

# Challenger Wave



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

## NEWS

### **Challenger Society evidence submitted to the House of Commons Select Committee consultation on the implications and priorities for science and research on leaving the EU**

#### Executive Summary

- We identify benefits of the EU that are specific to UK marine scientific research and make recommendations for the government to consider in 'Brexit' negotiations and beyond.
- The UK has an international reputation for excellence in marine science, largely reflecting the quality of the people that it attracts and trains.
- Major research challenges relating to marine resource management, ethical stewardship and climate change require multi-national collaboration and cooperation, especially with our neighbouring EU countries.
- Marine science is interdisciplinary and highly collaborative. The EU currently (and uniquely) facilitates multi-national research collaborations and there is a clear risk to UK marine science of not being 'at the table' steering the international research agenda.

The Challenger Society is the learned society for marine scientific researchers in the UK. The Society is submitting this evidence to highlight specific risks and priorities for UK marine research upon leaving the EU.

#### 1. The UK undertakes world-class marine research

The UK has a very strong and longstanding international reputation for excellence in marine science. As a result, the country exerts significant

influence on the research agenda internationally, and particularly in the EU, and benefits significantly from the associated collaboration and funding.

#### 2. Priorities

##### *2.1. Maintain access to EU funding*

The UK consistently punches above its weight in attracting EU funds to undertake marine science. Under Horizon 2020 and other EU programmes, UK institutions are partners in 45% of marine-related projects, and of those lead 20%. European Research Council (ERC) grants are an important source of funds and are a means of attracting top talent to the UK. The UK is awarded more ERC grants than any other EU member state, holding 31% of all grants in Earth system science, of which 35% are marine-related. In addition to the obvious financial benefits, EU programmes are central to the collaborative networks that underpin the inherently international nature of marine science. Without access to EU funds, the UK marine science community will lose a significant fraction of its income.

##### *2.2. Maintain UK's ability to drive international marine research agenda*

Maintaining the quality of UK marine research depends on our ability to influence future international research priorities and funding opportunities. The majority of the ocean surface area is outside Exclusive Economic Zones such that major challenges relating to marine resource management and climate change require multi-national collaboration and cooperation. Collaboration is particularly important with European countries that neighbour our seas due to the connectivity of the ecosystem services they provide, and with major global economies such as Germany and France. The UK currently has a key role in setting the international agenda, such as in the

EU Horizon 2020 programmes. For example, in the AtlantOS programme, which aims to monitor the health of the Atlantic Ocean, 10 of the 62 consortium members are UK bodies, second in number only to France. Another consequence of the excellent reputation of UK marine science has been to provide the status necessary to exert influence on the development of EU policies and directives, which benefit the UK and the open ocean marine environment in a major way. We therefore view our ability to influence and drive the international research agenda as a very high priority and should be an integral component of 'Brexit' negotiations.

### 2.3. Maintain free movement of people

There are relatively few marine research centres in the UK and EU. Their excellence depends upon access to the widest possible pool of talent and being able to attract and retain that talent. The UK hosts extraordinary marine scientists from students to professors. For example, the UK has one of the largest graduate schools for marine science in the EU and the centre attracts 20% of its 200 PhD students from other EU countries. Free mobility of people allows us to exchange knowledge and ideas and develop EU-wide collaborations, adding immeasurable value to science and the outputs of all our nation states. Changes such as increased visa restrictions on staff and students or increased tuition fees for EU postgraduate students would cause significant damage to UK marine scientific research by compromising the quality of research at UK institutes and diminishing the strength and breadth of current and future international collaborations.

### 2.4. Maximise value of specialist marine resources

The marine environment is difficult and expensive to observe. As such, our scientific knowledge and ability to manage the marine environment is limited by data availability. Each nation invests in ships, bespoke equipment and specialist skills and monitoring platforms, and the value of this investment is currently maximised by sharing and accessing resources and data. It is crucial that the existing level of access and collaboration is maintained (including via international funding and ship bartering). Undermining EU collaborations would threaten existing

frameworks for accessing and sharing these resources.

