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Developed by:...GB; AM
Reviewed by: ..... DLJ
Approved by:.....
LK
Date:5/16;11/17;10/28/22

UNIVERSITY OF RHODE ISLAND
Position Description

TITLE: Director, Nanotechnology Laboratory

DIVISION: Research and Economic Development

REPORTS TO: Vice President, Research and Economic Development

GRADE: 14

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

BASIC FUNCTION:

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.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Manage, operate, and perform routine maintenance of instruments.

Supervise research assistants, undergraduate and graduate students, and postdoctoral scholars.

Train students, faculty, and staff in instrument operation.

Collaborate with facility users, both internal and external, on their sample characterization projects. Develop and/or optimize protocols and interpret results.

Collaborate with faculty on developing research proposals.

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:

Laboratory equipment. Electron microscopy. Zeiss Sigma VP field-emission scanning electron microscope. JEOL F200 scanning transmission electron microscope with a direct electron camera and EELS capability. WITec Alpha confocal Raman microscope. Shimadzu Fourier-transform infrared spectroscope and microscope. Shimadzu scanning probe microscope. Zeiss Versa Xradia 610 X-ray microscope. Shimadzu X-ray fluorescence microscope. Rigaku Ultima IV X-Ray diffractometer. Perkin Elmer Opera Phenix high content confocal microscope.

ENVIRONMENTAL CONDITIONS:

This position is not substantially exposed to adverse environmental conditions.

QUALIFICATIONS:

REQUIRED: Master's degree in a science or engineering discipline with five years of relevant work experience (i.e., research assistant at a nanotechnology laboratory, material characterization experience in industry, etc.) OR Ph.D. in a science or engineering discipline with two years of relevant work experience (i.e., research assistant at a nanotechnology laboratory, material characterization experience in industry, etc.); Demonstrated experience in nanoscale imaging; Demonstrated ability to develop capabilities in electron microscopy; Demonstrated training experience; Demonstrated ability to work collaboratively; Demonstrated track record of scholarly work (including publications and presentations); Demonstrated experience in troubleshooting and repairing instrumentation; Demonstrated strong interpersonal and verbal communication skills; Demonstrated proficiency in written communication skills; and, Demonstrated ability to work with diverse groups/populations.

PREFERRED: Demonstrated ability to prepare grant proposals.

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