

**Canada & UK Joint Research Competition in Tidal Energy –  
United Kingdom Registrants  
(as of November 27, 2014)**

1. **Name:** Nicola Pearson

**Email address:** [nicola.pearson@oceanarraysystems.com](mailto:nicola.pearson@oceanarraysystems.com)

**Organization name:** Ocean Array Systems

**Street address:** ideaSpace

**Address line 2:** -

**City:** Cambridge

**Province / County:** -

**Postcode:** CB3 0GT

**Country:** UK

**Phone number:** 07963 656606

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Turbulence modelling

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** Already talking to Rockland Scientific Instruments (RSI) and FloWave Test Tank.

**2. Name:** Robert Clayton

**Email address:** [robert.clayton@sgurrenergy.com](mailto:robert.clayton@sgurrenergy.com)

**Organization name:** SgurrEnergy Ltd

**Street address:** 225 Bath Street

**Address line 2:** -

**City:** Glasgow

**Province / County:** -

**Postcode:** G2 4GZ

**Country:** United Kingdom

**Phone number:** 0141 227 1427

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** SgurrEnergy is one of the few consultancies in the world to possess extensive working knowledge of the intricacies of marine energy and we know that understanding the harsh marine environment is key to the development of any tidal project. SgurrEnergy are involved in cutting-edge marine energy projects around the world and have worked alongside key players within the marine energy industry including Scottish Power, AWS Ocean Energy, Swansea Bay Tidal Lagoon Power, Pelamis Wave Power, Highlands and Islands Enterprise and Voith Hydro Wavegen Limited. SgurrEnergy provides a comprehensive range of marine and tidal services covering these main areas:

- Integrated risk profiling
- Marine numerical modelling, including resource assessment and uncertainty analysis
- Accessibility studies
- Geotechnical reviews
- Technical and financial due diligence
- Environmental and social due diligence
- Technology reviews and inspections
- Oceanography and met ocean assessment
- Site selection and appraisal
- Computational fluid dynamics
- Underwater noise analysis and impact assessment
- Data acquisition and analysis
- Project management

In addition to our dedicated wave and tidal team, we can call on the in-house expertise of over 200 highly qualified consultants and engineers to supplement additional skills in electrical engineering, mechanical engineering, civil engineering, underwater noise, control and instrumentation, health and safety, operations and maintenance, geographical information systems (GIS), and project management.

**3. Name:** Ned Minns

**Email address:** [ned.minns@itpower.co.uk](mailto:ned.minns@itpower.co.uk)

**Organization name:** IT Power Ltd

**Street address:** 29 Great George St

**Address line 2:** -

**City:** Bristol

**Province / County:** Bristol

**Postcode:** BS1 5QT

**Country:** UK

**Phone number:** 0117 214 0518

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Engineering services to the marine renewable industry. eg resource analysis, turbulence analysis and incorporating these into engineering design.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** novel data measurement. Other.

**4. Name:** Robin Burns

**Email address:** [robin.burns@jasco.com](mailto:robin.burns@jasco.com)

**Organization name:** Jasco Applied Sciences (UK) Ltd

**Street address:** The Roundel, St. Clair's Farm

**Address line 2:** Wickham Road

**City:** Droxford

**Province / County:** Hampshire

**Postcode:** SO32 3PW

**Country:** UK

**Phone number:** 01489 878439

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Jasco designs, manufactures and deploys acoustic and particle motion sensors and recording instruments to conduct calibrated measurement programs for ambient and anthropogenic noise. Jasco has a wealth of experience in acoustics and conduct of acoustic recording projects for renewable energy, oil and gas and construction companies and a state-of-the-art R&D and engineering facility near the Bay of Fundy to conduct trails in this challenging marine environment.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** Jasco's acoustic and particle motion technology and multi-channel recording instrumentation can be combined with other sensors to provide a much broader set of environmental data from a single sensing point. We would look to collaborate with other measurement companies to combine our mooring expertise and instrumentation.

