

“Advanced resource assessment techniques for near-shore and offshore wind energy”

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My Background

Education

- BE, Civil & Environmental Engineering UCC 2011

Previous Positions

- Hydraulic & Maritime Research Centre, Cork – Summer 2010

Final Year Project

- *‘An Investigation into the Benefits of Combined Offshore Wave and Wind Energy Devices for Ireland’*

Research Interests

- Wind & Wave Energy



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Brief Outline - PhD

- Supervision – Dr. Paul Leahy & Dr. Eamon Mckeogh
- Nearshore/offshore wind resource assessment techniques
 - LIDAR, satellite-based remote sensing techniques
- Examine wind regime at a nearshore site
 - Cork Harbour – Initially
 - Other Potential Sites
 - Use of CFD – ANSYS/OpenFOAM
- Use of Results to site turbines at selected locations



Wind Energy Research in UCC's Sustainable Energy Research Group

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Wind energy – current research projects



- EU stoRE project – facilitating renewables through energy storage
- Offshore wind generation on the Irish system in 2020 – power system & market modelling (Edward Mc Garrigle)
- Intelligent Energy from Autoproduction – control systems for load management (industrial project)
- EU Joint Research Centre “Transforming non-hydro and conventional hydro to pumped hydro” – GIS-based study



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