience in micro-nano-fabrication will also be highly appreciated.

Professional skills: Mastering molecular beam epitaxy | Mastering nanofabrication techniques | Mastering nanostructure characterization methods | Mastering optical and electronic characterization methods

Transversal skills: Scientific and experimental rigor | Organization | Teamwork | Responsiveness and dynamism | Relational meaning | Autonomy

Soft skills: Spirit of initiative | Combativeness for the achievement of objectives | Sense of confidentiality

CONTRACT TERMS

- Contract type: CDD
- Duration : 12 months
- Status: day package framework – category 3bis
- Contract start date: as soon as possible
- Remuneration: Depending on experience
- Location: Center for Nanosciences and Nanotechnologies (C2N), UMR 9001 CNRS / Paris-Saclay University, 10 Boulevard Thomas Gobert, 91120 Palaiseau, France

JOB OFFER VALIDITY DATE

Up to January 31st, 2024

CONTACT

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