# Challenger Wave

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

# NEWS

## Seeking Challenger Fellowship Nominations 2018

The President would be grateful to receive nominations for Challenger Fellowships before 31st March 2016. Fellowships will be awarded at the Challenger conference in Newcastle in September 2018. Fellowships are awarded to early career scientists for their achievement or promise in a branch of marine science: marine biology, marine chemistry, marine geology and marine physics. Details of the nomination process can be found on the Fellowships page on the website at <a href="http://www.challenger-society.org.uk/Fellowships">http://www.challenger-society.org.uk/Fellowships</a>.

### Nominations/Eligibility

- 1. Nominations should be by submitted by email or letter (deadline for submission is **31st March 2018** explaining the reasons for nomination, quoting, where appropriate, relevant reference to scientific publications or other contributions.
- 2. A short curriculum vitae of the nominee is required.
- 3. The nomination should be submitted by a single proposer with support by one or preferably two others.
- 4. Nominations should be submitted to the President of The Society rachel.mills@soton.ac. uk (from whom advice may also be sought).
- 5. Nominees should be members of the Society.
- 6. Nominations and applications will be considered by the Council of the Challenger Society.
- 7. Current Council members of the Society are

ineligible for any award or prize.

- John Bacon, Honorary Secretary, Challenger Society for Marine Science

# Polar bear population decline may have been underestimated

A predicted population decrease of polar bears by around 30 per cent over the next three to four decades may have been underestimated, according to research from the Scottish Association for Marine Science (SAMS). Bleak population predictions have considered the reduction of sea ice in the region as a loss of habitat, restricting the bears' movements, hunting prospects and cub survival.



Polar bears in the Arctic

Research led by SAMS scientist Dr Thomas Brown, published in the journal PLOS ONE, has highlighted how the polar bear diet relies heavily on the production of microscopic algae that grow underneath the sea ice. The algae are eaten by zooplankton and this energy works its way up the food chain to the region's top predator. Looking at three polar bear communities, in the Canadian Arctic, Dr Brown showed that, on average, 86 per cent of the energy consumed was derived from sea ice algae, as opposed to open ocean algae.

The polar bears' reliance on carbon (energy) derived from sea ice algae was surprisingly high and shows that the reduction of sea ice means more than just a loss of habitat. It threatens the success of the entire food web in the Arctic as we know it. We know that carbon from sea ice algae is important for Arctic animals, but we need to quantify how much of that carbon is consumed in order to understand the full impact of sea ice loss."Dr Brown has devised a method to measure how much of a species' diet is derived from Arctic sea ice by tracing a chemical produced by sea ice algae, known as IP25, all the way up the food chain. He believes the method can now be used to establish long term monitoring of polar bear diets, which could inform future conservation measures. Sea ice cover in the Arctic circle is generally decreasing year on year. The lowest winter maximum ice extent ever recorded by

# satellite (1979-2017) occurred on March 7, 2017.

### China's new Arctic Policy: Polar Silk Road On the 27th January, China's State Council announced a new comprehensive Arctic policy outlining China's role in the future of the Arctic. The new policy also highlights the importance of the "Polar Silk Road" as a part of the One Belt One Road framework. The Arctic Circle Secretariat is honoured to be listed as one of the main international platforms where China aims to further its cooperative participation in the Arctic. This new China-Arctic policy follows numerous Chinese engagements in the Arctic in recent years, including participation in all Arctic Circle Assemblies and an invitation to hold an Arctic Circle Forum in China in the future. The announcement of China's new Arctic policy was widely covered in the international media, including major stories in the Financial Times and China Daily.

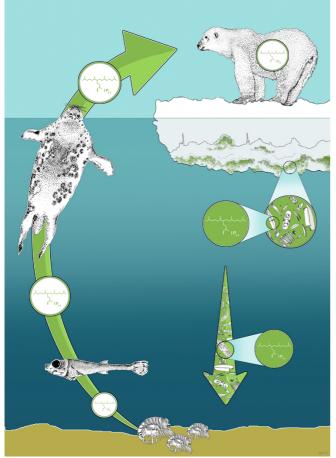
# **Marine Facilities Planning**

The updated Marine Facilities Planning website, available at: https://nerc.marinefacilitiesplanning. com, enables scientists to apply to use marine facilities from the Natural Environment Research Council (NERC) in support of marine science. To view current/past cruise programmes or details of published cruise applications, simply click the programme button. To apply to use marine facilities, you must be a registered user of the Marine Facilities Planning Website. To do this, please complete and submit your details via the Account Request page. If you have any questions or feedback about the Marine Facilities Planning



Arctic researcher Dr Tom Brown of SAMS

Dr Brown said "Polar bears rely on sea ice as habitat. Consequently, conservation assessments of polar bears identify the ongoing reduction in sea ice to represent a significant threat to their survival. However, the additional role of sea ice as an indirect source of energy to bears has been overlooked.



Graphic showing the movement of IP25 in sea ice carbon through the Arctic food web, from zooplankton up to the polar bear

Website, please kindly contact Colin Day, NMF Programme Manager (cdy@noc.ac.uk).

# The UK Marine Science and Technology Compendium

A database, featuring marine-related UK research institutes and university departments, the industry sector, government bodies and non-governmental organisations, has been designed at the request of members of the National Oceanography Centre (NOC) Association. The database is available at: http://naqbase.noc.ac.uk/. If your organisation is not yet listed, or if you have feedback or requests, please kindly contact Jackie Pearson, NOC Association Secretariat (jfpea@noc.ac.uk).

