

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) - Atomic Scale Investigations of Catalyst Materials
PRR Agenda (s):	<i>Moving2Neutrality</i>
Project Title (s):	<i>Development of ALK electrolyzers</i>
Job Reference:	<i>RRP.11.29.09.8</i>
Contract duration:	<i>36 months</i>
Expected hiring date:	<i>January 2023</i>
Main Job Duties:	<ul style="list-style-type: none"> • TEM/STEM and FIB-SEM Characterization of catalyst materials. • Conduct and produce high-quality original research work and outputs. • 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 Aberration corrected TEM/STEM techniques in combination with spectroscopy for the characterization of catalysts at the atomic scale. • Experience with cross-sectional analysis (FIB-SEM) and TEM lamella preparation. • Experience with TEM/STEM image processing, simulations and modelling. • 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 3D structural Characterization including Tomography and Spectroscopy-Tomography. • Experience with FIB 3D reconstruction techniques including slice and view.
Supervisor:	Dr. Leonard Deepak Francis