

Research Group: Nanostructured Materials

The Nanostructured Materials Research Group is dedicated to investigating fundamental aspects and dynamic phenomena at the atomic scale employing advanced electron microscopic techniques.

Job Title:	Research Fellow (PostDoc) – TEM/STEM Characterization of Battery Materials
PRR Agenda (s):	New Generation Storage (NGS)
Project Title (s):	<i>Production of Sodium-Ion Based Structural Batteries</i>
Job Reference:	RRP.12.42.09.3
Contract duration:	<i>36 months</i>
Expected hiring date:	<i>January 2023</i>
Main Job Duties:	<ul style="list-style-type: none"> • Conduct and produce high-quality original research work and outputs • Engage in research and collaborative activities with internal and external groups. • Disseminate the work in international conferences. • Publish in high impact journals. • Prepare technical and progress reports.
Required Qualification:	PhD in Materials Science, Nanoscience and Nanotechnology, Electron Microscopy, Physics and Chemistry
Mandatory requirements:	<ul style="list-style-type: none"> • Experience with TEM/STEM of energy related materials (Ex: Li- Na-based battery materials, solid electrolytes, etc.). • Experience with spectroscopic techniques including EELS and EDS. • Have a strong background in crystallography and electron diffraction. • Experience with conventional TEM sample preparation and FIB techniques. • Experience with writing project reports, publishing in high impact journals and adhering to strict deadlines.
Other preferred qualifications:	<ul style="list-style-type: none"> • Experience with Aberration Corrected TEM/STEM and spectroscopic techniques. • Experience with TEM/STEM image processing, simulations and modelling. • Experience with In situ TEM techniques.
Supervisor:	Dr. Leonard Deepak Francis