**5. Name:** Dimitrios Pletsas

**Email address:** [d.pletsas@swansea.ac.uk](mailto:d.pletsas@swansea.ac.uk)

**Organization name:** Swansea University

**Street address:** College of Engineering

**Address line 2:** Singleton Park

**City:** Swansea

**Province / County:** -

**Postcode:** SA2 8PP

**Country:** United Kingdom

**Phone number:** +447776344132

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** The Marine Energy Research Group (MERG) has studied extensively:

- physical processes in coastal zones and biological receptors including fish and mammals
- resource capacity around the Welsh coast for both wave and tidal devices focusing on areas of high energy resource that qualify for leasing
- coastal hazards and their important role in the assessment of vulnerability and risks to both human and natural systems
- interactions between the structure and the beach profiles with waves, tides and storms and how they are likely to change over time in the presence of large wave and tidal stream and tidal range energy conversion device arrays
- acoustic interactions of devices and the marine environment and vice versa including studies on collision risk with marine species, as well as assessing potential geophysical interactions of device arrays with coastal structures.
- marine mammals spatial and temporal distributions, behaviour and habitat usage in the Welsh waters with extensive work undertaken around sites identified suitable for development.

For more information:

<http://www.lcrimarine.org>

<http://www.swansea.ac.uk/engineering/marine-energy>

**6. Name:** Jeremy Bryceson

**Email address:** [jeremyb@kdpes.co.uk](mailto:jeremyb@kdpes.co.uk)

**Organization name:** KDPES

**Street address:** Unit 6, Industrial Estate,

**Address line 2:** Station Road

**City:** Gamlingay

**Province / County:** Bedfordshire

**Postcode:** SG19 3HB

**Country:** UK

**Phone number:** 01767 651058

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** KDPES is a supplier of customised instrumentation solutions and the UK representative for the Meggitt Sensorex product line which includes inclinometers, Gyros and Inertial Motion Units which have control and / or measurement applications in a broad range of applications.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** We feel that our extensive instrumentation background - some of which is marine in nature, would compliment the knowledge of the "primes" involved in the design of the turbines themselves and as a designer and manufacturer we are well placed to offer a prototyping as well as a full scale manufacturing services.

**7. Name:** Paul Bell

**Email address:** [psb@noc.ac.uk](mailto:psb@noc.ac.uk)

**Organization name:** National Oceanography Centre

**Street address:** 6 Brownlow Street

**Address line 2:** -

**City:** Liverpool

**Province / County:** -

**Postcode:** L3 5DA

**Country:** UK

**Phone number:** +44 (0)151 7954807

**Business size:** -

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** Marine radar remote sensing of current vector maps, bathymetry maps both subtidal and intertidal and other physical effects and associated analyses at tidal energy sites

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**

Companies interested in commercial applications of state of the art algorithms - preferably to integrate with existing radar product lines.

**8. Name:** Dr. Mark Day

**Email address:** [mark.day@npl.co.uk](mailto:mark.day@npl.co.uk)

**Organization name:** National Physical Laboratory

**Street address:** Hampton Road

**Address line 2:** -

**City:** Teddington

**Province / County:** Middlesex

**Postcode:** TW11 0LW

**Country:** UK

**Phone number:** +44 (0) 20 8943 6560

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** The National Physical Laboratory (NPL) is the UK's National Measurement Institute, is the leading metrology laboratory for underwater acoustics in the world, and our facilities for underwater acoustics are unique within Europe. These include state-of-the-art laboratory tanks with precision positioning systems, an acoustic pressure vessel which can simulate ocean conditions in the laboratory, and a large open-water facility located on a reservoir. NPL has an active research programme in many aspects of underwater acoustics, including research into near-field techniques, the use of optical methods for acoustic measurement, and the measurement of underwater radiated noise.

NPL contributes to the EC Marine Strategy Framework Directive (MSFD) Technical Sub-Group on underwater noise to advise on best practice and guidance in the implementation of the MSFD and the achievement of Good Environmental Status. In addition to this, the NPL provides contributions to several UK expert groups on underwater acoustics including those convened by the Department for Environment Food and Rural Affairs (DEFRA) and the Sound Forum of the Marine Science Coordination Committee (MSCC). These committees have produced national guidance on UK implementation of Descriptor 11 of the MFSD, noise measurement guidelines for underwater acoustics, and cumulative impact of multiple developments of offshore windfarms in UK waters.

NPL has extensive scientific expertise in the area of underwater noise surveys and environmental impact assessments. These include assessments for major offshore wind farm operators, the oil & gas industry and UK Government. The work includes acoustic modelling of sound propagation, prediction of noise levels, and assessment of likely impact using agreed methodologies.

