



THE UNIVERSITY  
of ADELAIDE

## AUSTRALIAN SOLAR THERMAL RESEARCH INITIATIVE (ASTRI) AND THE CENTRE FOR ENERGY TECHNOLOGY (CET) PHD SCHOLARSHIP

This exciting project funded by the Australian Solar Thermal Research Initiative (ASTRI) focuses on the development of a new generation of low-cost green hydrogen production technologies, employing a hybrid between concentrated solar thermal energy (CST) and electrolysis.

### About this Postgraduate Research Scholarship

<b>Scholarship provider:</b>	University of Adelaide and Australian Solar Thermal Research Initiative (ASTRI)
<b>Level of study</b>	Postgraduate Research, PhD
<b>Available for:</b>	Full time domestic and international applicants
<b>Stipend value:</b>	\$ 27,596 pa (AUD) tax free
<b>Other support:</b>	Program tuition fees offset for 3.5 years (AUD) (Domestic students)
<b>Period of stipend support:</b>	3 years
<b>Number of scholarships:</b>	1
<b>Applications open:</b>	29/08/2019
<b>Applications close:</b>	30/09/2019
<b>School(s) or Centre(s):</b>	Centre for Energy Technology

### The Project

This exciting project funded by the [Australian Solar Thermal Research Initiative](#) (ASTRI) focuses on the development of a new generation of low-cost green hydrogen production technologies, employing a hybrid between concentrated solar thermal energy (CST) and electrolysis. The project will provide new understanding to support the development of a novel solar hybrid sulphur cycle technology to thermo-catalytically dissociate SO<sub>3</sub> using molten metal catalysts in a bubbling environment to achieve high rates of heat and mass transport. This will build on the novel [solar bubble receiver/reactor](#) (SBRR) technology recently demonstrated at the University of Adelaide's [Centre for Energy Technology](#). The project will be undertaken in partnership with [DLR \(German Aerospace\)](#), [CSIRO](#) and [BHP](#) and is expected to include an international research visit. It will suit graduates from Mechanical Engineering, Chemical Engineering or Physics and will be supervised by [Prof Graham 'Gus' Nathan](#) and [Dr Mehdi Jafarian](#).

### Selection Criteria

Eligible candidates must:

- Have completed a relevant Bachelor degree with First Class Honours, or a Masters degree that contains a significant (and relevant) research component with equivalent academic performance. Students who hold an Honours degree in Chemical Engineering, Mechanical Engineering or Physics will be considered favourably.
- Be interested in the Heat transfer, Reaction Engineering, Thermo-fluids, Concentrated solar thermal research.
- Fulfil the minimum English language requirement (for international applicants).
- Be assessed by the [Adelaide Graduate Centre](#) as meeting all conditions for admission to the Doctoral program.
- Be willing to provide your personal details to ASTRI by way of a Student Deed Poll.

- Be living in or able to relocate to Adelaide, South Australia, for the duration of the scholarship.
- Not hold a qualification at the same or at a higher level than the research higher degree program you are undertaking.
- Not be receiving a living allowance award, scholarship or salary providing a benefit greater than 75% of the RTP Scholarship living allowance rate to undertake the research higher degree program.

For more information about the entry requirements for Higher Degrees by Research at University of Adelaide, please visit the [Adelaide Graduate Centre's website](#).

Students applying for this scholarship should plan for a start date of 15/10/2019 but no later than 1/03/2020.

## Location

Successful candidates will be based at the University of Adelaide, North Terrace campus.

## Terms and Conditions

The selected student will receive a living allowance stipend to the value of \$ 27,596 (AUD) per annum for 3 years. The stipend will be awarded on a yearly basis according to satisfactory progress.

Outstanding international applicants who are eligible for admission and have achieved a 1st class Honours grade or masters equivalent may also qualify for a tuition fee waiver as approved by the Faculty.

Access to authorised travel, training development and research project funds will also be available.

## Further Information

Please contact Dr Mehdi Jafarian for further information relating to the project.

E: [mehdi.jafarian@adelaide.edu.au](mailto:mehdi.jafarian@adelaide.edu.au)

## How to apply

Please address the eligibility criteria and email a copy of your CV, proof of qualification and a cover letter explaining why you are interested in applying for this scholarship to Dr Mehdi Jafarian. (E: [mehdi.jafarian@adelaide.edu.au](mailto:mehdi.jafarian@adelaide.edu.au))

Further information on the formal application process and admission and scholarship deadlines, please visit the [Adelaide Graduate Centre website](#).

**The University of Adelaide is an Equal Employment Opportunity employer. Women and Aboriginal and Torres Strait Islander people who meet the requirements of this position are strongly encouraged to apply.**