February 2015

# Challenger Wave

*Monthly newsletter of the Challenger Society for Marine Science (CSMS)*

## NEWS

**Understanding what the seas give us is central to their future management. A new website highlights an innovative approach to a sustainable future for our seas.**
As global environmental changes and human activities are impacting our oceans like never before it is increasingly important to ensure effective management of our seas. Until recently ocean management has focused on the impact that we humans have had on the marine environment. Now in a new approach the tables are turned and more emphasis is given to appreciating the impact that the marine environment has on our societies and economies, enabling us to put a value on marine 'goods and services'. The research findings of VECTORS, an EU funded marine research project coordinated by Plymouth Marine Laboratory, are now available on a new website www.marine-vectors.eu, which includes more details of the approach and a broad range of other findings. Their application aims to improve the management and governance of marine environments across Europe.

## VIEWS

**Short Courses – UAV Training Workshop, at the Scottish Association for Marine Science.**
*(21st April 2015)*
Successful operation of research Unmanned Aerial Vehicles (UAV) requires a range of expertise, from initial overall science planning to on-the-day piloting skills. This workshop will give you a basic knowledge of the four key areas of UAV-based Research. Hosted by Dr Phil Anderson and taught by a number of expert lecturers from the scientific, private and public sectors across the UK, this course covers the Four Fold Way of UAV Management.
http://www.sams.ac.uk/education/short-courses/uav-training

**Short Courses – Research Methods Field Course, at the Scottish Association for Marine Science.**
*(7-14th April 2015)*
A familiarity with environmental research and sampling methods will help increase the reliability of your data, your value as an employee and/or researcher and your understanding of this critical scientific skill. This course provides you with plenty of hands-on experience researching the marine environment on board a research vessel and in the lab.
http://www.sams.ac.uk/education/short-courses/research-methods

## SALTS

**No news from sea this month I'm afraid**
I know that this is a favourite section for many readers, where we get the inside information about life at sea, its thrills and spills. So please the next time you are at sea or carrying out any fieldwork, please remember that a simple paragraph or two will get you published here. - **Ed**

## CALENDAR

**12th-17th April 2015: European Geosciences Union General Assembly**
*Vienna, Austria.*
The EGU General Assembly 2015 will bring to-

gether geoscientists from all over the world to one meeting covering all disciplines of the Earth, planetary and space sciences. The EGU aims to provide a forum where scientists, especially early career researchers, can present their work and discuss their ideas with experts in all fields of geoscience. The EGU is looking forward to cordially welcoming you in Vienna !

**14th-16th April 2015: Ocean Business**
*NOC Southampton, UK.*
As one of the unmissable events in the ocean technology calendar, Ocean Business 2015 is delighted to announce that registration is now open. This coincides with the recent news that over 300 exhibition stands have sold; offering the greatest mix of technology, business and training yet. Ocean Business offers the visitor more than just an international exhibition. The show has an outstanding reputation for its training and demonstration programme, which runs alongside the exhibition. Visitors can actually test drive equipment at sea, in the dockside, in a test tank and in classrooms. Ocean Business also offers Offshore Survey, a technical conference and Ocean Careers, an interactive careers event – visitors are simply spoilt for choice. If that's not enough, Ocean Business is well known for organising some very special social events, and 2015 will be no exception - http://www.oceanbusiness.com

**15th-17th June 2015: ESSAS Symposium**
*University of Washington, Seattle.*
This is a call for abstracts and registration for the ESSAS (Ecosystem Studies of Sub-Arctic Seas) Symposium on the Role of Ice in the Sea that will be held at the University of Washington in Seattle, WA, USA from 15 - 17 June 2015.

The session themes are:
* Humans, Ice and the Sea in the Subarctic and Arctic Past
* The Role of Sea Ice in the Arctic and Subarctic
* Ecological Roles of Glaciers in the Sea
* Socio-economics of Management for Resilience
* Open paper session

The number of participants will be limited to 125, so you are encouraged to register soon. To register and submit an abstract, please go to: https://www.imr.no/conferences/ESSAS/

More information on the symposium and logistical arrangements is available at: http://www.imr.no/essas/2015_essas_annual_science_meeting/en

**14th-18th September 2015: 3rd CLIOTOP Symposium**
*San Sebastian, Spain.*

CSMS email addresses are president, admin, membership, secretary and treasurer@challenger-society.org.uk. Contributions for next month's edition of Challenger Wave should be sent to: john@vectisenvironmental.com by the 28th February.

