

The Nanoscience Cooperative Research Center, CIC nanoGUNE, located in Donostia / San Sebastian, Basque Country (Spain), is currently looking for a

POST DOCTORAL RESEARCHER

to work on

Structural characterization of high-speed machining of metals

NanoGUNE is a research center devoted to conducting world-class nanoscience research for a competitive growth of the Basque Country. NanoGUNE is a member of the Basque Research and Technology Alliance (<u>BRTA</u>) and is recognized by the Spanish Research Agency as a *María de Maeztu* Unit of Excellence.

The **position** is offered in the Electron Microscopy Laboratory, led by Ikerbasque research professor A. Chuvilin, (a.chuvilin@nanogune.eu). EMLab owns several high-end Electron Microscopes and Focused Ion Beam tools and is dealing with structural characterization in the broad range of research areas starting from bio-medical through semiconductor devices and batteries to metals and alloys.

The candidate will join a research line focusing on on the following state-of-the-art facilities:

- (Scanning) Transmission Electron Microscope (TEM/STEM) with an imaging Cs-corrector
- DualBeamTM (FIB/SEM) nanofabrication tool
- Environmental Scanning Electron Microscope (ESEM)
- Broad range of material-science samples-preparation lines.

More information can be found at https://www.nanogune.eu/electron-microscopy.

The candidate will enroll into two on-going **projects** dedicated to the basic studies of the nanoscale processes taking place during high-speed machining of metals and alloys. Both projects are in their termination phase, requiring structuring of the large amount of experimental data acquired in the duration of the projects, building up the working hypothesis, drafting potential publications and preparing the reports. Successful closure of the projects may require also to perform electron microscopy characterization of a few samples to complete existing set of experimental data.

The successful **candidate** will have a Ph.D. in Physics, Chemistry or Engineering. Additionally, the candidate should demonstrate experience in the following skills:

- Electron microscopy characterization and focused ion beam nanofabrication.
- Structure of metals and alloys, understanding of the atomic mechanisms of plasticity and diffusion in solids.
- Solid publication track record and proven ability for presenting the results of the research, and preparation of project applications and reports.

Although not compulsory, the following points will be considered:

• Self-motivated and a team player willing to coordinate the research in a particular topic.

We promote teamwork in a diverse and inclusive environment and welcome all kinds of applicants regardless of age, disability, gender, nationality, race, religion, or sexual orientation.

The position is <u>expected to start in 09/08/2021</u> and for a total length of up to 4 months (09/08/2021 - 31/12/2021) in the Electron Microscopy Group. The contract will be funded by the Elkartek 2020 aid Program for Collaborative Research in strategic areas, provided by the Basque Government.

Candidates should **apply** by completing the form below and attaching the following documents:

- a. A complete CV
- b. A cover letter and at least two reference letters grouped in a single PDF file



The **deadline** for applications is **25/07/2021**.

NOTES:

(i) All applicants will receive an answer after the end of the selection process; but please note that due to the large number of submissions that are expected, we cannot provide individual feedback.
(ii) Additional information about nanoGUNE's commitment towards <u>HR excellence in Research and</u> <u>Gender Equality</u> are available on our website.

(iii) We encourage you to subscribe to our <u>HR mailing list</u> to receive information related to nanoGUNE's open positions and open calls for different training and talent attraction programs.