



Sandia
National
Laboratories

Physical, Chemical, and Nano Sciences Center

TEM Scientist

Job Description:

The Physical, Chemical, and Nano Sciences Center of Sandia National Laboratories is seeking a well-qualified, experienced materials scientist who is an expert in transmission electron microscopy (TEM) for both basic and applied research. This position will include responsibility for and oversight of a TEM laboratory with additional users. We envision acquiring a new TEM in the near future, and the position will require developing specifications for the new instrument and modifying laboratory spaces as needed. The successful candidate will be expected to perform related analytical techniques including compositional analysis with x-rays, lattice imaging, electron diffraction, STEM, and EELS.

The position will initially involve working on interdisciplinary teams that investigate fundamental materials properties, answer cutting-edge scientific questions, and develop new materials with controlled defect types and density and improved performance. We expect the candidate to lead not only the TEM investigations for this R&D, but also to become a key member of these teams, providing seminal materials science understanding of the systems studied, particularly in the areas of crystalline structure and defects. The successful candidate will also be expected to disseminate the results of this research by leading the writing of technical papers in prestigious scientific journals and other appropriate venues, and presenting talks at national and international conferences. The candidate will be expected to conceive and fully develop compelling research proposals that lead to new R&D directions, and to be able to move readily into working with new materials that become of interest to the organization.

Required/Desired Criteria:

The candidate must hold a Ph.D. in experimental Materials Science or a closely related field, where an emphasis of his/her research has been on operating and collecting data using an advanced TEM system, followed by interpreting the results and placing them within the context of the larger body of materials research. Candidates are expected to be currently active in fundamental investigations of materials properties using TEM to image internal microstructures, as demonstrated by first-authored publications in international scientific journals. Candidates must have excellent communication skills and the ability work well with others. Previous successful experience working on such teams is highly desirable. The candidate must be able to give clear presentations of results at international scientific meetings, and to publish research findings as well written articles in widely read scientific journals. The candidate must also be able to conceive and develop new funded research areas, and a proven track record in this regard is highly desirable. Additional research experience beyond the Ph.D. is required.

US Citizenship is required, as is the candidate's willingness to go through the process to obtain a security clearance.

https://ws35snlnt.sandia.gov/psp/applicant/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_CE.GBL
Reference = 58641.