### 3. Recommendations

As part of Brexit negotiations, we urge the government to protect our access to, and influence on, EU funding and policies. In addition, we strongly encourage the government to maintain freedom of movement for researchers and level of fees for EU postgraduate students. If any of these goals cannot be agreed with the EU, we urge the government to fund new equivalent monetary value initiatives, e.g. within the Commonwealth or with the US (though we note why links with the EU nations are particularly important in point 2.2 above). We cannot stress strongly enough the importance of the 'community spirit' that underpins international collaborative research in marine science. We therefore also urge the government to provide repeated assurances to the UK, EU and international research communities during 'Brexit' negotiations to protect the UK's reputation for, and ability to conduct, outward-facing world-class research.

- *Written evidence submitted on behalf of the Challenger Society for Marine Science, by Dr. A Hickman, Dr. S Henson, Prof. H Bryden FRS, Prof. R Lampitt, Prof. R Mills, Prof. T Jickells.* More details about the consultation can be found here:

<http://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/news-parliament-2015/leaving-the-eu-further-call-for-evidence-launch2-16-17/>

## VIEWS

### Have you ever wished to be better informed of SCOR activities ?, then read on

In the past, the Scientific Committee on Oceanic Research (SCOR) only included the 3 SCOR Nominated Members from each nation on the SCOR email list, because of technical issues. However, we recently changed our email platform to Constant Contact, which allows us to easily send emails to a larger list of recipients.

SCOR is actively contacting individuals who are currently involved in SCOR, to find out if they

would like to join the SCOR email list. People on this list receive announcements about SCOR annual meetings, the SCOR Newsletter (3 times per year), and emails announcing special events of SCOR groups. People on the SCOR email list receive an average of about 1 email per week. Subscribers have the option to unsubscribe with every email received. Visit <http://www.scor-int.org> to join the SCOR email list.

## 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-16th September 2016: CIESM Congress

*Christian Albrechts University, Kiel, Germany*

The 41st CIESM Congress will take place in mid-September in Kiel, on the Baltic shore, at the kind invitation of the German Government; this will be the first time that our Congress takes place in Germany, which has been a Member of our Commission since 1969.

The CIESM meeting, one of the largest multi-disciplinary fora in marine science, will present a major opportunity not only for researchers working on the Mediterranean and Black Seas, but also to any investigator from the Red Sea all the way to the Kara Sea, including the Atlantic shores, to come and share / compare / discuss their scientific approaches and latest findings in some 90 distinct sessions that will cover key issues. The sectors will range from marine geo-sciences, ocean climate, marine food-webs, invasive species, to marine plastics, biotechnology, geo-chemistry and marine policy. Note that each session will include a 30 minute-debate with the audience.

The link, [www.ciesm.org/marine/congresses/Kiel](http://www.ciesm.org/marine/congresses/Kiel).

[www.challenger-society.org](http://www.challenger-society.org)

[htm](#), will lead you to our Congress web pages, with details on the many Congress themes. We look forward to see many of you in Kiel in September. With my best regards, Frederic Briand, Director General, The Mediterranean Science Commission, CIESM

### 14th-15th September 2016: 58<sup>th</sup> Marine Measurement Forum

*Plymouth Marine Laboratory, Plymouth, UK*

The Marine Measurement Forum (MMF) is a series of non-profit making events that provides opportunities for the informal exchange of ideas, knowledge, techniques and developments across an extensive range of marine scientific measurement activities. The main event will be held on the 15th September with a series of 20 minute presentations and networking breaks. As it is anticipated that many delegates will be staying in Plymouth on the 14th and with generous sponsorship from both the Plymouth City Council and PML a networking/social dinner has been arranged at the National Marine Aquarium. Please see website for full details:

[http://www.pml.ac.uk/Media\\_and\\_events/Events/Marine\\_Measurement\\_Forum](http://www.pml.ac.uk/Media_and_events/Events/Marine_Measurement_Forum)

Plymouth Marine Laboratory in partnership with Plymouth City Council and other marine research organisations are hosting its first Marine Tech Expo on 14th September 2016. The expo will be the first of a series designed to showcase Plymouth's marine credentials across the world in the run up to the Mayflower 400 celebrations in 2020. MMF delegates are encouraged to join this free event hosted at the new University of Plymouth Marine Station. Further details can be found on the website.