Current & future research projects aim to develop techniques for measurement of the noise radiated by marine renewable energy devices (MREDs), specifically, wave and tidal stream energy devices. Measurements pose significant challenges due to the hostile environments such as high flow rates and wave action in the vicinity, and new techniques will be required to overcome these issues.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** NPL would seek to partner with expertise in environmental monitoring and / or with organisations having specific expertise / products in sensing and instrumentation technologies.



**9. Name:** Dr Kevin Cooke

**Email address:** [kevin.cooke@miba.com](mailto:kevin.cooke@miba.com)

**Organization name:** Teer Coatings Limited, Miba Coating Group

**Street address:** West Stone House

**Address line 2:** Berry Hill Industrial Estate

**City:** Droitwich

**Province / County:** Worcestershire

**Postcode:** WR9 9AS

**Country:** UK

**Phone number:** 0044 1905 827550

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Teer Coatings Limited developed vacuum-deposited marine anti-fouling coatings as part of the FP6 project AMBIO. More generally we have a wide range of thin film coatings which can offer additional functionality, such as wear, corrosion, abrasion and cavitation erosion resistance, or low friction, electrical conductivity or insulation, etc. and can be deposited on virtually any vacuum-compatible substrate. We also manufacture thin film coating equipment, therefore a route to future scale up is assured.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** Our coatings can contribute to a project by improving functionality and viability of optical and other sensors in the marine environment. It would not be appropriate for us to lead a bid but we would like to work with partners, and particular end users, who can exploit the anti-fouling and other relevant properties of our coatings.

**10. Name:** Pete Cunningham

**Email address:** [peter.cunningham@chemquip.co.uk](mailto:peter.cunningham@chemquip.co.uk)

**Organization name:** Chemquip Ltd.,

**Street address:** Torr Vale Natural Science's Park,

**Address line 2:** Torr Vale Mills, New Mills, High Peak,

**City:** Via. Stockport,

**Province / County:** Derbyshire,

**Postcode:** Manchester,SK22 3HS

**Country:** United Kingdom

**Phone number:** 441663741753

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Rotating Machines

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
Canadian Engineer experienced in off / on shore rig work.

11. **Name:** Tim Embley

**Email address:** [Tim.embley@costain.com](mailto:Tim.embley@costain.com)

**Organization name:** Costain

**Street address:** Costain house

**Address line 2:** Vanwall business park

**City:** Maidenhead

**Province / County:** -

**Postcode:** SL64ub

**Country:** Berkshire

**Phone number:** 07825533825

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Construction and engineering

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** We are currently involved in the UKs largest tidal lagoon project in Swansea and see this as an ideal tested / technology transfer area to assist testing and advancing sensor technology.

12. **Name:** Stuart Brown

**Email address:** [stuart.brown@flowavett.co.uk](mailto:stuart.brown@flowavett.co.uk)

**Organization name:** FloWave Ocean Energy Research Facility

**Street address:** The University of Edinburgh, King's Buildings

**Address line 2:** West Mains Road

**City:** Edinburgh

**Province / County:** -

**Postcode:** EH9 3JF

**Country:** UK

**Phone number:** +44 131 651-3557

**Business size:** -

**Organization type:** Non-Academic Research Organization; Other

**Briefly describe your organization's products or services in relation to the call:** The FloWave Ocean Energy Research Facility is the UK/Europe's most sophisticated test tank facility and is designed specifically for testing wave and tidal stream renewable energy technologies.

Able to generate complex waves and fast currents over a large array-scale area at up to 14 knots equivalent, FloWave is probably the only test tank in the world big enough and fast enough to physically model array projects for all British, Canadian and other tidal sites at meaningful scale.

In addition to the physical assets of the test tank, we have the complementary expertise and know-how to take advantage of the capabilities of the machine both within FloWave, and locally within the University of Edinburgh's Institute for Energy Systems.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** For this call we would be happy to partner with one or more industrial or research partners. Instrumentation providers, specialist consultants/consultancies, software/analysis providers, and organisations with relevant site data, would all be suitable collaborators.

13. **Name:** Peter Morrish

**Email address:** [peter.morrish@beraninstruments.com](mailto:peter.morrish@beraninstruments.com)

**Organization name:** Beran Instruments Ltd

**Street address:** Hatchmoor Ind Estate

**Address line 2:** -

**City:** Torrington

**Province / County:** England

**Postcode:** EX387HP

**Country:** United Kingdom

**Phone number:** 01805624304

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Condition Monitoring Sensors, Data Acquisition, Algorithm and Software Development. Development of underwater systems, including hydrophones.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** Novel sensing technologies that are related to this call.  
Subject matter expert.

