#### - IMPORTANT NOTE -

INL is actively working to mitigate the risk of CoVid-19 and is promoting protection measures within their community with impact in the regular activities. Ongoing and new R&S processes may have changes during this exceptional period. Please check the details in the job vacancy to keep track on any updates.

# **Staff Researcher - Transmission Electron Microscopy - (Ref.05.21.23)**

Employer: International Iberian Nanotechnology Laboratory (INL)

Location: Braga, Portugal

Number of Vacancies: 1

**Group/Unit:** Atomic Structure-Composition of Materials

Required Education: PhD Degree

Employment Type: Full time

**Contract Duration:** 48 months

Open Date for Applications: May 24th, 2021

Closing Date for Applications: June 27<sup>th</sup>, 2021 23:00 (Lisbon Time)

## **Organisation Description**

The International Iberian Nanotechnology Laboratory – INL (http://www.inl.int), is the first and only International Intergovernmental Organisation in the world entirely focused on Nanoscience and Nanotechnology.

It was founded under an international legal framework to perform interdisciplinary research, deploy and communicate nanotechnology for the benefit of society. INL aims to be a recognised leading global nanotechnology innovation hub.

#### Introduction

Are you a highly qualified researcher in the electron microscopy area? Would you like to be a key player in transmission electron microscopy?

INL is seeking a researcher tenure-track position to join the Atomic Structure-Composition of Materials group lead by Professor Paulo Ferreira (https://inl.int/inl-people/paulo-j-ferreira/) to work primarily on the characterization of nanomaterials using advanced transmission electron microscopy, scanning-transmission electron microscopy, imaging and spectroscopy.

## **Job Role & Key Responsibilities**

The Researcher will undertake, among others, the following main activities and responsibilities:

- Conduct and produce high quality original research;
- Compound research activities and results and disseminate such results in research papers and reports;
- Secure funding through national grants, EU grants, RTD projects with industry and externally funded PhD students;
- Engage in internal managerial and organisational activities;
- Engage in collaborative research with researchers from other Departments and Institutions;
- Engage in RTDI activities together with industrial and other entities ensuring timely and accurate deployment of compounded knowledge to such entities;
- Participate in national and international conferences;
- Supervise PhD students and/or Postdocs.

## **Job Requirements**

Candidates should meet the following requirements:

#### Qualifications

PhD degree in Science or Engineering;

## **Experience and Technical Skills**

- Experience with imaging of nanomaterials, including low-dose imaging, as well as 3D data acquisition and reconstruction;
- Experience with TEM and STEM imaging techniques. These include, phase contrast TEM, diffraction contrast TEM, high angular annular dark field (HAADF) STEM and bright-field (BF) STEM, annular bright-field (ABF) STEM and Differential Phase Contract (DPC) STEM;
- Experience with electron diffraction techniques, namely selected area diffraction and nanobeam diffraction;
- Experience with Energy Dispersive Spectroscopy (EDS);
- Experience with Electron Energy Loss Spectroscopy (EELS);
- Experience with In-Situ TEM/STEM microscopy;
- Experience with image processing and standard software for electron microscopy;
- Experience with sample preparation of materials, such as metals, ceramics and 2D materials will be a plus.

#### **Personal Skills**

- Strong motivation to work both independently and as part of a team in an interdisciplinary environment;
- Well organized and able to keep experimental records;

- Attention to detail and self-motivation to perform reproducible experiments;
- Eager to learn new concepts and to remain up-to-date on the pertaining fields;
- Excellent communication skills and positive attitude toward contributing to scientific projects and working in an interdisciplinary environment.
- Capable of establishing collaborative ties;
- Team work spirit.

#### Languages

Excellent communication skills in English are required since it's the working language of INL.

## Supervision

The work plan will be developed at the INL under the scientific guidance of Prof Paulo Ferreira.

#### **Duration of the contract**

The successful candidate will be offered a tenure-track position with initial appointment for 4 years that may be renewed based on the performance of the individual.

#### What we offer

- Work Accidents insurance costs to be paid by INL, to provide coverage for work accidents and invalidity benefits;
- Health insurance with excellent coverage;
- Tax Benefits;
- A family allowance for staff members that are married or that are living under the status of "common-law couple" and/or have any dependent child;
- A child allowance for each dependent child;
- Free Nursery Service at INL campus (subject to availability);
- Support for Education fees of dependent children;
- Depending on the place of residence, INL covers 100% of travel expenses for all family members;
- 30 days of annual leave;
- Diplomatic status.

## **How to Apply**

The application is made online through our <u>e-recruiting platform</u>. Please click on the "Apply" button.

For the application to be valid it must be made in English and the candidate must complete all required sections of the online application form, as well as submit all required documents. Incomplete applications lacking the below mentioned supporting documents will not be considered.

## **Supporting Documents**

Please enclose the following supporting documents in pdf format:

- a) Cover letter in English;
- b) Curriculum Vitae in English;
- c) Academic certificates;
- d) 3 Recommendation letters (to be sent to <a href="mailto:hr.services@inl.int">hr.services@inl.int</a>)
- e) Recognition of academic degrees (only academic degrees awarded by non-Portuguese higher education institutions)\*.

\* The selected candidate(s) with an academic degree granted by a non-Portuguese higher education institution must present, for hiring purposes, the certificate of recognition of that degree(s), issued by the Portuguese Directorate General for Higher Education or by a Portuguese Public Higher Education Institution. Please consult the website of the Portuguese Directorate General for Higher Education: https://www.dges.gov.pt/en.

At the application stage, the supporting document(s) mentioned in paragraph (d) [Recognition of academic degrees (only academic degrees awarded by non-Portuguese higher education institutions)], may be replaced by a Declaration of Honour (Template) from the candidate. In this case, the application of the candidate will be provisionally accepted provided that the following conditions shall be satisfied:

- 1. The Declaration of Honour should state facts only prior to the application. If the information on the Declaration of Honour differs from the certificate of recognition submitted at stage of preparing the contract, only this last one is considered;
- 2. The Certificate of Recognition issued by the competent Portuguese Authority is mandatory at the stage of preparing the contract;
- 3. The Certificate of Recognition must match the information considered in the evaluation stage.

The documents must be submitted in the "additional files" section using the "add portfolio" icon that appears in the application form.

## **Additional Information**

# **Employment Agreement**

If your application is successful and you accept our offer of employment, you will receive the employment agreement and all other relevant documents. If you are relocating, you will be given assistance by the HR Office.

#### If Your Application is Not Successful

We highly value your interest in becoming part of the INL experience and it is important for us to maintain good communications with all candidates. No matter the outcome of your application, we will always provide you with feedback.

# **Equal Opportunity and Non-Discrimination Principle**

INL promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of and duties based on any possible discriminatory issues.

The advertisement deadline may be extended at any time without previous notice in order to improve the suitability and effectiveness of the recruitment process.