



Postdoctoral position in 4D scanning transmission electron microscopy (4D STEM) of multifunctional oxide materials.

Job description

Research project includes the characterization of advanced multifunctional oxide materials such as ferroelectrics, piezoelectric, multiferroics by aberration corrected 4D STEM. The work will be integrated in many national and international research projects and European integrations.

Qualifications

Applicants should have a strong background in materials science. Preference will be given to applicants with demonstrated experience in TEM, HRTEM and aberration corrected STEM, particularly with expertise in 4D STEM techniques. Experience with EELS and EDXS techniques and programming in Python is highly desirable.

We are looking for a self-motivated candidate who has successfully completed Ph.D. study in physics, chemistry or materials sciences. Applicants should have excellent written and oral communication skills in English, and a strong publication record. The successful candidate will join an interdisciplinary team of scientists from the fields of materials science, simulations, and computations, and will actively participate in the ongoing research activities of the laboratory. The post represents an excellent opportunity for an individual to develop his/her career and interact with leading scientists.

Facilities at Jozef Stefan Institute (JSI) include a new state-of-the-art probe aberration corrected X-FEG/Monochromator STEM (Thermo Fisher Spectra 300) equipped with 4D STEM, pixelate detector EMPAD (Thermoscientific), DualEELS (Gatan Continuum S/1077 GIF) and Super-X EDS system. Conventional TEMs and FIB are also available. Aberration corrected cold-FEG STEM (JEOL ARM 200 CF) with 4D STEM, pixelate detector MERLIN (Quantum detectors) is accessible at the nearby institute.

The position is for two years with the possibility of prolongation. Applicants should submit curriculum vitae, including a list of publications, and three letters of recommendation.

For more information:

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