**14. Name:** Diganta Bhusan Das

**Email address:** [d.b.das@lboro.ac.uk](mailto:d.b.das@lboro.ac.uk)

**Organization name:** Loughborough University

**Street address:** Ashby Road

**Address line 2:** Chemical Engineering Department

**City:** Loughborough

**Province / County:** Leices

**Postcode:** LE113TU

**Country:** UK

**Phone number:** 0044 1509222509

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** We carry out research on environmental monitoring (particularly application of membrane), computer modelling of CO<sub>2</sub> flow and transport, geoelectrical characterisation of porous sample saturated with CO<sub>2</sub>

**Comment on the complementary skills / experience you would seek in a consotium partner(s):** We are looking for industrail partner who are interested on environmental monitoring of CO<sub>2</sub>, computer modelling of CO<sub>2</sub> flow and transport and, geoelectrical characterisation of porous sample saturated with CO<sub>2</sub>

15. **Name:** Carol Sparling

**Email address:** [ces@smrumarine.com](mailto:ces@smrumarine.com)

**Organization name:** SMRU Marine

**Street address:** SMRU Marine

**Address line 2:** New Technology Centre, North Haugh

**City:** St Andrews

**Province / County:** -

**Postcode:** KY169SR

**Country:** United Kingdom

**Phone number:** 441334479100

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Business; Academic Institute

**Briefly describe your organization's products or services in relation to the call:** Developing and testing marine mammal monitoring equipment and developing approaches to analyse the data collected (passive acoustic and active acoustic monitoring)

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
Industrial partner in the area of supply of acoustic monitoring equipment, seabed deployment housing or cable connection systems

**16. Name:** Bonny B. N. Umeadi

**Email address:** [B.umeadi@hotmail.com](mailto:B.umeadi@hotmail.com)

**Organization name:** NanoMind IDC

**Street address:** Communications House 26 York

**Address line 2:** 26 York Street

**City:** London

**Province / County:** London

**Postcode:** W1U 6PZ

**Country:** United Kingdom

**Phone number:** 442075262013

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business; Non-Academic Research Organization

**Briefly describe your organization's products or services in relation to the call:** combined Nano-chip, wireless communication Sensor based Technologies

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
NanoMind IDC will not only deliver sustainable benefits by minimising or eliminating potential liability and drags in the Offshore Energy Research to industries clients, it will drive to transform how Advancing environmental monitoring, sensing and instrumentation technologies integrity monitoring, detection & reporting are managed.



17. **Name:** Steven Benjamins

**Email address:** [Steven.Benjamins@sams.ac.uk](mailto:Steven.Benjamins@sams.ac.uk)

**Organization name:** SAMS (Scottish Association for Marine Science)

**Street address:** Dunstaffnage

**Address line 2:** -

**City:** Oban

**Province / County:** Argyll

**Postcode:** PA371QA

**Country:** Scotland, UK

**Phone number:** +44(0)1631-559449

**Business size:** -

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** SAMS has considerable expertise in studying tidal-stream environments and their components, including oceanography and species such as marine mammals.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
Business expertise, access to tidal sites for equipment testing and method validation.

**18. Name:** Eric Siegel

**Email address:** [eric.siegel@nortekpiezo.co.uk](mailto:eric.siegel@nortekpiezo.co.uk)

**Organization name:** Nortek Piezo

**Street address:** -

**Address line 2:** -

**City:** Aberdeen

**Province / County:** Scotland

**Postcode:** -

**Country:** UK

**Phone number:** 01224 925143

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Nortek Piezo designs and manufactures broadband composite transducers for instrumentation companies in the marine technology market. We are capable of making very broadband projectors (TX) and receivers (RX) in single-element and multi-element arrays. We can design systems with very precise directionality. Applications include acoustic imaging, measurements of currents and sediments, and passive acoustic listening.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** We are seeking electronic hardware and signal processing collaborators that require new capabilities in broadband acoustic transducers to achieve their data collection requirements.

