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UNIVERSITY OF GIRONA WINS EUROPEAN UNDERWATER CHALLENGE AT PINWOOD STUDIOS Seven university teams enter defence-sponsored competition

In the first competition of its kind to be held in Europe, a team of students from the University of Girona, Spain won £5,000 for completing a series of sub-marine missions with an autonomous underwater vehicle. The winning team beat other European universities including Glasgow, Southampton, Bremen and Heriot-Watt at the event which was held between 3 and 6 August at the newly constructed Underwater Stage at Pinewood Studios.



The competition was modelled on an autonomous underwater vehicle competition in the US which has been running successfully for eight years. The European event was designed to similarly encourage young engineers and scientists to think about underwater technology and its future possibilities.

The challenge, sponsored by the Ministry of Defence's (MOD) Research Acquisition Organisation (RAO) and

the Defence Science and Technology Laboratory (Dstl), was to design and build an underwater vehicle that was capable of independently carrying out specified in-water 'missions' in front of a panel of judges. Points were awarded for performance, innovation, craftsmanship, efficiency and economy, and although the University of Girona won first place, prizes were awarded to all of the seven university teams that took part. The University of Leicester, for example, took the award for 'most innovative use of an everyday object', having used a fruit-bowl as a key component for their vehicle. The University of Bath were named as the team that 'persevered the most to overcome the challenge', having re-built their vehicle almost from scratch on each day of the event.

"The type of teamwork I have seen from the students at this competition certainly helps to foster innovation," said Commodore Mark Anderson from the Royal Navy, who made a special appearance at the event to award prizes to the teams. "Getting the right kit for the underwater environment is vital for the Ministry of Defence and innovation helps to give us the winning edge."

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Picture shows the winning team receiving the prize from Commodore Mark Anderson

For more information, photographs or a copy of the official event DVD, please contact:

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Notes to Editors:

Dstl

The Defence Science and Technology Laboratory (Dstl) is a centre of scientific excellence for the Ministry of Defence (MOD). Its 3,500 strong workforce includes some of the nation's most talented and creative scientists with the brief to ensure that the UK Armed Forces and Government are supported in-house by the very best impartial scientific and technological advice. Dstl's unique position at the heart of the MOD means that its advice is trusted by governments, academia, industry and international partners. It offers timely and accurate advice at all levels of military planning and operations, both overseas and on the home front. For more information please visit www.dstl.gov.uk.

Student Autonomous Underwater Challenge Europe (SAUC-E)

The challenge, aimed at teams of University students, was to design and build an autonomous underwater vehicle (AUV) and then undertake a specified in-water "mission" with the vehicle. The competition, sponsored by Ministry of Defence's (MOD) Research Acquisition Organisation (RAO) and Defence Science and Technology Laboratory (Dstl), took place at Pinewood Studios between 3 and 6 August 2006. Although a similar competition has taken place in the USA for eight years, this was the first of its kind in Europe. For more information about the event, please visit www.dstl.gov.uk/news_events/competitions/sauce/index.php

The Challenge

The teams' vehicles were tested with four different missions that they needed to complete autonomously:

- To navigate the vehicles through a validation gate one metre below the surface.
- To locate and drop a marker onto a circular target marked with a flashing light.
- To locate an acoustically and optically reflective mid-water target, and contact it with the AUV.
- To surface the AUV within a designated surfacing zone, marked with an active acoustic device.

The Results Table

1 st	University of Girona (Spain)
2 nd	Heriot-Watt University
3 rd	Southampton University
The team with the fastest vehicle	International University Bremen (Germany)
The team with the most innovative use of an everyday object (for use of a fruit bowl)	University of Leicester
The team that persevered the most to overcome the challenge	University of Bath
The team that took the most challenging approach	University of Glasgow

Education Outreach

As a centre of scientific excellence for the Ministry of Defence and other government departments, Dstl takes a proactive approach to encourage and develop young people's interest in science. As part of this approach, Dstl works in partnership with the education community to inspire teachers and students alike, by feeding their curiosity and challenging young minds.

Dstl works throughout the many stages of the education system, from primary through to professional Chartership, and we aim to ensure students, teachers, schools, universities and colleges are supported and encouraged to achieve their best in science and technology.