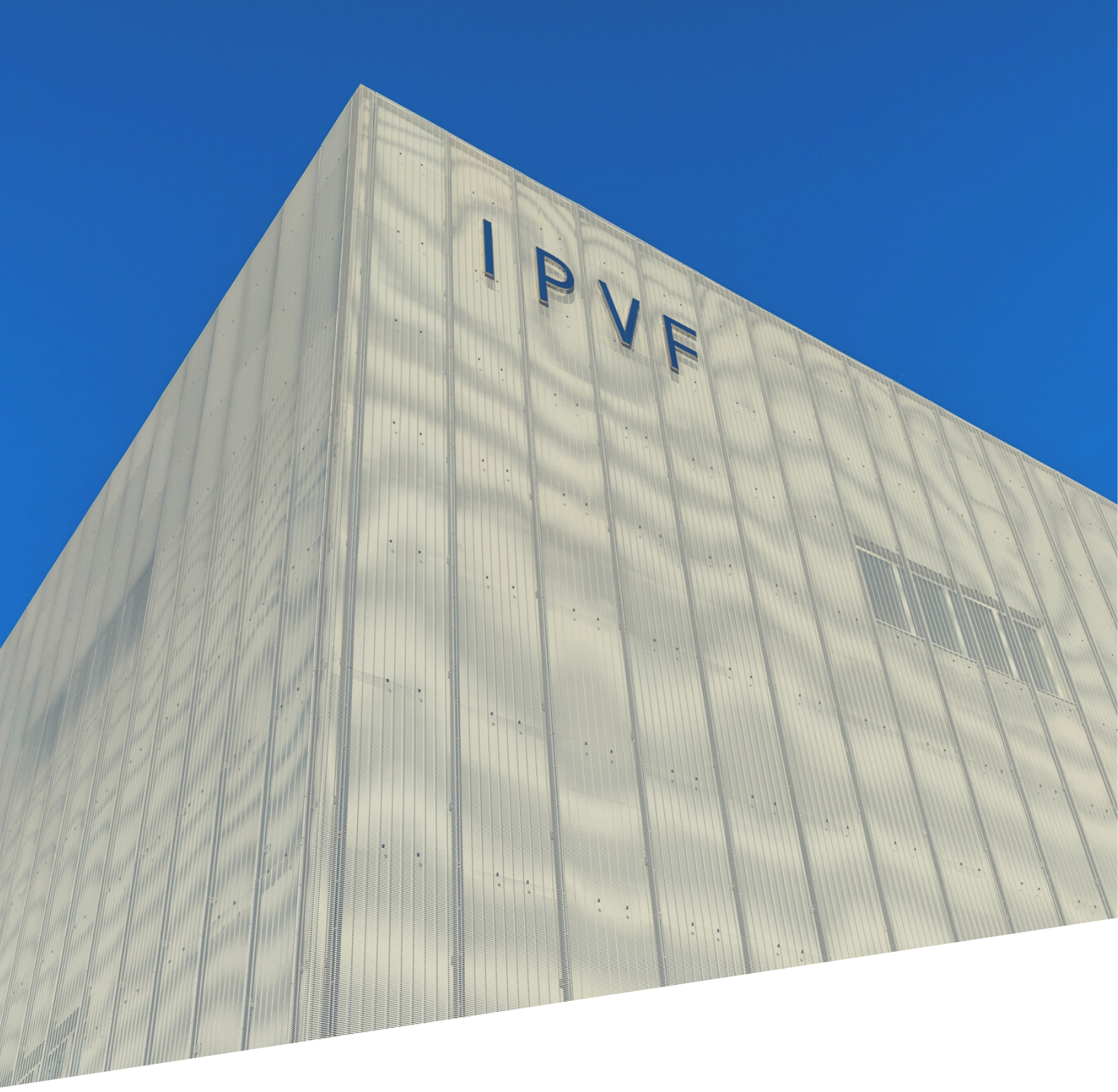
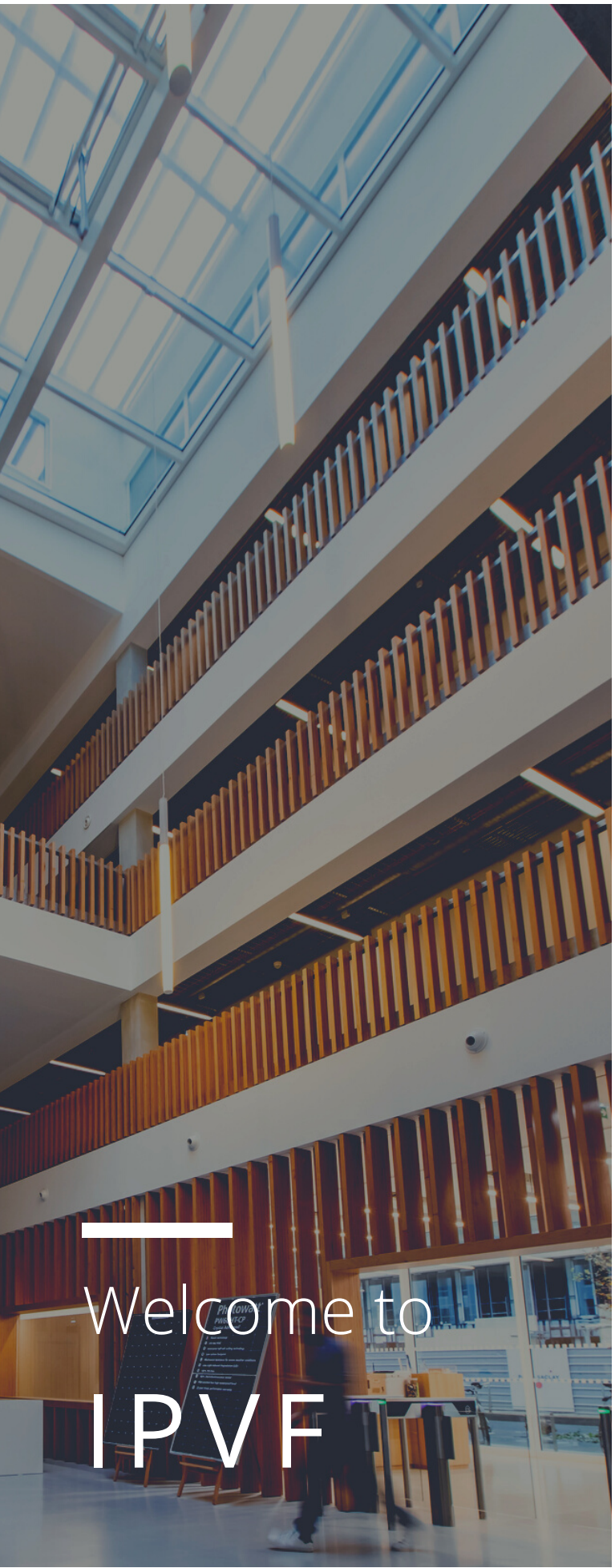