### Joining the Challenger Society Council

The Challenger Society Council, comprising approximately fifteen ordinary members of the Society, is the body entrusted with managing financial affairs, setting policy and deciding how the Society can best support and engage with the marine science community. The council is led by the serving President and council members, after election at a society AGM, council members generally serve for a period of three or four years taking responsibility for one of the management portfolios administered by the Society. Detail of the current Council membership is listed on the website at http://www.challenger-society.org.uk/ The Council. The council meets four times a year (usually in London) and presents the progress of the Society to the membership at the Annual General Meeting, held either at the Challenger Conference or a suitable scientific meeting, in September each year.

During the next 12 months there are three vacancies for council membership places which need to be filled, including the post of Honorary Secretary. For these positions we seek lively and engaging scientists, from academia or industry, enthusiastic about supporting career development for our colleagues and helping to shape and manage the future of one of the oldest and foremost Marine Science Societies in the world. If you are a full member of the Society and interested in joining the council, please email an expression of interest to the Honorary Secretary (john.bacon@cefas.co.uk) with a short statement of your career to date and how you think that you might best contribute to the Council. Your application will be considered at the next scheduled council meeting and if successful, a proposal for your election at the AGM put forward. Please mark the email subject as Challenger Society Council Application. We really look forward to hearing from you. - John Bacon Honorary Secretary, Challenger Society for Marine Science



# 61st Marine Measurement Forum at NPL Teddington on 24th May 2018

The Steering Group for the non-profit making Marine Measurement Forum (MMF) series of twice yearly, one day networking seminars is delighted to announce details for the forthcoming MMF61. The event is scheduled for Thursday 24th May 2018 and will be hosted by the National Physical Laboratory (NPL) in Teddington, Middlesex.

Detailed information on the day's proceedings, including a call for presentations and event registration, can be found at http://www.npl.co.uk/events/24-may-2018-the-61st-marine-measurement-forum-mmf. - Roger Scrivens. MMF Steering Group

# Applications are now open for the IMBeR ClimEco6 Summer School

We are very pleased to announce that the sixth summer school in the IMBeR ClimEco (Climate and Ecosystems) series will be held at the Gadjah Mada University in Yogyakarta, Indonesia from 1-8 August 2018. The theme of ClimEco6 is Interdisciplinary approaches for sustainable oceans.

In addition to lectures and discussions around topics such as

- the impacts of climate on marine systems and implications for food security
- modelling options for different disciplines and integrated research
- social and economic research techniques, and
- governing and managing marine resources,

there will also be several practical workshops aimed to help early-career researchers to be more efficient and effective!

An amazing group of lecturers will participate for the whole duration of the course. They are: Chris Cvitanovic (the convener), Jessica Blythe, Laurent Bopp, Beth Fulton, Priscila Lopes, Francis Nunoo, Dr Saudi (our local host), Rashid Sumaila, and Ingrid van Putten. For more information about the summer school, see the website. If you have any questions, please contact IMBeR@imr.no.

Because of the hands-on nature of the summer school and to ensure good discussions and interactions, the number of participants will be limited to 60. To be considered for a spot on the course, you need to apply by 26 March 2018, by completing the application form, and submitting it along with a short CV and motivation for why you want to attend.

### Missed the Open Sea Lab?

Now you can experience the excitement, enthusiasm and creativity of EMODnet's first Open Sea Lab in our short film. Meet the teams and hear what they thought about this energetic three-day bootcamp and hackathon to create innovative solutions from marine open data! - <a href="http://www.emodnet.eu/missed-open-sea-lab-watch-film">http://www.emodnet.eu/missed-open-sea-lab-watch-film</a>

The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund.



### **JMSE 2018 Travel Awards**

Two travel awards sponsored by the Journal of Marine Science and Engineering (http://www.mdpi.com/journal/jmse/awards) for postdoctoral researchers and PhD. students are available to attend marine science and engineering related conferences in 2018. The award will be 800 CHF (Swiss Francs) for each winner; the application deadline is the **20th April 2018**.

We are currently accepting nominations and applications for the award. Please find additional details and apply here: http://www.mdpi.com/journal/jmse/awards. - Dr. Anthony S. Clare, School of Natural and Environmental Sciences, Newcastle University.

# European Early Career Researchers: Apply to attend an IMBeR workshop on working at the Science-Policy-Society interface

The IMBeR Network of IMBeR Early Career Scientists (NIECS), in conjunction with the European EKLIPSE project, is convening a workshop for Europe-based Early Career Researchers (less than seven years post PhD) to learn about working efficiently and effectively at the Science-Policy-Society interface in Veli Lošinj, Croatia from 17-20 June 2018.

Topics to be covered include:

- The role of science in natural resources governance
- How to produce usable marine science
- Improving knowledge exchange between scientists and policy-makers
- Career pathways to have impact at the science-policy-society interface

There will also be practical sessions on techniques to interact effectively with different stakeholders. For example:

- · How to write a policy brief
- How to develop a Research Impact Plan
- Simulated science-policy discussions with an invited policy-maker

More information is available on the website. Because of the practical nature of the course, only 25 participants will be accepted. To be considered for one of the places, complete and submit the application form and a short CV by 5 March 2018. Some travel support is available. Information about how to apply for funding will be provided to successful applicants. If you have any questions, contact Lisa at IMBeR@imr.no



### Southampton to Guadeloupe

I am just back on dry land after being Chief Scientist on the 42 day JC156 cruise between Southampton and Guadeloupe. This cruise was undertaken on the RRS James Cook and was a UK contribution to the international GEOTRACES program, delivering trace element and isotope data along their GA13 section.