### 20th-21st September 2016: Sea Ice SIG (Special Interest Group) workshop

*University College, London, UK*

To be held in the Department of Earth Sciences at University College London, Tuesday 20th September (13:00 - 18:00) and Wednesday 21st September (09:00 - 13:00). The workshop is an informal meeting of those working in the broad subject of sea ice (both hemispheres), physics chemistry and biology. It will take the form of short presentations, posters and discussion, and is an opportunity to meet up with others in the field.

In addition to the usual UK sea ice workshop format we will be hosting a follow on session

on Wednesday 21st September (14:00 - 18:00), open to the public and media, where we invite participants to reflect on the September 2016 sea ice minimum. If you wish to attend and/or present at the workshop please email Michel Tsamados ([m.tsamados@ucl.ac.uk](mailto:m.tsamados@ucl.ac.uk)).

## 26th-29th September 2016: 7th EGO Conference on Autonomous Ocean Gliders and their Applications

National Oceanography Centre, Southampton, UK

The 7th EGO conference, <http://conference.noc.ac.uk/ego-conference>, will provide a forum in which scientists, engineers, students and industry can exchange knowledge and experiences on the development of glider technology, the application of gliders in oceanographic research and the role of gliders in ocean observing systems. The conference will be held at the National Oceanography Centre (NOC) in Southampton, UK. The NOC now hosts the largest and most diverse research fleet of marine autonomous systems in Europe in purpose built facilities including the new Marine Robotics Innovation Centre, where marine businesses work alongside NOC's scientists and engineers. The opening session of the meeting will start at midday on Monday 26th September and the meeting will finish at 16:00 Thursday 29th September 2016.

## 19th-21st October 2016: MASTS Annual Science Meeting: "Our Marine Environment – a Shared Resource"

Technology & Innovation Centre, Glasgow, UK

The 2016 ASM will promote the latest advances in marine science, good governance and using sound science responsibly, and describe research that will lead us to achieve a sustainable marine economy and live within environmental limits. The draft programme for the MASTS Annual Science Meeting is now available to view - <http://www.masts.ac.uk/media/36052/masts-asm-2016-draft-programme-for-web.pdf>

Registration is open at:

<https://www.eventsforce.net/standrews/52/home>

This cross-disciplinary meeting brings together members of the marine science community, with the aim of promoting and communicating research excellence and forging new scientific collaborations. The cross-disciplinary nature of the event as well as the high calibre of the selected talks means that scientists can broaden their knowledge in marine science as well as

benefit from expertise and ideas gained in a range of fields other than their own.

Science presentations and e-poster sessions will take place on the first two days (Wednesday 19th October and Thursday 20th October), together with Plenary Speakers and opportunities to network. On the third day the venue will host a number of meetings and workshops: If you are interested in hosting one of these, please contact [Dr Emma Defew](#)

We also invite you to join us at the conference dinner and ceilidh (music from the Hoochie Coochie band) to be held on the evening of Wednesday 19th October at the Millennium Hotel Glasgow. Anyone interested in exhibiting at the 2016 event, or anyone wishing to showcase or demonstrate a piece of kit/equipment should email [Dr Emma Defew](#)

We advise delegates to book accommodation for the event as soon as possible. The nearest place to stay is the [Premier Inn](#) on George Street.

