



## PhD Scholarships on CO<sub>2</sub> Electroreduction at UNSW

We are looking for a PhD candidate to fill in an Australian Research Council-funded project on CO<sub>2</sub> electroreduction in the School of Chemistry of University of New South Wales (Sydney, Australia).

**Please apply if you have a passion for research and wish to pursue a career in the fields of clean energy and sustainability such as:**

- ✓ Energy conversion
- ✓ Environmental treatment
- ✓ Decarbonisation technologies

**The successful applicant will:**

- ✓ Synthesize Cu based materials and single-atom catalysts for CO<sub>2</sub> electroreduction.
- ✓ Evaluate their performances in three-electrode H-cell systems and large-scale gas diffusion layer (GDL) based flow cells and zero-gap membrane electrode assemblies.
- ✓ Conduct advanced *operando* and *post-mortem* characterization.

**Qualifications:**

- ✓ Master's degree or 1<sup>st</sup> Class Honours Degree in Chemistry, Electrochemistry, Chemical Engineering, Materials Science, or a similar discipline

**Desired skills:**

- ✓ Knowledge of electrochemical energy technologies such as electrocatalysis, electrolyser, or batteries
- ✓ Demonstrated experience in conducting research projects and publishing research papers in respected journals
- ✓ Excellent spoken and written English

The scholarships are available immediately. Candidates interested in these positions are welcome to contact Dr Chen Jia ([chen.jia@unsw.edu.au](mailto:chen.jia@unsw.edu.au)) and Prof Chuan Zhao ([chuan.zhao@unsw.edu.au](mailto:chuan.zhao@unsw.edu.au)) via email, and attach a CV, cover letter, and other relevant information.

### ABOUT UNSW

The University of New South Wales (UNSW) is one of the leading universities in Australia and is the 44th best university in the world (2021 QS World University Rankings). The School of Chemistry is in the UNSW Kensington Campus, within easy reach of Sydney's CBD, sandy beaches and national parks. Sydney is consistently rated as one of the world's most liveable cities.

### ABOUT THE NANOELECTROCHEMISTRY GROUP

The NanoElectroChemistry Lab in the School of Chemistry at UNSW is led by Professor Chuan Zhao and composed of ~20 enthusiastic researchers from 8 countries. The group is one of the leaders in electrochemistry and nanomaterials in Australia and publishes regularly in highly respected journals. The group also has strong links with the industry and has several patents successfully commercialised.