UNIVERSITY OF RHODE ISLAND
Position Description

TITLE: Director, Nanotechnology Laboratory

DIVISION: Research and Economic Development

REPORTS TO: RI EPSCoR Principal Investigator & Project Director

GRADE: 14

SUPERVISES: Research Assistants, Undergraduate and Graduate Students, Postdoctoral Scholars

BASIC FUNCTION:

Utilize significant expertise in electron microscopy to manage several core instruments within the University, operated through the RI NSF EPSCoR program and the URI College of Engineering. Support, participate in, and lead a broad range of research activities across academia and industry associated with nanoscale characterization including, but not limited to, inorganic and organic nanomaterials, emulsions, nanostructured devices, and biological specimens.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Manage, operate and perform routine maintenance of instruments that support academic and industry clientele, including a Zeiss Sigma VP Field-Emission Scanning Electron Microscope (FE-SEM) and a JEOL JEM-2100 Transmission Electron Microscope (TEM), both have cryo capabilities.

Train students, faculty, and staff in instrument operation, and develop training workshops and/or modules that can be integrated into courses and/or accessed remotely.

Collaborate with students, faculty, and staff on their sample characterization projects and develop, and/or optimize protocols.

Collaborate with faculty on developing funding opportunities.

Remain current in material characterization techniques through additional training and professional development opportunities.

OTHER DUTIES AND RESPONSIBILITIES:

Perform other duties as required.

LICENSES, TOOLS AND EQUIPMENT:
Zeiss Sigma VP Field-Emission Scanning Electron Microscope (FE-SEM) and JEOL JEM-2100 Transmission Electron Microscope (TEM.)

ENVIRONMENTAL CONDITIONS:
This position is not substantially exposed to adverse environmental conditions.

QUALIFICATIONS:

REQUIRED: Master’s degree in a science or engineering discipline; Minimum of five years of relevant work experience such as (examples: research assistant at nanotechnology laboratory; material characterization experience in industry); Demonstrated expertise in FE-SEM and TEM; Demonstrated training experience; Demonstrated ability to work collaboratively; Demonstrated track record of scholarly work (including publications and presentations); Demonstrated experience in repairing and augmenting instrumentation; Demonstrated strong interpersonal and verbal communication skills; Demonstrated proficiency in written communication skills; and, Demonstrated ability to work with diverse groups/populations.

PREFERRED: Ph.D. or postdoctoral training in a relevant science or engineering discipline; Demonstrated expertise in X-ray diffraction, dynamic light scattering, and optical microscopy; and, Demonstrated ability to prepare grant proposals.

ALL REQUIREMENTS ARE SUBJECT TO POSSIBLE MODIFICATION TO REASONABLY ACCOMMODATE INDIVIDUALS WITH DISABILITIES.