

Thank you for choosing to apply for admission to a Postgraduate course with the Bryden Centre. The list of available projects are detailed below and further information can be accessed by selecting the PhD title.

To apply for any of the projects listed please follow the link provided [Online application portal](#)

Please note those applying to Queen's University Belfast, the name of the School and the supervisor must be included in the application.



School of Mechanical and Aerospace Engineering

1. *Decision Support tool for optimal sequencing of installation operations for an offshore wind farm* Contact: Prof Adrian Murphy a.murphy@qub.ac.uk
2. *Renewable energy crops for reducing agriculture run-off and improving water quality* Contact: Dr Beatrice Smyth beatrice.smyth@qub.ac.uk
3. *Optimal integration of joint energy and power services to determine true strike price of offshore wind* Contact: Dr Aoife Foley a.foley@qub.ac.uk
4. *Thermochemical Conversion of Biomass Lignin into Mesoporous Carbon Material* Contact: Dr Xiaolei Zhang xiaolei.zhang@qub.ac.uk
5. *Nutrient management of digestate and slurry combined with energy recovery* Contact: Dr Beatrice Smyth beatrice.smyth@qub.ac.uk

School of Chemistry and Chemical Engineering

6. *After treatment solutions for lean methane combustion applications* Contact: Professor Alexandre Goguet a.goguet@qub.ac.uk
7. *Production, combustion and modelling of biomass-derived liquid transportation fuel additives* Contact: Dr Haresh Manyar h.manyar@qub.ac.uk
8. *Nanocatalysts for the direct conversion of CO₂ to hydrocarbons* Contact: Dr Nancy Artioli N.Artioli@qub.ac.uk

School of Chemistry and Chemical Engineering

9. Novel combined energy cycles utilising renewable working fluids for efficient energy conversion
Contact: Professor David Rooney d.rooney@qub.ac.uk
10. Engineering modelling methods to support outsourcing decisions in Marine renewable energy
Contact: Dr John Doran john.doran@lyit.ie
11. Investigating the coupling of photocatalytic technology with floating solar PV arrays for aquaculture water treatment
Contact: Professor Peter Robertson P.Robertson@qub.ac.uk

School of Natural and Built Environment

12. Modelling the dynamic response of floating solar PV arrays to develop the basis of sustainable design
Contact: Professor Trevor Whittaker t.whittaker@qub.ac.uk
13. Assessing the influence of inflow characteristics on tidal turbines
Contact: Professor Trevor Whittaker t.whittaker@qub.ac.uk
14. Regional Geochemical Provenance of feedstock: Investigation of Geo-genic influence on Anaerobic Digestion
Contact: Dr Jennifer McKinley j.mckinley@qub.ac.uk
15. Remote image analysis for resource Assessment of tidal energy sites
Contact: Dr Gerry Hamill g.a.hamill@qub.ac.uk

