

Company Description

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 Maria de Maeztu Unit of Excellence.

Information

Deadline: 2022-06-30
 Country: Basque Country
Category: Business
 City: Donostia/San Sebastián
Province: Gipuzkoa

Company

CIC nanoGUNE



Main functions, requisites & benefits

Main functions

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.

Requisites

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.

Benefits

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

