

PhD Scholarships in Electrocatalysis

A unique opportunity exists for gifted candidates interested in undertaking PhD in the field of materials and physical chemistry at Monash University under the supervision of Dr. Alexandr N. Simonov and Prof. Douglas R. Macfarlane within our global international research program funded by the Australian Government. PhD projects currently available are in the fields of (i) water electrolysis for the renewable hydrogen production, (ii) dinitrogen reduction for the sustainable ammonia synthesis, and (iii) chlorine evolution reaction for sanitisation applications. The projects will majorly focus on the design and characterisation of new efficient and robust electrocatalysts, and methods for their immobilisation on suitable electrode supports. One of the anticipated outcomes of the projects will be the demonstration of the catalyst performance and durability at the industrial level in laboratory prototype electrolyzers.

Location

[Clayton campus, Monash University](#)

Remuneration

27 872 AUD per annum full-time rate (tax-free stipend for 3 years)

Candidate requirements

- Successful applicants will have an excellent academic track record in chemistry or materials science. An Honours or Masters degree with H1 or equivalent is essential.
- A strong interest in physical and materials chemistry at university level.
- Excellent written and verbal communication skills.
- Ability to work independently as well as in a team.
- Ability to plan, organise and manage multiple tasks and meet deadlines.
- Evidence of data analysis and interpretation skills; experience in statistical analysis is desirable.
- Some experience or understanding of qualitative research would be an advantage.
- Candidates will be required to meet Monash entry requirements (including English-language skills).
- Scholarship holders must be enrolled full-time and on-campus.

Applications and further information

To submit an expression of interest, please email the following documents to Dr. Alexandr Simonov <alexandr.simonov@monash.edu> as PDF attachments:

- Cover letter (1 × A4 page **maximum**)
- Curriculum Vitae (2 × A4 pages **maximum**) + list of publications
- Copy of academic transcripts (university level qualifications)
- For international applicants, IELTS test results (>6.0 score)