

Blyth Marine Station and RV Princess Royal



School of Marine Science and Technology

The School of Marine Science and Technology at Newcastle University is one of the largest and broadest-based marine school of its kind in Europe, covering the fields of marine engineering, marine biology, naval architecture, offshore engineering, coastal management and small craft technology, and enjoys a substantial international reputation.

Teaching in the School is informed by internationally recognised and industrially relevant research. This is backed by extensive specialist facilities on the main campus, complemented by the Dove Marine Laboratory located nearby on the coast at Cullercoats, and further enhanced by our new Blyth Marine Station and the School's own sea-going Research Vessel The Princess Royal.

All our research groups are actively involved in industrial partnerships, which often take advantage of the interdisciplinary expertise available in the School. These can take the form of consultancy projects, sponsored student and research projects, access to the facilities, or combinations of these tailored to individual requirements.



Blyth Marine Station

This exciting new development at Port of Blyth houses our "Blyth Marine Station". Funding from the European Fisheries Fund and the Coastal Communities Fund, with generous additional support from Northumberland County Council, has enabled us to support the operation of our Research Vessel, The Princess Royal, and further more build upon our educational and local engagement with schools and colleges.

The new facility will also enhance the learning experience of our Undergraduates and Postgraduates and support the research being carried out by our PhD students, staff and commercial clients.



The facility comprises of:

- operational office and workshops for support and maintenance of the vessel and its equipment
- recirculating seawater aquarium
- facilities for staff, undergraduate and postgraduate students to use when preparing for trips on the vessel
- facilities for engineering related outreach activities for school children



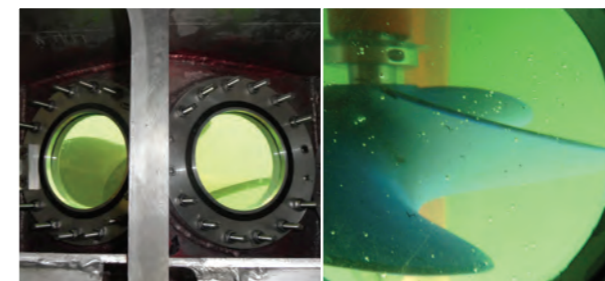
RV Princess Royal

Newcastle University's new research vessel, The Princess Royal, was designed in-house by staff and students in the School of Marine Science and Technology.

The catamaran has established itself as the ideal platform for small research vessels due to its stability, large deck area and manoeuvrability. Our unique marriage of the catamaran and the deep-vee hull form gives enhanced seakeeping, efficiency and speed potential whilst maintaining its other inherent virtues.

Outline Specification as follows:

Length Overall	18.9m
Beam Overall	7.3m
Design Draft	1.64m
Displacement (light)	36 tonnes
Payload	5 tonnes
Max Speed	20 knots
Cruising Speed	15 knots
Engines	2 x 600hp
Propulsion	Fixed pitch propellers



Normal Area of Operation

The coastal waters, rivers and estuaries of North East England.

Operating Conditions

Classification	MCA category 2
Sea state	4-5
Range	400 nautical miles

Research Vessel

Capabilities

- Low and high speed (> 15 knots) transit to research grounds
- Use of static fishing gear
- Conventional surface, mid-water and bottom trawling
- Plankton sampling
- Water sampling at depths up to 200m
- Sea floor coring and rock dredging
- Soft sediment sampling and sea floor photography
- Undergraduate / postgraduate teaching facility
- Platform for a wide variety of research programmes
- Charter for government and commercial organisations
- Marine wildlife observation and acoustic monitoring
- Environment (wind/wave/current) monitoring
- Underwater acoustic investigations
- Cavitation observations
- Performance monitoring (of torque, thrust, fuel consumption, SOG, STW etc.)
- Anti-fouling performance assessment
- Bio-fouling sampling
- Biofuels research
- Full scale experimentation
- Vocational training
- Water quality assessment
- Wind farm / wet renewable farm support
- Underwater ROV/AUV/diving support





Equipment and Features

Integral equipment

- 3 tonne hydraulic A-frame
- 2 x 2 tonne trawl winches
- 2 tonne auxiliary winch
- Hydrographic conducting winch
- 6.5 tonne-m knuckle boom crane
- Pot hauler
- Static drift-net hauler
- 1.5m x 1.5m moon pool for ROV deployment
- Wave radar
- Motion sensor
- Speed log (EM type flush STW)
- Propeller shaft thrust and torque gauges
- 4 x 150mm propeller observation windows (2 per demi-hull)
- Boroscope apertures at both demi-hulls
- Hydrophones at bow

Marine science equipment

- 6 x 5 l Rosette water sampler with integral CTD unit
- Coupled, or independent, fast repetition-rate fluorimeters and C-DOM sensors
- Scientific Meteorological package
- Day grab and Van Veen grab
- Range of static and towed fishing gears
- Underwater stills and video cameras
- In-line thermosalinograph
- Towed Side-scan sonar
- Movement compensating Marine balance
- Laboratory PCs
- Onboard microscope & camera

Contact Details

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