

## DPHil studentship in Inorganic Chemistry

**Title:** Towards gallium oxide thin film based electronic devices

**Supervisor:** Professor Anna Regoutz

**Start date:** 1<sup>st</sup> October 2025

Applications are invited for a **DPHil studentship in Inorganic Chemistry**, available from October 2025, to work under the supervision of **Prof. Anna Regoutz** in the Department of Chemistry at the University of Oxford.

The studentship will cover course fees at a Home rate and provide a stipend of no less than the standard UK Research Council rate (currently set at £19,237 p.a.) for 3.5 years. Please note the eligibility criteria set out by the UKRI at:

<https://www.ukri.org/what-we-do/developing-people-and-skills/esrc/funding-for-postgraduate-training-and-development/eligibility-for-studentship-funding/>

The project will focus on gallium oxide, a promising, emerging ultra-wide band gap material, with potential application in power electronics, and on establishing a complete understanding of its fundamental structure-electronic structure relationship, the preparation of high-quality samples, and the optimisation of interfaces necessary to create device heterostructures.

This will involve (i) developing a solution-based, energy-efficient manufacturing process for Ga<sub>2</sub>O<sub>3</sub>-based materials, (ii) interfacing Ga<sub>2</sub>O<sub>3</sub> with varying metallisation schemes to create device-relevant heterostructures, and (iii) exploring the formed interfaces using advanced X-ray spectroscopy techniques. More information on the broader activities of the group can be found on the group website: <https://a-x-s.org/>.

Candidates with a first-class or strong upper second-class undergraduate degree in Chemistry, Physics, or Materials Science are encouraged to apply. Candidates are expected to have a strong commitment to research, fundamental science, and materials characterisation and should have demonstrated the ability to learn new skills independently. The successful applicant will be based in the Inorganic Chemistry Laboratory, Oxford.

Candidates should submit a formal application for a DPhil in Chemistry via the Oxford online application system:

<https://www.ox.ac.uk/admissions/graduate/applying-to-oxford>

<https://www.ox.ac.uk/admissions/graduate/courses/dphil-chemistry>

Please quote **AR/Chem/2025** under 'Departmental Studentship Applications'.

Application deadline: **12.00 noon UK time on Wednesday 29<sup>th</sup> January 2025**

Queries relating to the application and admission process should be directed to: [graduate.admissions@chem.ox.ac.uk](mailto:graduate.admissions@chem.ox.ac.uk); tel.: +44 (0) 1865 272569.

The Department of Chemistry holds the Athena SWAN Silver Award, and the Regoutz group is dedicated to promoting diversity, equality, and inclusion.