



The Solar Energy Conversion Cluster was officially launched in 2009 with a mission to develop new materials and synthesise devices that mimic the steps involved in natural photosynthesis.

IMAGE: The touch of the sun: life!
by Erica Cacchiotti

RESEARCH

Harnessing the “free energy” of the sun, together with the application of engineering, chemistry, biochemistry, physics and computational modelling, the cluster is directing its research to sustainable energy production.

The research group's work programme is subdivided into four research strands with tasks which parallel the sequence of steps observed in photosynthesis. The first three strands focus on the fabrication and characterisation of energy related materials and the objectives of the fourth strand will focus on the development of commercially viable solar energy modules.

THE TEAM

The Strategic Research Cluster is led by Director, Professor Don MacElroy, UCD School of Chemical and Bioprocess Engineering; the four Research Strand Leaders are Prof Edmond Magner, Prof Don MacElroy, Prof Han Vos and Prof John T Sheridan.

In addition, the team comprises a number of academic funded researchers, collaborators, postdoctoral researchers, PhD and MSc research students.

FUNDING

The Solar Energy Conversion (SEC) Cluster has received funding through Science Foundation Ireland's Strategic Research Programme of €5.3 million over 5 years.

COLLABORATION

Industry partners to date include Airtricity, Celtic Catalysts and SolarPrint.