

Flow measurement for accurate tidal turbine design

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PARTNERS:



UNIVERSITY OF
BATH



**QUEEN'S
UNIVERSITY
BELFAST**



**Cambridge
Instrumentation**



**British
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Bio and reasons for choosing Supergen Flex Fund



Bio:

- 2008 – 2012: PhD – aero-engine compressors, Cambridge
- 2012 – 2019: Research Fellow/Senior Research Fellow, Cambridge
Independent research projects, teaching, 1 PhD student
- 2019 – present: Lecturer, Mechanical Engineering, University of Bath

Why Flex Fund?

Money!

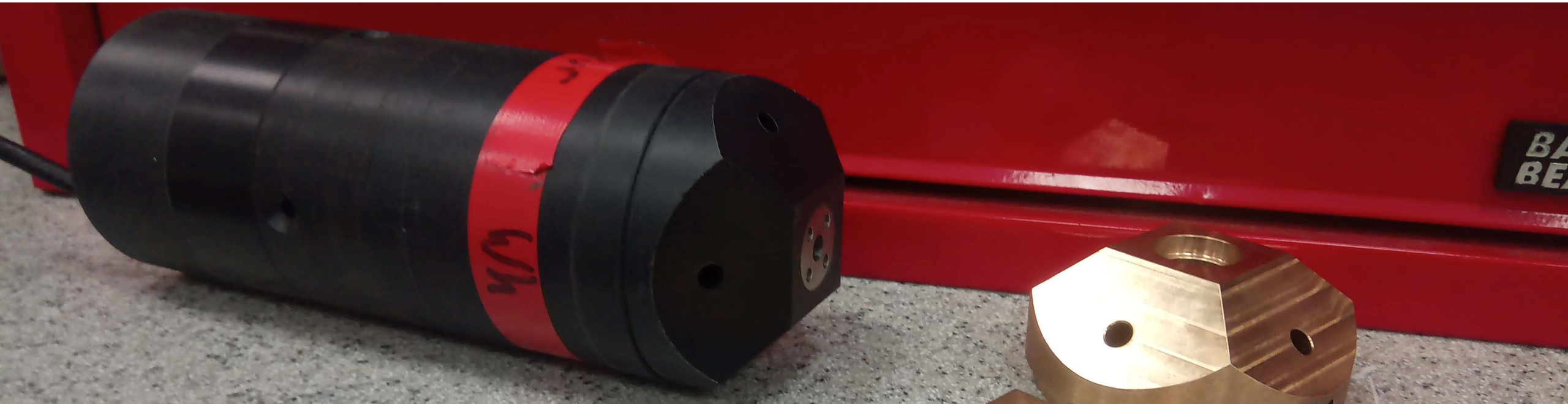
Project suited the funding – pilot for something bigger, potentially useful across ORE

Could make progress with £125k

Contacts in place (QUB, British Antarctic Survey)

Flow measurement for accurate tidal turbine design

1. Build two self-contained, autonomous probes
2. Test in Strangford Lough
3. Measure spatial correlation of unsteady flow features
4. Explore use of probe in flume/towing tanks and other applications



Top tips for putting together a proposal

Do it!

Explain your proposal in a sentence

Get people to read it for you

Fit to call

Budget

Supergen  Offshore
Renewable
Energy
Challenges

A1: measurement techniques for forecasting and characterisation

A2: improved modelling for resource/load assessment