**19. Name:** Elaine Buck

**Email address:** [elaine.buck@emec.org.uk](mailto:elaine.buck@emec.org.uk)

**Organization name:** European Marine Energy Centre

**Street address:** Old Academy Business Centre

**Address line 2:** Back Road

**City:** Stromness

**Province / County:** Orkney

**Postcode:** KW163AW

**Country:** UK

**Phone number:** +44 (0)1856 852060

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** EMEC has designed, built and installed a prototype Integrated Marine Energy Measurement Platform (IMP) at our tidal test site in the Fall of Warness, Orkney. The system includes a subsea measurement pod which is cabled to shore and houses real-time measurement equipment for currents, waves, acoustics, temperature, salinity, turbidity and a bespoke sonar system. The platform is supported by onshore measurement equipment to build up a comprehensive picture of the high energy environment the machines operate in. EMEC is looking to partner with sensor developers to build, test and deploy on the pod for the next generation IMP.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** EMEC looking to partner with businesses for IMP fabrication and sensor technologies development with capabilities to build a web-enabled interface for interrogation, analysis and reporting of collected data for tidal resource characterisation and turbine performance assessment.

**20. Name:** Simon Cheeseman

**Email address:** [simon.cheeseman@ore.catapult.org.uk](mailto:simon.cheeseman@ore.catapult.org.uk)

**Organization name:** Offshore Renewable Energy Catapult

**Street address:** 121 George Street

**Address line 2:** -

**City:** Glasgow

**Province / County:** -

**Postcode:** G1 1RD

**Country:** UK

**Phone number:** +44(0)3330041424

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Non-Academic Research Organization

**Briefly describe your organization's products or services in relation to the call:** Innovation of technology to support offshore wind, wave & tidal.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
Business commercialisation and technology research

**21. Name:** Deborah Greaves

**Email address:** [deborah.greaves@plymouth.ac.uk](mailto:deborah.greaves@plymouth.ac.uk)

**Organization name:** Plymouth University

**Street address:** Drakes Circus

**Address line 2:** -

**City:** Plymouth

**Province / County:** -

**Postcode:** PL4 8AA

**Country:** UK

**Phone number:** 01752 586122

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** COAST Laboratory for wave and current testing of marine energy devices  
Academic research expertise in marine renewable energy

**22. Name:** Thomas Clark

**Email address:** [tom.clark@oceanarraysystems.com](mailto:tom.clark@oceanarraysystems.com)

**Organization name:** Ocean Array Systems

**Street address:** Hauser Forum

**Address line 2:** 3 Charles Babbage Road

**City:** Cambridge

**Province / County:** Cambridgeshire

**Postcode:** CB30GT

**Country:** UK

**Phone number:** 07764530850

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Software for processing marine measurement data

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
Marine measurement equipment manufacturer/supplier

**23. Name:** Jamie Grimwade

**Email address:** [jamie.grimwade@flowaveTT.co.uk](mailto:jamie.grimwade@flowaveTT.co.uk)

**Organization name:** FloWaveTT Ltd

**Street address:** Max Born Crescent

**Address line 2:** King's Buildings

**City:** Edinburgh

**Province / County:** -

**Postcode:** EH9 3BF

**Country:** Scotland

**Phone number:** 0044 7834751 482

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business; Non-Academic Research Organization

**Briefly describe your organization's products or services in relation to the call:** Large Scale combined wave and tidal hydrodynamic test facility. 14knots flow capability at 1:20th scale assumptions. Interested in benchmarking/validating measurement equipment in controlled/calibrated environment before oceanographic deployment.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
Instrumentation supply, offshore survey company,

**24. Name:** Michael E. Kavanagh

**Email address:** [mepkav@me.com](mailto:mepkav@me.com)

**Organization name:** Omnequip Ltd.

**Street address:** 3 Fourth Avenue

**Address line 2:** P. O. Box 5272

**City:** Brighton and Hove

**Province / County:** East Sussex

**Postcode:** BN52 9QF

**Country:** United Kingdom.

**Phone number:** +44 (0)1273 729742

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Other

**Briefly describe your organization's products or services in relation to the call:** I am an individual, ex Marine Engineer. I hold two patents, one for Tidal Power, one for Ocean Mining and Extraction of Gas Hydrates.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** Knowledge and contacts to initiate start of building tidal power system on, say, The Bay of Fundy in Canada, and/or the Rivers Mersey and Severn in UK. Also; extracting gas from the Hydrates found off The Shetland Isles.