The goal of the cruise was to collect the first ever nanomolar trace metal data set along the

hydrothermal vent sites on the Mid Atlantic Ridge from the Azores to around 20° N. Alongside that, we planned to collect a number of additional datasets to help in the interpretation of the trace metal data.



Cruise photo of JC156 Scientists, Technicians and Crew (photo credit: Valérie Le Guennec)

Overall, the cruise was a great success with 37 science stations completed and an excellent on board atmosphere. We had the pleasure of enjoying Christmas at sea, which was a new one for me. To help in the festivities, the scientists all bought two 'Secret Santa' presents – one for a fellow scientist and one for the crew. Moreover, one colleague from the University of Washington (USA), Joe Resing, went to the trouble of making cruise t-shirts for all scientists and crew!

Our captain took on the role of Father Christmas and the day kicked off the right spirit! Presents were followed by an excellent meal laid on by our sterling galley staff and enjoyed by all. There's no doubt this shared day helped cement an excellent relationship between scientists, technicians and crew, which helped enormously in our scientific successes. We also had the pleasure of enjoying New Year at sea and the ships bell was put to good use with the oldest on board ringing out 2017 and the youngest ringing in 2018!

We spent almost all our time in subtropical waters and while this meant we did not see quite as much wildlife as we might have liked we enjoyed gorgeous tropical sunrises and sunsets! The weather was warm and by the time we got to Guadeloupe the entire scientific party headed straight to the beach for a well-earned swim!



The last sunrise of 2017 (photo credit: Alessandro Tagliabue)

Thanks to our dedicated bunch of samplers and analysts, many initial datasets were generated on board, which helped shape decisions made at sea. Over the months ahead even more data will emerge to help us better understand how the hydrothermal sites on the mid Atlantic Ridge shape ocean biogeochemistry. - Alessandro Tagliabue, JC156 Chief Scientist, University of Liverpool

# CALENDAR

# 15th Februry 2018: Business Breakfast Meeting

NOC, Southampton, UK





### NOC Business Breakfast Meeting – Thursday 15 February 2018

On the Thursday 15 February 2018 the National Oceanography Centre, Southampton (NOC) will be hosting the next in its series of NOC Business Breakfast meetings.

At this Breakfast Club meeting, Richard Hall will be talking about the new ERDF Innovation Network Programme and how it will help

SMEs access the expertise and facilities of the Knowledge Base using Mini Grant, (£2,400 for the mini grant funded 80%) and Maxi grants. (£24,500 funded 49%)

Breakfast will be served from 0830 with the presentation beginning at approximately 0915. The room is available before and after the presentation for free format networking giving an opportunity for industry to meet and network with NOC and Innovation Network staff and take part in opportunistic discussions, whilst enjoying breakfast and a coffee.

This event is free to attend, to register please click here

13th-15th March 2018: Oceanology International



- Meet the key players: with 500+ exhibitors from over 79 countries displaying state of the art marine technologies, take the opportunity to explore a diverse range of solutions
- Unbeatable networking: Connect with over 8,000 attendees from a range of different sectors in the exhibition and our Ocean Social networking events
- Essential information: learn from industry experts presenting a diverse programme
  of technical sessions in the free-to-attend conference
- 4. **Vessels and demonstrations:** head to the docks to watch live coverage of exhibitor's equipment at work
- Discover the latest marine technologies: Several new features have been added to make it even easier to identify new technology including the Ocean Tech Hub and Ocean ICT Exoo

We are pleased to announce that for the first time in 2018, we'll be running the highly anticipated Ocean Futures Forum: an exclusive one day programme (Tuesday 13th March) of informative debates and networking for senior strategists and heads of business. Join Oceanology leaders to take a long term view of Ocean Energy, Business Diversification and Sustainability Trends. For more information visit the OI website or contact Ellen Burgess.

The CTNW (Catch the Next Wave): Frontiers of Exploration conference has moved. This full day conference, now taking place on Thursday 15 March, organised with The Explorers Club, will examine the intrinsic link between technology and exploration and how one drives the other. Pairs of explorers and technologists will examine the role of enabling technology for exploration on the seafloor, in, on and over the oceans and into space.

Back again for 2018: the free-to-attend Conference Programme

9 Technical Tracks: Three days of technical updates and case studies on the latest marine technology and ocean science R&D, applications and best practice. View the confirmed schedule, with speakers confirmed in December.

Free Vessel and Dockside Demos: Visitors are able to watch live coverage of equipment at work via the popular elevated viewing platforms on the dockside or via a covered private meeting area and have the opportunity to network.

