

Looking for the PhD student – Organic and perovskite solar cells

News

28 September 2018

Looking for the research student - PhD at the University of New South Wales, Sydney, Australia

Topic: Organic and perovskite solar cells

Contact: A/Professor Ashraf Uddin (a.uddin@unsw.edu.au).

Of interest

[Scholarships at UNSW](#)

[Graduate Research at UNSW](#)

PhD at the University of New South Wales, Sydney, Australia

The School of Photovoltaic and Renewable Energy Engineering (SPREE) is one of the nine schools within the Faculty of Engineering at University of New South Wales (UNSW), Sydney, Australia. SPREE grew out of the Australian Research Council Photovoltaics Centre of Excellence in response to the growing industry of renewable energy. The school is widely considered as the best in the world. Building on its world-leading research, the school attracts leading international researchers in the area of photovoltaic.

Our academic staff has been consistently ranked amongst the leaders worldwide in the photovoltaic field through international peer review. Our team has held the world record for silicon solar cell efficiencies for over twenty years and has been responsible for developing the most successfully commercialized new photovoltaic technology internationally throughout the same period. The solar cell technology that is predicted to dominate the market in the next decade (the 'PERC') was invented and developed in our school.

We are looking for the excellent students for our novel projects involving organic and perovskite solar cells. Suitable student will be awarded a full scholarship for 3.5 years (PhD duration in Australia is 3-3.5 years). The scholarship fully covers the university fees and provides additional allowance to cover living costs:

Tuition fees: \$45,000 per year

Living allowance: ~\$27,000 per year

Conference allowance: \$3,000 per conference (to support attending a scientific international conference; at least two conferences during the PhD).

Requirements:

Undergraduate Degree: Bachelor degree in Physics, Materials science, electrical engineering and any other suitable subject of science or engineering with a graduation GPA above 8 out of 10 or equivalent.

Master's Degree: Priority will be given for those who graduated from a Masters by research program, focusing on semiconductor devices or similar.

Supervision will be done by A/Professor Ashraf Uddin and Prof. Gavin Conibeer (SPREE).

For more details please contact A/Professor Ashraf Uddin (a.uddin@unsw.edu.au).

The aims of the projects are to develop the high efficiency and stable organic and perovskite solar cells for commercial applications.

Current organic and perovskite solar cells lab projects are:

(i) Semi-transparent organic photovoltaic (OPV) for window application

(ii) Organic-organic, organic-perovskite and perovskite-perovskite tandem solar cells for high efficiency devices for commercial application

(iii) Encapsulation of OPV devices

(iv) Ternary bulk-heterojunction solution-processed OPV devices