*We continue to send printed copies of Challenger Wave to members of the CSMS without email addresses. However it is in everybody's interest to send your email address to Jennifer Jones jxj@noc.ac.uk as soon as possible*

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JOBS

## Vacancy at SOCIB the Balearic Islands Coastal Observing and Forecasting System

SOCIB Balearic Islands Coastal Observing and Forecasting System

**Vacancy notice**

**Publishing date:** 12 December 2014
**Closing date:** Vacancy will remain open until filled

| Vacancy number 2 | Number of Posts | Type of Contract | Observation |
|---|---|---|---|
| Process and integration of physical data (temperature, salinity, currents, etc.) of Sur_Baleares project | 1 | 3 years | SUR_BALEARES, 3 years project |

Duties:
In the SUR_BALEARES Project, the applicant will carry out the tasks of acquisition and processing of physical data from the different platforms (catamaran, gliders, Ibiza Chanel Buoy, etc.) in line with international standards. The applicant will participate in monitoring programs of the Project on the catamaran and will also participate in the publication of technical reports of the campaigns.
In support of the SOCIB coastal research vessel's coastal monitoring capabilities, SOCIB is recruiting an observational physical oceanographer to help maintain and expand physical observational capacity. The role of the post will be to incorporate current and new observational technologies into the vessel and to research, maintain and develop world class data analysis and handling standards for physical observations both on board the vessel and on the autonomous platforms that it launches and recovers. The successful applicant will report to the head of the SOCIB marine vessel scientific programme. They will work closely with the Engineering and Technology Division to support the incorporation of additional observational capacity; and also with the Data Centre Facility to enable the necessary expansion of data curation, access and presentation. The nature of this post will bring plenty of opportunity for involvement in research programmes and papers.

Education and experience:
We are seeking a highly motivated individual with a higher degree in physics, engineering or equivalent. A track record of sea-going is desired as is experience of calibrating and analysing complex datasets. The ability to work with others and quickly become a part of a team is essential.

For further information send detailed CV, explicitly indicating your experiences and skills related to the Post, as well as details on two potential sources of references, please contact jallen@socib.es. Please indicate the vacancy number 2.

Fore more information about either vacancy visit: http://www.socib.es/JobOpportunities

**Research Leaders – Heriot-Watt University, Edinburgh**

Heriot-Watt University in Edinburgh Scotland is seeking research leaders to join our new £21m Lyell Centre for Earth and Marine Science and Technology, a purpose-built complex of labs and offices incorporating the Scottish Headquarters and Marine Operations division of the British Geological Survey.

We will be appointing across the earth and marine sciences and welcome applications from excellent researchers anywhere in the world. We invite research leaders and ambitious early career researchers to join us in leading and driving research in key inter-disciplinary themes. Please see http://www.nature.com/naturejobs/science/jobs/480987-research-leaders, www.hw.ac.uk/researchleaders or http://www.hw.ac.uk/jobs-lyell for further information and how to apply.

Prof J Murray Roberts, Director, Centre for Marine Biodiversity & Biotechnology
Co-ordinator, Lyell Centre for Earth and Marine Science & Technology

Heriot-Watt University is a Scottish charity registered under charity number SC000278.

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**15 PhD positions in Algal Research and Biotechnology**

Do you hold a MSc degree or are you expecting to complete one before July 15th, 2015? If you want to undertake further doctoral research and training as part of an international and highly inter-disciplinary team, combining a unique and ambitious theoretical, field, hands-on training and research, then ALFF is the programme for you.

***ALFF: The ALgal microbiome - Friends or Foes***
Algal aquaculture is developing exponentially worldwide, with multiple applications in the food, chemical and pharmaceutical industries. Current research in algal biotechnology mostly focuses on metabolite discovery, aquaculture yield improvement and engineering bottle-necks. However, agronomical experience shows that controlling the interaction of land crops with mutualistic or pathogenic microbes is critical to successful production. Likewise, controlling the microbial flora associated with algae (the 'algal microbiome') is emerging as the biggest biological challenge for their increased usage. Bacteria can control the morphogenesis of algae, while others are indispensable to algal survival. Pathogens are causing devastating diseases, the impact of which worsens with the intensification of aquaculture practices. ALFF aims to achieve a scientific step-change in our understanding of algal-microbial interactions, whilst also leading to the development of superior mass algal cultivation and biocontrol strategies.

***Scientific excellence, creativity, entrepreneurship and innovation***
ALFF is funded under the prestigious EU Marie Sklodowska-Curie Initial Training Networks (ITN) programme and is specifically designed to train students in research and algal biotechnology. We offer highly interdisciplinary and international training for 15 PhD students throughout the EU, with a highly competitive

salary and close contacts with the industry, government agencies and leading laboratories. In addition to conducting research, students will be enrolled on an extensive programme of short courses, conferences and secondments at other institutions. ALFF also encompasses an ambitious outreach and public engagement programme, in collaboration with highly renowned institutions such as the Flanders Marine Institute and the United Nations University.

***Desired skills and experience***

To apply for the Algal Microbiome: Friends or Foes (ALFF) Programme you should normally have a good MSc degree or an equivalent qualification, or be expected to complete a MSc degree by mid-July 2015, or have a background in one of the fields of environmental and life sciences. Depending on the project(s) you decide to apply for, an appropriate background could include marine biology, marine science, aquatic biology, micro-biology, phycology, biology, chemistry, environmental sciences or information technology. At the time of recruitment, you must not have resided or carried out your main activity (work, studies, etc.) in the country of your host organisation for more than 12 months in the 3 years immediately prior to the reference date. The selection process will take into consideration the whole range of experience of applicants. Career breaks, evidence of non-formal qualifications and evidence of previous international mobility will be regarded favourably.

For more details on the PhD projects being advertised, please go to:
**http://www.sams.ac.uk/Algal-doctorate-EU-Marie-Curie/algal-microbiome-friends-or-foes-alff/**
Closing date for applications: Sunday, March 1st 2015.

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