Near and Far Markets Sessions: Content will be delivered by Trade Commissions and Regional Trade & Industry groups, showcasing opportunities within their country/region, support mechanisms provided to assist trade with the country/region (including inward investment) and any products, services or companies from the country/region who want to work with Oi's international audience

# 8th-13th April 2018: European Geophysical Union (EGU) 2018 Meeting

Vienna, Austria

Examples of sessions at this year's meeting are:

Session OS2.2: "Advances in understanding of the multi-disciplinary dynamics of the Southern European Seas (Mediterranean and Black Sea)". During this session, we propose to overview recent developments and understanding, by observations and modelling, of the Southern European Seas (SES) general circulation, physical processes, their ecosystems biogeochemical fluxes. For further information, visit the EGU Assembly site. We are looking forward meeting you in Vienna, Marilaure Grégoire, Samuel Somot, Ananda Pascual, Emin Ozsoy, Gianmaria Sannino, Emil Stanev (conveners)

Session OS2.5: "How integrated research infrastructures can support science and policy needs in coastal marine areas". The purpose of this session is to present how the so called coastal Research Infrastructures (RI) are supporting science results and society needs in the coastal seas: from technology developments to analysis of the results after deployment in the field and feeding operational oceanography thanks to assimilation of harmonised data flow. Emphasis is given on 5 scientific areas:

- I. Pelagic phytoplankton biodiversity, with a focus on HAB and Eutrophication.
- II. Monitoring changes in benthic biodiversity
- III. The occurrence of chemical contaminants in coastal waters and biological responses
- IV. The carbon cycle and carbonate systems
- V. 4-D characterisation of trans-boundary hydrography and transport

Studied processes and their variability scales are not restricted but a special attention will be given interactions between physics biology/biogeochemistry. In addition to usual research and development results, presentations are expected to exemplify RIs' answers to societal needs, policy requirements in the coastal marine domain. Achievements supported by the JERICO-RI Research Infrastructure are expected but not exclusively. Indeed, the main objective is to exchange results and experiences on the topic at a worldwide level. Conveners: Ingrid Puillat (Ifremer, France, ipuillat@ifremer.fr), Anna Rubio (AZTI, Spain), Laurent Delauney (Ifremer, France), Catherine Boccadoro (IRIS, Norway) and Luis Felipe Artigas (ULCO, France).

Session ESSI1.1: "Informatics in Oceanography and Ocean Science". The session presents the state of art information systems in oceanography (metadata, vocabularies, ISO and models), applications, data interoperability (Interoperability forms, Web services, Quality of Services, Open standards), data circulation and services (quality assurance / quality control, preservation, network services) and Education in ocean science (Education and Research, Internet tools for education). The 2018 session should provide new ideas on the interoperability issues deriving from different sources of data. ISO standards introduce the necessary elements in the abstract process aiming to assess 'how' and 'how much' data meets applicable regulatory requirements and aims to enhance user needs. Data management infrastructures should include an evaluation of data by assuring relevance, reliability and fitness-for-purposes / fitness-foruse, adequacy, comparability and compatibility. Presenters are strongly encouraged demonstrate how their efforts will benefit their communities. facilitate collaborative user knowledge building, decision making knowledge management in general, intended as a range of strategies and practices to identify, create, represent and distribute data, products and information. Convener: A. Novellino, Co-Conveners: Stefania Sparnocchia, Simoncelli; Link: http://meetingorganizer. copernicus.org/EGU2018/session/26506

Session OS4.4/BG3.8: "Recent advances in ocean physics and biogeochemistry from autonomous underwater vehicles". This session aims to bring together scientists in an interdisciplinary discussion about all aspects of

the scientific analysis of data collected with Autonomous platforms on the coastal, regional, global scales. Topics on basin, or exhaustive) physical and biogeochemical variability of the ocean, ocean processes on different spatial and temporal scales (from ocean turbulence to basin-wide circulation), interactions between the ocean, atmosphere and land, have been welcomed in this session! Co-Conveners: Simón Ruiz, Pierre Testor, Karen Antonio Olita: http:// Heywood, Link: meetingorganizer.copernicus.org/EGU2018/sessi on/28016

**Session OS4.5:** "Copernicus Marine Environment Monitoring Service (CMEMS)". This session will focus on:

- Scientific advances on themes relevant to CMEMS (e.g. on physical and biogeochemical modeling, coupling with coastal systems; coupling with sea-ice, atmosphere & waves models; data assimilation both for physics and biogeochemistry; impact of existing and future in situ and satellite observations for estimates of the ocean state; processing and analysis of remote and in-situ observations of the ocean) that are needed for the short to long term evolution of the CMEMS products.
- Verification, validation and uncertainty estimates of CMEMS products and forecasting skills.
- The use of CMEMS products for downstream applications,
- Ocean monitoring and on the long-term assessment of the ocean physical and biogeochemical states.

A detailed description is given below, and the direct link to session OS4.5 is http://meetingorganizer.copernicus.org/EGU20 18/session/26768

Be a part of the EGU 2018 General Assembly (http://www.egu2018.eu/) by entering the EGU Photo Competition. But hurry, the deadline for submissions is next week, up until 15 February! Every participant pre-registered for the General Assembly can submit up to three original photos and one moving image on any broad theme related to the Earth, planetary, and space sciences. The best photos will be exhibited at the EGU General Assembly on 8–13 April, and winners receive a free registration to next year's General Assembly.

Register on Imaggeo to upload your image and

check the checkbox to enter it into the contest – it is that easy! <a href="http://imaggeo.egu.eu/signup/">http://imaggeo.egu.eu/signup/</a>. You can find out more about the competition, including past winners, at <a href="https://imaggeo.egu.eu/photo-contest/">https://imaggeo.egu.eu/photo-contest/</a> and <a href="https://imaggeo.egu.eu/photo-contest/information/">https://imaggeo.egu.eu/photo-contest/information/</a>.

