



MISSION TITLE

Development of new functional materials by Atomic Layer Deposition

POSITION DESCRIPTION

Function	Engineer	Reference	IPVF-2020-E001
Contract type	COD	Duration	36 months
Starting date	June 01, 2020	Education	Engineer degree/Master 2
Working Place	Palaiseau, Paris area	Salary	Profile dependent

IPVF IN BRIEF

Become an actor of the Energy Transition by joining a team driven by innovation and impact to address today's most decisive challenges.

IPVF - Institut Photovoltaïque d'Île-de-France, is a global Research, Innovation and Education center, which mission is to **accelerate energy transition through science & technology**.

Gathering industrial PV leaders (EDF, Total, Air Liquide, Horiba and Riber) and world-renowned academic research teams (CNRS, Ecole Polytechnique), multi-disciplinary and international IPVF teams conduct research for clean energy technologies.

IPVF at a glance:

- *An ambitious Scientific and Technological Program: from tandem solar cell technologies to economy & market assessment, state-of-the art characterization, photocatalysis and concepts breakthrough.*
- *A state-of-the-art technological platform: more than 100 tools, located in cleanrooms (advanced characterization, materials deposition, prototypes for fabrication, modelling...).*
- *A high-standard Education program (M.S. and PhD students).*

JOB CONTEXT

IPVF has launched the Program VI PROOF to explore breakthrough approaches for future photovoltaic innovations. Within PROOF, the MAP project aims at developing new functional materials to reduce the risks associated with materials and processes. Atomic Layer Deposition (ALD) has been selected as the method of choice to address these challenges, by coordinated efforts in molecular chemistry, surface chemistry, material science, modelisation and instrumentation. The Engineer will benefit from IPVF expertise and unique capabilities in ALD.

MAIN MISSIONS

Within the MAP team, the engineer will be expected to develop ALD processes for new functional materials. In strong collaboration with the MAP team members, he/she will:

- Conduct the necessary bibliographic studies
- Set up and perform ALD experimental plans
- Finely characterize the growth mechanism involved and the materials developed
- Contribute to the implementation of the materials in optoelectronic devices developed at IPVF.

SOUGHT PROFILE

Knowledge	Know-how	Self-management skills
<ul style="list-style-type: none"> ▪ Vacuum deposition ▪ Materials science ▪ Thin film and device characterization 	<ul style="list-style-type: none"> ▪ Hands-on experience with ALD/CVD would be a plus ▪ Knowledge of Origin, Excel ▪ Communication of results 	<ul style="list-style-type: none"> ▪ Curious and enterprising ▪ Autonomous ▪ Organizational and collaborative skills ▪ Results-oriented

CONTACT

Cover letter and résumé to be sent to: n.schneider@cnrs.fr and rh@ipvf.fr