25. **Name:** Stephen McCarthy

**Email address:** [steve.mccarthy@sgurrcontrol.com](mailto:steve.mccarthy@sgurrcontrol.com)

**Organization name:** SgurrControl Ltd.

**Street address:** inovo

**Address line 2:** 121 George Street

**City:** Glasgow

**Province / County:** -

**Postcode:** G1 1RD

**Country:** UK

**Phone number:** 447438652996

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** SgurrControl is a Glasgow based control engineering consultancy specialising in the development of control systems for wind and tidal turbines. The company provides power and loading optimisation algorithms, tidal turbine simulation and loads analysis, supervisory and dynamic controllers, an innovative individual blade control solution and advanced tidal array control solutions.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** OEMs, sensor manufacturers and research facilities requiring advanced control engineering solutions.

26. **Name:** Hugh Swire

**Email address:** [hugh@waterpoweredtechnologies.com](mailto:hugh@waterpoweredtechnologies.com)

**Organization name:** Water Powered Technologies Ltd

**Street address:** 14 Kingshill Industrial Estate

**Address line 2:** -

**City:** Bude

**Province / County:** Cornwall

**Postcode:** EX23 8QN

**Country:** UK

**Phone number:** +44 7841 822 081

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Company has developed very large water powered pump able to move sea water onto shore based storage for pumped hydro or direct generation from tidal streams. As just a water pump current 1 meter diameter unit can pump +1billion litres annually (TRL6) for marine today power applications system is TRL2.

Marine applications of the technology would be more fish friendly (no turbine blades) and much more cost effective as no electronics in the sea (all land based)

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**

Looking for fabrication and testing partner in Canada

27. **Name:** raymond keith jackson

**Email address:** [keith21939@hotmail.com](mailto:keith21939@hotmail.com)

**Organization name:** Eco-Hydro-Water-Wheel

**Street address:** 22 Victoria Court, brigham street, openshaw

**Address line 2:** -

**City:** Manchester

**Province / County:** -

**Postcode:** M11 2YA

**Country:** ENGLAND

**Phone number:** 01612229498

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** -

**Briefly describe your organization's products or services in relation to the call:** INVENTED ECO-HYDRO-WATER-WHEEL, to get energy/electricity from any stream that has a fall of 12 degrees, or waterfalls.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** skill in doing a website and filing this programme.

**28. Name:** Steven Jermy

**Email address:** [steve.jermy@mojomaritime.com](mailto:steve.jermy@mojomaritime.com)

**Organization name:** Mojo Maritime Limited

**Street address:** Units 5C&D Falmouth Business Park

**Address line 2:** Bickland Water Road

**City:** Falmouth

**Province / County:** Cornwall

**Postcode:** TR11 4SZ

**Country:** United Kingdom

**Phone number:** 0044 1326 218218

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** We are a marine renewable energy engineering and operations consultancy, and have developed a design for a tidal installation ship, that operates in high flow tidal environments.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** We are seeking - and have identified - a Canadian company with expertise in ADCP design, development, and production, including in high energy tidal sites and for integral fitting into survey vessels.

**29. Name:** Martyn Hann

**Email address:** [martyn.hann@plymouth.ac.uk](mailto:martyn.hann@plymouth.ac.uk)

**Organization name:** Plymouth University

**Street address:** Drake Circus

**Address line 2:** -

**City:** Plymouth

**Province / County:** Devon

**Postcode:** PL4 8AA

**Country:** United Kingdom

**Phone number:** 441752586130

**Business size:** -

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** Tidal testing basins and flumes.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** Full scale measurement data

**30. Name:** Robert A Beharie

**Email address:** [rab11@hw.ac.uk](mailto:rab11@hw.ac.uk)

**Organization name:** Heriot-Watt University - ICIT

**Street address:** Old Academy

**Address line 2:** Back Road

**City:** Stromness

**Province / County:** Orkney

**Postcode:** KW16 3AW

**Country:** United Kingdom

**Phone number:** 01856850605

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** Development of cost effective sound monitoring buoy. Calibrated underwater sound measurements of marine renewable energy devices and ambient background noise in high energy wave and tidal environments. Sea trials of new devices in high energy environments.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
Investment of project and commercialization of outcomes.