If you are interested in developing a project to raise awareness of the geosciences outside the scientific community, you can apply for the EGU Public Engagement Grants, also by 15 February. Winners receive 1000 EUR and a free registration to the EGU 2019 General Assembly: https://www.egu.eu/news/367/applications-openfor-egu-public-engagement-grants/. - Chloe Hill,

### EGU Executive Office

# 8th-9th May 2018: Arctic Circle Forum Tórshavn, Faroe Islands

The Arctic Circle Secretariat is accepting proposals for sessions at the Arctic Circle Forum to be held in Torshavn, organized in cooperation with the Government of the Faroe Islands. Governments, universities, companies, research institutions, organizations and associations are welcome to submit proposals: <a href="http://www.arcticcircle.org/forums/faroeislands/proposals">http://www.arcticcircle.org/forums/faroeislands/proposals</a>.



Proposals will be considered for sessions related to the Forum's themes:

# Innovations for sustainable economic development

Prospects for new and existing businesses in the Arctic, focusing on IT, digitalization, fishing, shipping, maritime services, energy, tourism, food.

Transport, investment and infrastructure

Exploring priorities for infrastructure and investments to promote advancement and growth: maritime transport, telecommunications, education and research.

### **Dynamic communities**

Meeting demographic and societal challenges in Arctic societies: gender equality, e-health, community food and energy sustainability.

DEADLINE: March 1, 2018

# 24th May 2018: 61st Marine Measurement Forum

Teddington, UK

The Steering Group for the non-profit making Marine Measurement Forum (MMF) series of twice yearly, one day networking seminars is delighted to announce details for the forthcoming MMF61. The event will be hosted by the National Physical Laboratory (NPL) in Teddington, Middlesex. Detailed information on the day's proceedings, including a call for presentations and event registration, can be found at <a href="http://www.npl.co.uk/events/24-may-2018-the-61st-marine-measurement-forum-mmf">http://www.npl.co.uk/events/24-may-2018-the-61st-marine-measurement-forum-mmf</a>

# 28th May to 1st June 2018: 50<sup>th</sup> International Liege Colloquium on Ocean Dynamics: Longterm studies in oceanography – a celebration of 50 years of science at the Liege Colloquium Liège, Belgium

In 2018 we arrive at the 50<sup>th</sup> edition of the International Liège Colloquium of Ocean Dynamics, a perfect reason to celebrate and review the advances made in studying the oceans during the last several decades. In particular, this edition will be dedicated to long-term studies in oceanography. Our knowledge about the ocean has changed dramatically over these past 50 years, as has the availability and quality of data and tools to study the ocean. The ocean plays a crucial role in the regulation of the Earth's climate. As climate change poses an unprecedented threat to the Earth environment, studies that focus on the long-term variation of the ocean and its response to climate change have therefore become essential to understand and monitor the Earth climate.

### Sessions:

### Ocean dynamics & climate change

Studies addressing the impact of climate change on ocean dynamics, and the influence of the ocean on climate.

Oceanic climate records (datasets, methods and comparisons)

Generic studies about model-based and observation-based datasets (reanalyses, validation reconstructions), their intercomparisons, and studies about methods for multidecadal reconstructions reanalyses and (assimilation, bias corrections and drift corrections). Reprocessing and intercallibration of multi-mission datasets.

### Coastal and regional processes

Studies focusing on long-term variability and local trends of specific regions, including downscaling of large scale processes.

### Trends in polar regions

Abstracts on the trends of ocean and sea ice dynamics of polar regions, influence of climate on their variability and the impact of these regions on the global climate system.

### Biogeochemical processes

Studies about oceanic long-term ecosystem changes induced by climate variability.

### Long-term trends in oceanography (open session)

An open session for all studies on the multidecadal study of the ocean. Abstracts that do not fit in other session can be submitted here.

Further details are available at: http://labos.ulg.ac. be/gher/home/colloquium/colloquium-2018/.

We are looking forward to welcoming you in Liège in the name of the Organizing Committee: Aida Alvera Azcarate, ULG, Belgium Jean-Marie Beckers, ULG, Belgium Hugues Goosse, UCL, Belgium

### 4th-8th June 2018: 4th International Symposium on The Effects of Climate Change on The World's Oceans

Washington D.C., USA

REGISTER: On-line

http://meetings.pices.int/meetings/international/20 18/climate-change/registration

Check sessions:

http://meetings.pices.int/meetings/international/20 18/climate-change/Program

A good IMBeR relevant session is S13: Multiple stressors at multiple scales: ecosystem based management in the face of changing ocean conditions

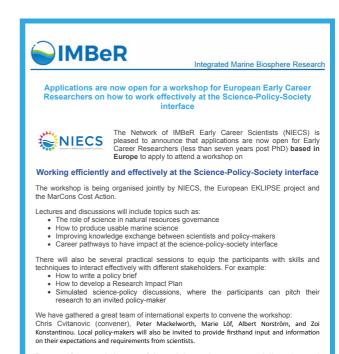
**APPLY: Financial Support** http://meetings.pices.int/meetings/international/20

### 18/climate-change/support

We look forward to seeing you in Washington D.C. - ECCWO Symposium Convenors

### 17-20 June 2018: European Early Career Researchers: Apply to attend an IMBeR workshop on working at the Science-Policy-Society interface

Veli Lošini, Croatia



Because of the practical nature of the workshop and to ensure good discussions and interactions, only 25 participants will be accepted. To be considered for a spot on the course, please submit your completed application form by 5 March 2018.