R&D ENGINEER - ALD

DEVELOPMENT OF NEW FUNCTIONAL MATERIALS BY ATOMIC LAYER DEPOSITION

2022 // IPVF - 18 BD. THOMAS GOBERT - 91120 PALAISEAU

IPVF



IPVF – INSTITUT PHOTOVOLTAÏQUE D'ÎLE-DE-FRANCE

We develop energy transition technologies with top scientific talents & tools.

IPVF is trusted by global players such as EDF, TotalEnergies, Orange, Air Liquide, CNRS and Ecole Polytechnique.
Gathering 150+ researchers, our 8'000sqm Saclay-based platform is a one-stop-shop for all kinds of deeptech Research & Innovation services.
Our programs cover among others next generation photovoltaics, Building-integrated PV, Vehicule-integrated PV, agrivoltaics, IoT, green hydrogen.
IPVF has built an ambitious scientific and technological research program, divided into 6 programs and 24 sub-projects, to achieve this objective.

Created in 2013, IPVF aims to stay:

- A global leader in photovoltaics-related R&D by federating the best French teams in the field of research, innovation and industrial production, in partnership with major international institutes, particularly in Europe,
- A leader on the development of photovoltaic technological building blocks consistent with market trends,
- A reference in shipping the most promising R&D concepts to the industry.

IPVF may be the right place for you if you want to:

- Join an ambitious and international company dedicated to the Energy Transition,
- Discover a learning culture where you will have plenty of exposure to challenging assignment,
- Challenge yourself. Do what you love and build your future.

Within the framework of our growth, we want to reinforce our Programs Direction with the recruitment of a **R&D Engineer** to join our "Anticipation of tomorrow's PV technologies and uses" program to explore breakthrough approaches for future photovoltaic innovations. Within this program, you will join a team, who 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.

Function: Research Engineer
Contract type: Fixed-term contract
Duration: 36 months
Starting date: ASAP
Working place: Palaiseau (Paris-Saclay technological cluster)
Education: Engineer/PhD

What You'll Be Doing:

- Develop ALD processes for new functional materials, in strong collaboration with the team members and other IPVF programs.
- Conduct the necessary bibliographic studies to identify potential solutions.
- Set up and perform ALD experimental plans, *i.e.* determine ALD parameters that allow the fabrication of highly controlled functional thin films.
- Finely characterize the growth mechanism involved and the materials developed by *in-situ* and/or *ex-situ* characterization techniques, thermal treatments. If necessary, develop new characterization tools.
- Participate to IPVF efforts in results consolidation and automatic treatment.
- Contribute to the implementation of ALD materials in optoelectronic devices developed at IPVF.

What You'll Need To Be Successful:

- Knowledge in vacuum deposition.
- Proficiency in materials science.
- Expertise in thin film and device characterization.
- Hands-on experience with ALD/CVD is an asset.
- Knowledge of Origin and Microsoft pack.
- Good communication of results.
- Self-motivated, autonomous and have a track record of learning new skills and techniques, and applying those to achieve results.
- Willingness to spend time in the labs.
- Fast moving, action oriented, and willing to roll up your sleeves and spend time in the labs.
- A team player with a positive attitude.
- Passion for making an impact on the world's energy challenges.

CONTACT

Resume & cover letter must be sent both to:

n.schneider@cnrs.fr

rh@ipvf.fr

ipvf.fr