**31. Name:** Clym Stock-Williams

**Email address:** [Clym.StockWilliams@eon.com](mailto:Clym.StockWilliams@eon.com)

**Organization name:** E.ON

**Street address:** Technology Centre

**Address line 2:** Ratcliffe-on-Soar

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**Province / County:** -

**Postcode:** NG11 0EE

**Country:** U.K.

**Phone number:** +44 7590 483513

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Algorithm development for tidal turbine or oceanographic data analysis; software development; utility company perspective

**Comment on the complementary skills / experience you would seek in a consortium partner(s):**  
Sensor development; tidal site owner/developer

**32. Name:** Robert Knapp

**Email address:** [robert.knapp@epsilonoptics.com](mailto:robert.knapp@epsilonoptics.com)

**Organization name:** Epsilon Optics Ltd

**Street address:** 10 Glasshouse Studios

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**City:** Fordingbridge

**Province / County:** Hampshire

**Postcode:** SP6 1QX

**Country:** United Kingdom

**Phone number:** +441425655027

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Business

**Briefly describe your organization's products or services in relation to the call:** Provision of fiber-optic strain sensing technology for critical structures such as tidal energy turbine blades and support structures

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** We have experience of monitoring tidal energy turbines but would like to team with turbine manufacturers, test houses or others to explore enhancements to the existing strain sensing technology. This may for instance involved higher frequency acquisition of strain data to analyse vibration modes of blades and other structures.



**33. Name:** Brian Sellar

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**Organization name:** The University of Edinburgh

**Street address:** The King's Buildings

**Address line 2:** Mayfield Road

**City:** Edinburgh

**Province / County:** Midlothian

**Postcode:** EH93JL

**Country:** UK

**Phone number:** 01316508698

**Business size:** Large enterprise (> 500 employees)

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** Research in the Institute for Energy Systems (IES) at the University of Edinburgh delivers world leading research in low carbon energy systems, technology and policy. Led by Professor Markus Mueller there are seven integrated research areas involving 19 academic staff, 26 research staff and around 50 postgraduate students.

Within IES we have academic expertise in resource modelling and measurement, hydrodynamics, aerodynamics, computational fluid dynamics, thermodynamics, electromagnetics, power electronics, control, power systems analysis and life-cycle analysis. IES has developed unique world class test facilities for wave and tidal energy, in particular the FloWave Combined Wave and Current Test Tank.

Specific skills for this call have been further developed through the soon to complete £13M ETI ReDAPT "Reliable Data Acquisition for Tidal Platform". The University were responsible for multi-year full-scale resource characterisation using state-of-the art instrumentation arrays deployed sub-sea and integrated with a commercial scale and operating tidal turbine test programme. We are exploring options to leverage the in-field skills, data processing techniques, scientific equipment and supply-chain gained as part of this cutting-edge project.

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** We hope to partner with businesses looking to improve the utility and impact of their products for the marine renewable sector through improved hardware and software design leading to improvements in the areas outlined in this calls scoping document.

We also hope to build on (and establish) ties with Canadian academic research groups with a view to sharing experiences and skills in instrument deployment and retrieval techniques and data processing methodologies and taking a longer view, to explore submitting joint funding proposals in the future.

**34. Name:** Diego del Villar

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**Organization name:** Environmental Research Institute (ERI). North Highland College UHI

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**Province / County:** Caithness

**Postcode:** KW14 7EE

**Country:** Scotland

**Phone number:** +44(0)1847889673

**Business size:** Small to medium enterprise (< 500 employees)

**Organization type:** Academic Institute

**Briefly describe your organization's products or services in relation to the call:** ERI itself is located close to many key renewable energy resources, notably the Pentland Firth; the foremost tidal current resource in the UK. A major issue in the development of all renewable energy industries are environmental uncertainties and concerns varying from "reliability of supply" linked to climate variability and vulnerability of the resource to fears of damage to the environment, fishing and tourism. In parallel with the economic redevelopment of the region, ERI will apply its environmental knowledge to assist in establishing sustainable industries sympathetic to the local environment and communities.

ERI research interests cover themes related to bio-energy, energy and communities, renewables and renewable integration. Marine energy constitutes however the main area of specialisation, and the one in which prospects for further developments, reinforcement of the knowledge base, research capacities and collaboration with the industry look more promising. Moreover, Scotland as a region represents a very fertile ground, thanks to the presence of other research organisations working in complementary areas (other energy fields for which excellent research is performed in Aberdeen, Edinburgh and Glasgow).

**Comment on the complementary skills / experience you would seek in a consortium partner(s):** This partnership will help ERI to efficiently monitor and track fish in challenging oceanic conditions (i.e. wave heights up to 14 m, severe wind conditions and large commercial shipping traffic) where no previous studies have been conducted and ambitious targets for renewable energy production are established.