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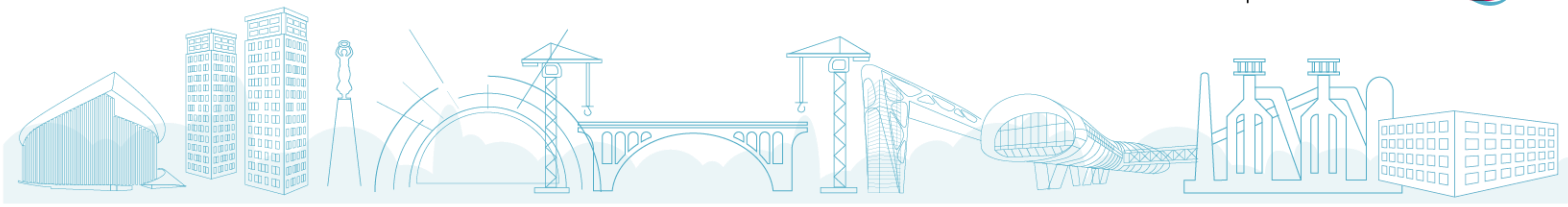
LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY | LIST



PHD STUDENT IN NANOSTRUCTURED PASSIVATING CONTACTS FOR HIGH EFFICIENCY CRYSTALLINE SILICON SOLAR CELLS (M/F)

Fixed term contract | Fulltime/40h | Belvaux | Luxembourg

Context

As a key player in research and innovation in Luxembourg, the Luxembourg Institute of Science and Technology (LIST), with its employees, is active in the domains of materials, the environment and IT. As an RTO (Research and Technology Organization) and with its interdisciplinary impact-driven approach, LIST contributes to the development of Luxembourg's economy and society.

The Materials Research and Technology Department (MRT) translates cutting-edge materials research into applicable technology, with about 150 collaborators. For this, the department cultivates close relationships and joint projects with both academic and industrial partners, and contributes to Luxembourg's and Europe's innovation agenda in Materials Research and Technology.

Description

The Advanced Instrumentation in Ion Nanoanalytics (AINA) group at the Luxembourg Institute of Science and Technology (LIST) is renowned for developing innovative nanoanalytical techniques for materials characterization.

We are currently looking for a well-motivated candidate to perform PhD research using mainly a novel instrumentation technique combining Transmission Electron Microscopy (TEM) and Secondary Ion Mass Spectrometry (SIMS) for applications in solar energy materials.

The project offers opportunities to develop innovative analytical solutions for high-resolution high-sensitivity imaging through correlative microscopy methods. The candidate will acquire highly-valued skills in advanced characterization techniques to overcome future research challenges in materials science. **The PhD candidate shall be registered with the University of Luxembourg to fulfill academic requirements**. The project is a close collaboration with the Photovoltaics Lab in EPFL, Switzerland.

Profile

Education

- Master degree in Materials Science, Physics or closely related fields

Competencies

- Interest to work with prototype instruments
- Self-motivated by passion for science and research
- Ability to work in a team with team-spirit are mandatory

Language

- Very good knowledge of English is mandatory

Job reference: MRT-2017-026

Application file:

- A CV
- A motivation letter

Apply online: MRT-Job offer

Your working environment

The research department

The Materials Research and Technology department (MRT) focuses on two key enabling technologies: nanotechnologies and advanced materials, and investigates research questions related to transducing materials and actuators, photocatalysis and energy harvesters, transparent electronics and smart nanocomposites, point-of-care and drug delivery, modelling and design of structures and multifunctional composites, bio-based polymers and composites, adhesion and compatibilization of fibres/matrix, process engineering and advanced manufacturing.

> LIST.lu/MRT