Some travel support will be available. Further information will be provided to the

successful applicants.

Please note this workshop is **only for EU-based ECRs** and preference will be given to those whose institutions do not offer this type of training.

If you have any questions, please contact Lisa at IMBeR@imr.no

### 15th-26th June 2018: POLAR2018 - Where the Poles SCAR/IASC come together, Conference

Davos. Switzerland

The Scientific Committee on Antarctic Research SCAR and the International Arctic Science Committee IASC invite the international polar and high altitude community to their joint meeting POLAR2018, hosted by WSL and SLF.

### Program overview

15 - 18 June 2018: SCAR and IASC/ASSW **Business & Satellite Meetings** 19 - 23 June 2018: SCAR/IASC Open Science

Conference, including the COMNAP Symposium 24 - 26 June 2018 SCAR Delegates Meeting & 2018 Arctic Observing Summit

The goal of POLAR2018 is to bring together excellent research from both poles, as well as from high altitude areas, focusing on the similar challenges those regions face. The program features 65 different sessions, structured into 12 categories. In addition to the parallel sessions, central elements of the Open Science Conference (OSC) will be keynote presentations, miniextended poster sessions. symposia. exhibitions. The annual COMNAP symposium will be held during the OSC, as well as a plenary lecture from the 2018 Arctic Observing Summit as an opening to this biennial summit immediately after the OSC. A range of excursions and trips will allow participants to make the most of coming to the Swiss Alps and enjoy science, nature, culture,

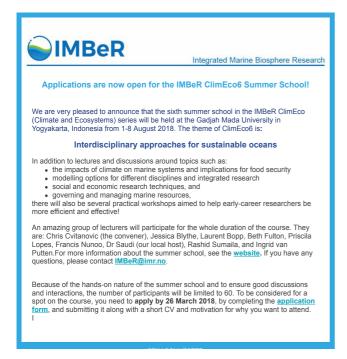
### **Davos**

and sports.

POLAR2018 will be held in the Swiss mountain town of Davos, which can easily be reached by train from Zurich Airport. Davos, Europe's highest city, is situated in the Eastern part of the Swiss Alps at 1560 meters above sea level. It offers an advanced congress infrastructure and a wide range of accommodation for all budgets. The stunning alpine environment will ensure your visit is an enjoyable experience. We are looking forward to welcoming you in Davos in June 2018.

# 1st-8th August 2018: IMBeR ClimEco6 Summer School

Gadjah Mada University in Yogyakarta, Indonesia



# 10th-13th September 2018: 18th Biennial Conference of the Challenger Society

Newcastle upon Tyne, UK

Registration is now open for the 18th Biennial Conference of the Challenger Society for Marine Science: conferences.ncl.ac.uk/challenger-2018/registration/. For a list of available sessions, to submit an abstract or check for details and news please visit our website conferences.ncl.ac.uk/challenger-2018/. We look forward to seeing you in Newcastle upon Tyne in September - **Dr Alan Jamieson**, Challenger Conference 2018: Organising committee chair.



The biennial Challenger conference attracts over 400 leading UK marine scientists and science managers. As well as showcasing cutting edge marine science and technology, the conference is noted for its training of young scientists and networking events, including a public lecture by an eminent authority on relevant societal marine issues.

### 2018 Mini-Expo

This year we are privileged to welcome as special keynote speaker, His Serene Highness Albert II, Sovereign Prince of Monaco - The Prince Albert II of Monaco Foundation who will be present on the final day.



The mini-expo will run over 3 days (10th,11th and 13th) The conference normally rotates between the major UK marine research establishments, but 2018 sees the first visit to the University of Newcastle. The Venue is impressive and the exhibition space for sponsors is large, and colocated with the refreshments and close to posters and lecture rooms with good access for exhibitors.

The society is now the adhering body for the Scientific Committee on Oceanic Research (SCOR) providing yet more exposure for participating companies.

Sponsorship packages will give local, national and international companies the chance to support UK marine scientific research and the training of young marine scientists, whilst a targeted exhibition and careers fair will also enable companies to self promote and recruit new staff. Spaces will be limited so please book early.

Take this early opportunity to help make the UK's premier marine science conference in 2018
the most successful ever.





Stand positions are taken on a first come first served basis, preference will be accommodated if possible.

The refreshments, and posters will be held in the Lindisfarne Room.



# 17th-21st September 2018: 53rd European Marine Biology Symposium

Ostend, Belgium

The Flanders Marine Institute (VLIZ) and LifeWatch Belgium are organizing the 53rd edition of the European Marine Biology Symposium (EMBS53). The EMBS53 Organizing and Scientific Committee are pleased to welcome your abstract submissions for oral papers and scientific posters. We particularly welcome papers on 'Marine Biology from a Historical Perspective', 'Science in a Modern Era', 'Marine and Coastal Citizen Science' and 'Science in the North Sea'. The deadline for abstract submissions is the 15th April 2018.

Please note that no extensions to the deadline will be granted and that presenting authors are responsible for registration, travel and accommodation costs. Presenters who are unable to attend should arrange for another qualified individual to present the paper or poster in question (with notification to the Organizing Committee). All abstract submissions should be submitted via our abstract submission form <a href="http://www.embs53.org/submit">http://www.embs53.org/submit</a>.

