Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Provost PhD Scholarship Available in September 2018

Applications from highly motivated students are invited for a fully funded 4-year PhD scholarship (16,000€/year + academic fees) in the Computational Catalysis and Energy Materials (CCEM) Group led by Dr. Max García-Melchor. The CCEM group was established in Trinity in 2016 with a vision for developing a strongly performing international team in the field of computational catalysis for energy applications.

Project

The successful candidate will be involved in an innovative and challenging research project that aims to use state-of-the-art density functional theory to conduct a ***"High-Throughput Screening of Hybrid Materials for Sustainable Energy Applications"***. The successful candidate will be directly supervised by Dr. García-Melchor and will receive a unique training in the modelling of molecular and heterogeneous catalysis. The candidate will also be instructed in the use of cutting-edge supercomputing facilities based at the Trinity Centre for High Performance Computing (TCHPC) and the Irish Centre of High-End Computing (ICHEC), which the CCEM group has access to.

Responsibilities and Conditions

The successful candidate will join an exciting and dynamic research team and will be encouraged to develop his/her chemical knowledge, and technical and transferable skills. The candidate will attend courses on the Dublin Chemistry Programme, group meetings, seminars, as well as international conferences. This scholarship will allow the candidate to develop advanced computational chemistry skills and gain particular expertise in the modelling of (electro)chemical processes involving molecular and solid catalysts. On graduation the candidate should be well placed to pursue a career in either the Materials Science industry or as an academic researcher.

Eligibility Criteria

Applications are welcome from strongly motivated candidates with, or expecting to gain, a first or upper second class honours (or equivalent) BSc and/or MSc in Chemistry, Computational Chemistry, Nanoscience, or related discipline. Previous experience in molecular modelling and programming will be a plus. Good oral and written communication skills in English are required.

Application Process

Applications must include a cover letter, CV (resume), and the contact details of at least 2 referees. **Documents should be emailed** to Dr. García-Melchor (garciamm@tcd.ie) **by May 31st 2018 at 5 pm Dublin local time**.

Shortlisted candidates may be interviewed at Trinity or remotely via Skype. All candidates will be notified of the application outcome in due course. For further details, see:

http://www.ccem-group.com/

http://www.tcd.ie/Graduate_Studies/students/prospective/apply/