Ibryce@decomnorthsea.com by COB, Friday 5th August.', 'This joint SUT/MASTS Workshop brings together operators, engineers, scientists, salvors, regulators, insurers, financiers to consider these three fundamental areas to consider topics from a life cycle evidence based approach.', 'For further information, please contact: Karen Seath, General Manager, Decom North Sea, [kseath@decomnorthsea.com](mailto:kseath@decomnorthsea.com) 01224 452 169'."/>

A workshop on *Decommissioning and Wreck Removal* will take place in Glasgow at the MASTS Annual Science Meeting, on the 20th and 21st October, contact Izzie Bryce, [Ibryce@decomnorthsea.com](mailto:Ibryce@decomnorthsea.com) for more information.

There are a number of training opportunities available at the MASTS ASM on Friday 21st October:

- Choice Modelling for Ocean and Coastal Management
- Modelling your data: a hands-on introduction to dynamical systems and Bayesian statistics for postgraduates and early career researchers



## 15th-17th November 2016: SUT 2016 Technical Conference, The Future of Underwater Technology

London, UK

The conference will be held in London (UK) to celebrate the 50th anniversary year of the Society. It aims to attract the best authors in their field from across the world to showcase new technologies, products, best practices and in particular foresight the next generation of subsea engineering, marine science, and all aspects of underwater technology. It will be a flagship event for the Society and it is the intent for it to become a regular occurrence and be held in future at SUT global centres around the world.

Academics, Consultants, Engineers and Scientists, Business Executives and Managers, Lawyers, Insurers and Underwriters, Researchers, Technicians, Young Professionals and Students are some of the people we expect to see at the conference. There are also opportunities for sponsorship and to take up exhibition space. The venue will allow provision for vessel access alongside.

The programme will consist of plenary sessions, technical sessions, and student poster displays. Substantial effort will be made to ensure the highest quality programme with emphasis on the theme of the event. The final programme will be developed by the Technical Steering Committee which will be made up of representatives from the whole SUT organisation including Branch Committees, Special Interest Groups, and Council, [www.sut.org/event/sut2016](http://www.sut.org/event/sut2016).

## 6th-7th September 2017: Advances in Marine Biogeochemistry Conference VIII

Oban, UK

Save the date for AMBIO VIII, more information nearer the time, [www.challenger-society.org.uk/](http://www.challenger-society.org.uk/)

## Marine Biogeochemistry Forum

**Advances in Marine Biogeochemistry Conference VIII**

**Save the date!**  
**6 – 7 Sept 2017**  
**at SAMS in Oban**

Marine Biogeochemistry Special  
Interest Group of the Challenger Society



AMBIO meetings set the stage for Marine Biogeochemistry in the UK, connecting disciplines within the field and establishing networks for the integration of early career scientists. The AMBIO VIII meeting in September 2017 is to be hosted at the Scottish Association for Marine Science in Oban. Save the date! Registration will open in early 2017.

Info: [www.challenger-society.org.uk/Marine\\_Biogeochemistry\\_Forum](http://www.challenger-society.org.uk/Marine_Biogeochemistry_Forum)  
Contact: [kirsty.crocket@sams.ac.uk](mailto:kirsty.crocket@sams.ac.uk), [natalie.hicks@sams.ac.uk](mailto:natalie.hicks@sams.ac.uk)

## 2nd-6th October 2017: the 5th IMBIZO

Woods Hole, MA, USA

Mark the dates !, IMBER will hold its fifth IMBIZO (the Zulu word for a gathering) at the Woods Hole Oceanographic Institute. The theme of IMBIZO V will be: *Marine biosphere research for a sustainable ocean: Linking ecosystems, future states and resource management*. We will follow the usual IMBIZO format of three concurrent but interacting workshops – topics to be announced soon. Please spread the news widely.



The CSMS email address is [info@challenger-society.org.uk](mailto:info@challenger-society.org.uk). Contributions for next month's edition of Challenger Wave should be sent to: [john@vectisenvironmental.com](mailto:john@vectisenvironmental.com) by the 30th September.

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](mailto:jxj@noc.ac.uk) as soon as possible

## ***JOBS***

No job adverts sent to me this month i'm afraid, come on let's get writing those grant proposals ! – **Ed.**

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