

## 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 Investigations of Catalysts  |
|---------------------------------|---|
| PRR Agenda (s):                 | Moving2Neutrality   |
| Project Title (s):              | Development of ALK electrolysers  |
| Job Reference:                  | RRP.11.29.09.7  |
| Contract duration:              | 36 months   |
| Expected hiring date:           | January 2023  |
| Main Job Duties:                | <ul> <li>TEM/STEM Characterization of catalyst materials</li> <li>Crystal structure Modelling and Image Simulations.</li> <li>Disseminate the work in international conferences.</li> <li>Publish in high impact journals.</li> <li>Prepare technical and progress reports.</li> </ul>  |
| Required Qualification:         | PhD degree in Materials Science, Nanoscience and Nanotechnology,<br>Electron Microscopy, Physics and Chemistry  |
| Mandatory requirements:         | <ul> <li>Experience with TEM/STEM techniques in combination with spectroscopy for the characterization of catalysts.</li> <li>Have a strong background in crystallography and electron diffraction</li> <li>Experience with TEM/STEM image processing, simulations and modelling.</li> <li>Experience with writing project reports, publishing in high impact journals and adhering to strict deadlines.</li> </ul> |
| Other preferred qualifications: | <ul> <li>Experience with Aberration Corrected TEM/STEM</li> <li>In situ TEM/STEM</li> </ul>   |
| Supervisor:                     | Dr. Leonard Deepak Francis  |