We are glad to announce that the Journal of the Marine Biological Association (JMBA) kindly offers to publishing a special issue of the EMBS53 conference (scheduled for October 2019). Everyone who contributes a poster or an oral presentation at the EMBS53 is invited to submit a manuscript by 7th December, 2018. All manuscripts will go through a peer-review process.

### Important dates:

- -Deadline abstract submission (there will be NO extension of the deadlines): 15th April 2018
- -Notification of abstract acceptance: 15th May

2018

-Deadline early bird registration: 31st May 2018 -Deadline late registration: 31st August 2018

For more information: http://www.embs53.org/.

- Leen Vandepitte, on behalf of the EMBS53
Organizing Committee.

19th-21st October 2018: 6th Arctic Circle assembly

Reykjavik, Iceland



Proposals are now being accepted for Breakout Sessions at the Sixth Arctic Circle Assembly to be held October 19 – 21, 2018 in Reykjavík, Iceland.

Participation will be granted based on session topic, area of focus, goals, and room availability at the Harpa Reykjavík Concert Hall and Conference Center. When proposals are submitted, 50% of speakers need to be confirmed.

SUBMISSION DEADLINE: MAY 15th, 2018

**Submission Guidelines** 

Submit proposals to Secretariat@ArcticCircle.org

Over 120 sessions were held at the 2017 Arctic Circle Assembly, with more than 600 speakers. Programs from previous Assemblies, which list all past breakout sessions, may be found at <a href="https://www.arcticcircle.org">www.arcticcircle.org</a>. The Arctic Circle provides an open, democratic forum for discussion and cooperation on Arctic Affairs.



www.arcticcircle.org

# 5th-7th November 2018: International Conference on Marine Data and Information Systems

Barcelona, Spain



# 21st November 2018: Joint meeting of the Challenger Society History SIG and the Royal Met Soc History Group

NOC, Southampton, UK

A meeting is being planned, sponsored jointly by the Challenger Society History SIG and the Royal Met Soc History Group. It will focus on how our ability to collect ocean temperature and salinity profiles has developed from the era of the Challenger Expedition (1870s) to the present day when the Argo array of profiling floats now provides global coverage. It will also highlight the products derived from these data and will look towards future developments. More information will be circulated as it becomes available.

The CSMS email address is info@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



### **Engineers/technical staff at the National Oceanography Centre (Southampton)**

The Ocean Technology & Engineering Group at the National Oceanography Centre (Southampton) is seeking engineers/technical staff to aid in the development and delivery of our novel sensor technology for in-situ measurement of physical, chemical, and biological parameters in the oceans. Current vacancies are:

### Research Engineer, In-Situ Sensors

We seek a microfluidics engineer to design and develop in situ sensors for chemical and biological oceanographic parameters. Our ideal applicant can pull together expertise in multiple disciplines including fluidics, optics, chemistry, and mechanical systems to produce innovative, elegant design solutions for a range of applications.

### Oceanographic sensor assembly and test engineer

This role will support the manufacture, assembly, and troubleshooting of cutting-edge robust microfluidic sensing systems in a research & development environment. We seek someone who enjoys mastering a broad spectrum of interdisciplinary technical skills, who enjoys hands-on practical work, pays careful attention to detail, and takes initiative.

### Research Engineer: Electrochemistry and Impedance sensor technology

We seek a talented research engineer to lead innovations in the design, development and optimisation of new and existing electrochemical and impedance sensors within the group. You'll bring together analysis, systems design, laboratory study and simulation to enable improved performance, reliability and reduced size and resource consumption.

### Sensor development engineer: optical dissolved gas sensors

The focus of this post will be to lead innovations on the development of an optical dissolved methane sensor and to lead work to integrate it into miniaturised autonomous underwater vehicles. The post will optimise sensor systems through design, testing, simulation and deployment to enable improved performance, reliability and reduced size and resource consumption.

Full job descriptions and application instructions are at http://noc.ac.uk/about-us/working-for-noc/vacancies

### Call for Applications for an Early-Career Scientist to Join the SCOR Executive Committee

The Scientific Committee on Oceanic Research (SCOR) is an international non-governmental organization whose vision is to advance international ocean research, within and across disciplines, by stimulating international cooperation in ocean sciences. More information about SCOR can be found at www.scorint.org.

SCOR is governed by an Executive Committee that currently includes 10 members: (1) 6 officers elected from among national SCOR committees, (2) 3 presidents (or their designees) of other parts of SCOR's parent organization (the International Council for Science) that have interests in ocean science, and 1 member appointed by the Executive Committee to add expertise to the committee, currently in geology. More information about the SCOR Executive Committee and its composition can be found at <a href="http://www.scor-int.org/SCOR\_ExComm.htm">http://www.scor-int.org/SCOR\_ExComm.htm</a>. SCOR rules allow the addition of one additional member to the Executive Committee to further improve the balance of membership on the committee. At the 2017 annual SCOR meeting, the Executive Committee decided to add an early-career scientist to the committee, to add perspectives from younger scientists to SCOR discussions.

**Job Description:** The early-career scientist will have the same responsibilities as other SCOR Executive Committee members (see <a href="http://scor-int.org/EC\_Job\_Descriptions.pdf">http://scor-int.org/EC\_Job\_Descriptions.pdf</a>). The duties of SCOR Executive Committee Members require a few hours each week for responding to emails and reviewing documents, as well as participation in one in-person meeting per year, the annual SCOR meeting. SCOR will pay for the travel costs related to the SCOR meeting. The term of appointment will be for two years.

