



Medal awarded for scientific study

THIS year's Cornforth Medal of the Royal Australian Chemical Institute has been awarded to James Cook University graduate Dr Deanna D'Alessandro.

The medal, named in honour of Australian Nobel Prize winner Sir John Cornforth, recognises the most outstanding PhD thesis in any branch of chemistry, chemical science or chemical technology submitted in Australia.

Dr D'Alessandro's PhD thesis addressed the topic of Stereochemical Effects on Intervalence Charge Transfer.

JCU School of Pharmacy and Molecular Sciences
Nevitt Professor of Chemistry

Professor Richard Keene supervised Dr D'Alessandro's thesis.

"The award is an unexpected and tremendous honour but one that would not have been possible without all the support, encouragement and kindness I received, in particular of my supervisor Professor Richard Keene," she said.

Professor Keene said Dr D'Alessandro was an extremely talented young chemist.

"Her postgraduate studies were of the highest quality in both the experimental and theoretical aspects," Professor Keene said.

Dr D'Alessandro said her work had shown that molecules containing exactly

the same atoms but in different spatial arrangements could have very different physical properties, such as different colours and different interactions with other species in their surrounding environment.

"At an applied level, the molecules which we studied have been of interest for over two decades as components of devices that convert solar energy to electricity so, understanding how electron transfer is influenced by the shape of the molecules is an important advance," she said.

Dr D'Alessandro studied at JCU for nine years, where she completed her honours degree in Science and finished her PhD cum laude

this year.

She received a Medal for Excellence from the university for her Doctoral Research Thesis.

She is employed as a Postdoctoral Research Fellow in the Molecular Electronics Group at the University of Sydney and plans to pursue a second postdoctoral position overseas next year in the area of physical inorganic chemistry.

Dr D'Alessandro said she felt proud to have attended a regional university and that her time at JCU prepared her for being part of a larger research group and university in a capital city.



CHEMIST
Dr Deanna
D'Alessandro
rewarded for
an outstanding
PhD thesis.