Open Position: PhD Student in Sustainable Energy Conversion Reactions

The global consumption of fossil fuels is increasing. Since its supply is limited and will eventually run out, finding other sources of fuels is a pressing task for mankind. To this end, we are working to develop efficient electrocatalysts for sustainable energy conversion reactions. Systems of interest include the electrochemical reduction of carbon dioxide to liquid fuels and water splitting to hydrogen gas. The macroscopic aspects of these reactions are generally understood. However, we still do not comprehend them at the molecular level. This prevents us from designing better systems with the required efficiency and sustainability to be economically viable. We will address this issue by applying analytical tools to understand the mechanistic, electronic and structural aspects of these processes. This knowledge will then be used to direct our efforts to develop better electrocatalysts.

We are looking for a PhD student with a scientific background in electrochemistry and heterogeneous catalysis. The PhD student’s work will be to develop catalytic systems for the conversion of water and CO₂ to chemicals and fuels. A generous stipend will be provided. Proficiency in spoken and written English is required.

If you would like to work with us, please email Assoc. Prof. Boon Siang Jason Yeo (a) a personal cover letter, (b) a curriculum vitae, and (c) contact details of three referees. The successful candidate will be admitted to the graduate program in the NUS. The position is full-time. The citizens and permanent residents of Singapore are especially encouraged to apply for this position.

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