**Requirements:** Applicants should be no more than 10 years post-Ph.D. or 40 years of age, and should be affiliated to an ocean science organization, institution or government agency. Applicants should have good communication skills in English, both speaking and writing.

Application and Review Process: Applicants should submit (1) the Application Form form, (2) a short CV, and (3) two reference letters to Ed Urban (ed.urban@scor-int.org) by 23:00 GMT on 31 March 2018. The SCOR Executive Committee will make a selection by 30 April 2018.

### Call for 500 new scientific positions in Portugal - apply to work at CCMAR

The Foundation for Science and Technology of Portugal (FCT) opened 500 new scientific positions at all levels (Junior researcher, Assistant Researcher, Principal Researcher, Coordinating Researcher). The call is open between 19th January and 15th February.

We invite strong candidates to apply to the FCT 'Stimulus to Individual Scientific Employment 2017' having CCMAR- Centre of Marine Sciences at the University of Algarve, Faro, Portugal (ccmar.ualg.pt) as the host institution (where selected candidates will be working). CCMAR is a top marine research institute in Portugal, with a vibrant and enthusiastic group of scientists and support, excellent facilities, extensive international collaboration and a leading member of the European Biological Resource Centre (embrc.eu). CCMAR invites candidates in all areas from Oceanography, ecology, organismal biology, bioinformatics, biotechnology, etc. Please get in touch if in doubt.

Those interested in applying should send, as soon as possible, considering the short deadline, an e-mail to <a href="mailto:ccmar@ualg.pt">ccmar@ualg.pt</a> (subject: Scientific Employment 2017) addressed to the director and include: 1) Motivation letter including planned research goals and up to two contacts for references; 2) Curriculum vitae; 3) an indication of which level you are applying for. CCMAR will reply shortly and may carry out online interviews. Detailed information about the call can be found <a href="mailto:here">here</a> in Portuguese (but CCMAR will help with translation and the application). The guidelines (In English) can also be downloaded from the website.

# Looking for a job in marine science? Follow CIESM on Facebook



In a world where jobs are increasingly hard to find, we are pleased to let you know that we just started to post on our Facebook page a diversity of relevant job offers regularly brought to our attention.

Follow us on Facebook now!

All the best, the CIESM team Mediterranean Science Commission

### There are jobs on the IMBER web site

http://www.imber.info



Integrated Marine Biosphere Research

### **IMBeR e-News**

### **Announcements and reminders**

- EU-based early career researchers, apply for the IMBeR workshop on operating effectively at the science-policy-society interface, Losnij, Croatia, 17-20 June 2018. Apply by 5 March
- Applications are open for the IMBeR ClimEco6 summer school Interdisciplinary approaches for sustainable oceans. Yogyakarta, Indonesia. 1-8 August 2018. Apply by 26 March
- IMBeR wishes all our Chinese colleagues and friends a happy New Year on Friday
- Submit a short film to the Ocean Film Challenge, could go viral on social media. Submit by 14 Feb
- UN announces decade of Ocean Science for sustainable development (2021-2030)
- Call for papers for special issue: Multiple Values for the Management and Sustainable Use of Coastal and Marine Ecosystem Services. Submit extended abstract by 28 Feb

### Conferences, meetings, workshops and webinars

- OceanObs'19 Town Hall at Ocean Sciences, Oregon Convention Centre C123-C124, 13 Feb 2018, 12:45-13:45
- IV International ENSO Conference, Guayaquil, Ecuador 16-18 October 2018. Abstracts by 30 April
- Indian Ocean Science meetings including SIBER and IIOE2, Jakarta, Indonesia. 18-23 March.
   Register now
- Blue Growth Summer school. AZTI, San Sebastian, Spain. 5-7 June 2018. Register now
- Summer lecture series: Ocean optics and colour science, Ville Franche, France. 25 June 7 Jully 2018. Apply by 1 March
- Ocean Deoxygenation Conference, Kiel, Germany, 3-7 September. Abstracts by 31 March
   NAS IV Conference Viewers Chicago Co. Largery 2010. Substitute assistance and by 201
- XMAS IV Conference, Xiamen, China. 6-9 January 2019. Submit session proposals by 30 April
- Sustainable Ocean Summit, Hong Kong, 14-16 November 2018. Registration is open
- 3rd GEO Data Providers Workshop, Frascati, Italy. 2-4 May 2018. Registration is open

### Jobs and opportunities

- Interdisciplinary, bi-national PhD: Conservation & MSP, SOCPacific project. Apply by 12 March
- Travel support to attend POLAR2018, Davos, Switzerland, 15-26 June. Apply by 28 Feb
- PhD: Global impact and distribution of marine plastic particles. U of Bern, Switzerland. Apply by 1
  March
- Expert Reviewers: Second Order Draft of IPCC Special Report on Global Warming of 1.5°C.
   Register by 18 Feb
- 2 Postdocs: Geographic image processing and data manipulation UMass, Massachusetts, USA.
   Apply by 1 March
- Four Postdocs: Marine Science. LabexMer, Brest, France. Apply by 15 April
- PhD: Microbial turnover of organic matter, in Arctic Ocean GEOMAR, Kiel, Germany. Apply by 15 Feb
- Postdoc: Marine Molecular Ecology, ODU, Norfolk VA, USA. Apply by 28 Feb
- PhD: Seafood and aquaculture supply chains, Arizona State, USA. Apply by 15 Feb

Visit the IMBeR Website