

WEDNESDAY, 7 JUNE 2023

CSIRO SCHOLARSHIP TO HELP FEDERATION DEVELOP NEW BATTERY STORAGE TECH

Federation University Australia has received an industry scholarship from Australia's National Science Agency, CSIRO, to develop the next generation of battery storage monitoring technology.

CSIRO's Industry PhD Program brings together universities, CSIRO and an industry partner to co-develop and jointly supervise a four-year industry-focused PhD project. Federation will receive AUD \$232k over four years for the 'Bringing Intelligence to Battery Management through a Cloud Platform' project with the support of Clayton-based industry partner Techplus Control Systems.

The research will be led by Gippsland-based Professor Joarder Kamruzzaman, who is the Director of Federation's [Centre for Smart Analytics](#), with Dr. David Abbott from CSIRO and Dr. Masud Bakaul from Techplus Control Systems joining the supervision team.

As Australia transitions to a net-zero future using renewable energy, batteries are becoming increasingly crucial for energy storage. Currently, Battery Management Systems lack sophisticated monitoring and fault diagnosis capabilities due to the prevalence of on-board systems which lack the computing power to perform complex operations. This research aims to rectify this issue by developing advanced tools and data analytic techniques that will be hosted on the cloud and applied remotely across multiple battery installations for efficient and safe operation.

The research could have significant implications for households, communities and larger industrial operators that use batteries to store energy sourced from renewable sources such as solar and wind power. Federation University is now seeking a domestic PhD candidate with a degree in Information Technology or Electronic Engineering to help drive this exciting project forward.

Quote attributable to Professor Joarder Kamruzzaman, Director, Centre for Smart Analytics at Federation University Australia.

"I am excited to receive a scholarship grant from CSIRO and our industry partner Techplus Control Systems for this project and am looking forward to collaborating with them on this research. Victoria has committed to having 95% of the state's energy sourced from renewables by 2035, therefore, battery management systems must become more advanced to ensure robust storage solutions are in place to meet this increased demand. We are now looking for a suitable PhD candidate to join us on this project that will deliver real benefits to communities throughout Australia."

About Federation University Australia

With a history spanning over 150 years, Federation University Australia is Victoria's premier regional dual-sector university with campuses located in Ballarat, Berwick, Brisbane, Gippsland and Wimmera. From 2018-2022 Federation ranked first in Australia for first-generation student enrolments. In a first for Australia, the globally recognised co-operative education model will be embedded across all Federation programs from 2025.