

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

### The structure and microscale properties of nanocrystalline Ti6Al4V alloy

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

The Electron Microscopy Laboratory (EML) led by Ikerbasque Research Professor A. Chuvilin aims to provide world class electron microscopy studies to nanoGUNE researchers, as well as to the Basque research community and worldwide. The laboratory possesses high-end equipment including a Cs corrected TEM and state of the art focused ion beam tools. Along with the research provided for the benefit of other groups in nanoGUNE, the EML conducts a few of its own research lines, one of them being research into the structure and properties of nanostructured metals and alloys, which is performed in collaboration with the School of Engineering of Mondragon University. More information about the Lab can be found at <https://www.nanogune.eu/en/research/groups/electron-microscopy>

The research will include structural characterization of nanocrystalline material formed during machining of Ti64 alloy under different conditions, testing of its micromechanical properties using pillar compression and beam bending methods in-SEM, and development and application of strain measurement methods with a high spatial resolution.

The successful candidate will have a PhD in Physics, Chemistry, Engineering or a similar field and will have the following theoretical background, experimental skills and competences:

- Deep knowledge of the plasticity of metals.
- Knowledge of the theory of metal machining.
- Hands-on experience with the mechanical characterization of metals.
- Expertise in Scanning and Transmission Electron Microscopy techniques, in particular in application to metals and alloys.
- Proficiency in spoken and written English.
- Previous experience in supervision of PhD students.
- Previous experience in inventive activity and patenting.
- Ability for independent research and coordination of activities among different research groups.

We offer an international and competitive environment, state-of-the-art equipment, and the possibility to perform industrially relevant research at the highest level.

The position is expected to start on September 1, 2022. The end date of the position is 31.12.2023. The contract will be funded by the Elkartek program of the Basque Government.

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

- A complete CV, including the name and contact details of at least three possible referees.
- A cover letter.

The deadline for application is June 30, 2022.

*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 [HR excellence in Research and Gender Equality](#) are available on our website.*

*(iii) We encourage you to subscribe to our [HR mailing list](#) to receive information related to nanoGUNE's open positions and open calls for different training and talent attraction programs.*