

**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.

<b>Job Title:</b>	<b>Research Fellow (PostDoc) – Cryo-TEM/STEM Characterization of Beam Sensitive Materials</b>
<b>PRR Agenda (s):</b>	New Generation Storage (NGS)
<b>Project Title (s):</b>	<i>Production of Sodium-Ion Based Structural Batteries</i>
<b>Job Reference:</b>	RRP.12.42.09.4
<b>Contract duration:</b>	<i>30 months</i>
<b>Expected hiring date:</b>	<i>July 2023</i>
<b>Main Job Duties:</b>	<ul style="list-style-type: none"> <li>• Cryo-TEM/STEM Characterization of Beam Sensitive Materials.</li> <li>• Preparation of samples by conventional and cryo-based techniques.</li> <li>• Disseminate the work in international conferences.</li> <li>• Publish in high impact journals.</li> <li>• Prepare technical and progress reports.</li> </ul>
<b>Required Qualification:</b>	<ul style="list-style-type: none"> <li>• PhD in Materials Science, Nanoscience and Nanotechnology, Electron Microscopy, Physics and Chemistry</li> </ul>
<b>Mandatory requirements:</b>	<ul style="list-style-type: none"> <li>• Experience with cryo-TEM/STEM for imaging beam sensitive materials.</li> <li>• Experience with electron diffraction and spectroscopic techniques including EELS and EDS.</li> <li>• (iii) Experience with cryo-sample preparation and conventional sample preparation techniques.</li> <li>• Experience with writing project reports, publishing in high impact journals and adhering to strict deadlines.</li> </ul>
<b>Other preferred qualifications:</b>	<ul style="list-style-type: none"> <li>• Experience with Aberration Corrected TEM/STEM and spectroscopic techniques.</li> <li>• Experience with TEM/STEM image processing, simulations and modelling.</li> </ul>
<b>Supervisor:</b>	Dr. Leonard Deepak Francis