

Call for Applications for:

**PhD Scholarship (ARC Project on
Enhancing Students' Creative and Critical Thinking Skills in Science)
School of Education, Curtin University**

November 2019

A merit-based PhD scholarship is available for the holder to conduct research in a project, funded by the Australian Research Council Discovery Project scheme (ARC DP180100143).

There is a growing demand to engage students in scientific thinking process and build their problem-solving capabilities through evidence-based teaching strategies. This project investigates how students develop creative and critical thinking skills as well as scientific understanding while constructing visual explanations (science diagrams) in groups. The project will also develop and evaluate teaching strategies to better support students' scientific thinking skills and understanding.

The PhD student will interact with secondary school science teachers and students, video-record classroom interactions, conduct interviews, analyse class videos and diagrams, write a doctoral thesis, and contribute to writing peer-reviewed journal articles.

The successful PhD student will be supervised by a team of experienced science education researchers (Dr Mihye Won and Professor David F. Treagust) from the STEM Education Research Group (formerly Science and Mathematics Education Centre—SMEC) at Curtin University, Perth, Australia.

Candidates for the PhD scholarship are expected to:

- Hold undergraduate or postgraduate degrees with research experience in science (e.g., physics or chemistry) or science education;
- Have strong understanding of relevant science concepts;
- Demonstrate an aptitude for research through their analytical skills and creative thinking;
- Be able to work in a team setting and take responsibility for their individual tasks; and
- Possess excellent spoken and written communications skills.

Value: This scholarship covers the tuition fees [\$36,400/year] and the living stipend [\$27,596/year] for three years.

Interested applicants should contact Dr Mihye Won, (mihye.won@curtin.edu.au, +61-8-9266-4074) with their CV, transcripts, short statements of purpose (1 page), and English test results (IELTS or TOEFL for international applicants). Shortlisted applicants will be contacted for interview.

Scholarship is subject to approval of admission at Curtin in the HDR course.

<https://futurestudents.curtin.edu.au/research/apply/admission-criteria/>

Applications can be made immediately and will remain open until the position is filled.