# Challenger Wave

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

### NEWS

### *Very short deadline*: MEDIN survey. The survey is live until 13<sup>th</sup> September

The Marine Environmental Data and Information Network (MEDIN) was established in April 2008 to make access to, and analysis of, marine data easier and cheaper for the good of all users of the marine environment and wider society.



MEDIN are currently looking to assess the value of the services we provide to the marine community and we need your help. Please fill in this short survey <a href="www.smartsurvey.co.uk/s/MEDIN\_User\_Survey/">www.smartsurvey.co.uk/s/MEDIN\_User\_Survey/</a>, which will only take around 10 minutes to complete.

The survey is designed to gather information on how people use MEDIN's services and how you benefit from them. Your help is gratefully received and will be used to improve the future services provided by MEDIN. The feedback you give will enable MEDIN to determine just how valuable a service we provide to the UK marine community. MEDIN have commissioned Economics for the Environment Consultancy (effec) to undertake this assessment. All responses will be kept confidential and MEDIN do not ask for your name or the name of your organisation.

The survey will remain online until 13th September; eftec will then analyse the results and provide MEDIN with a final report on the benefits of MEDIN at the end of October. Please note.

there is no intention to use this information to make MEDIN a paid service, it is solely to better understand the benefits that we provide. - **Dr. Robin McCandliss**, British Oceanographic Data Centre

#### Level playing field for presentations declared by the EGU president, Alberto Montanari, to funding agencies

This month the EGU President Alberto Montanari wrote an open letter to funding agencies, www.egu.eu/news/507/, with information on the assessment of presentations given at EGU scientific meetings. The letter emphasises that there is no distinction regarding the standing, quality or prestige of oral, poster, or PICO presentations at the EGU General Assembly and recommends that funding agencies do not use presentation type as a criterion for assessing the scientific value of contributions.

### **VIEWS**

#### Historic titles in oceanography

I was sent the following list of books on oceanography and the state by Thorkild Aarup at IOC. They might be of interest.

IOS, Wormley people will know of (2), it was reviewed by Tony Rice on the Wormley web site last year, but note the Master's thesis it is based on is free while the book is over 55 pounds even on a Kindle. The Hamblin book is from 2005.

1) Here is the title of another history book, Hamblin "Oceanographers and the Cold War". https://books.google.fr/books/about/Oceanographers\_and\_the\_Cold\_War.html?id=9FVFaWr5qugC&printsec=frontcover&source=kp\_read\_button&redir\_esc=y#v=onepage&g&f=false

# 2) Here is the PhD dissertation Between the Devil and the Deep Blue Sea: Ocean Science and the British Cold War State https://www.research.manchester.ac.uk/portal/files/84022755/FULL\_TE XT.PDF, which is the basis for the book with the same name. (Book was reviewd in Physics Today). The student was supervised by Simone Turchetti at University of Manchester. There is a rumour, that a copy of the book exists in the NOC, Southampton, Library.

3) Simone Turchetti also has a list of interesting publications https://www.research.manchester. ac.uk/portal/en/researchers/simone-turchetti(c4c 71696-89ab-465c-8f4e-f01d9e419669)/publications.html . - *Philip Woodworth* 

#### **Oregon History of Oceanography collection**

A History of Oceanography collection has been put together by Helen Rozwadowski, current President of the International Commission for the History of Oceanography, and Anita Guerrini, for the history of the oceanography programme at Oregon State University. They have made the collection freely available and it can be found at the following URL: https://ir.library.oregonstate.edu/concern/defaults/d217qw79s — Sam Robinson



#### 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

#### 17th – 19th September 2019: IOCCP meeting, OceanObs '19

Honolulu, Hawaii, USA

For more details of the IOCCP OceanObs'19 meeting, please go to http://www.oceanobs19.net/breakout-sessions/.

### 25th September 2019: Sonardyne to host Marine Measurement Forum #63

Yateley, UK

The Steering Group for the Marine Measurement Forum (MMF) series of twice yearly, one day networking seminars is delighted to announce details for the forthcoming MMF63. The event will be hosted by Sonardyne at their Yateley, Hampshire HQ.

Detailed information on the day's proceedings, including a call for presentations and event registration, can be found at www.eventbrite.co. uk/e/mmf-63-hosted-by-sonardyne-tickets-61858940757.

### 25th – 26th September 2019: Workshop on Sea operations for Ocean Observatories

Toulon, France

EMSO ERIC proposes to bring together the major players in the field for a workshop focusing on means and methods for servicing fixed-point observing systems during their deployment, maintenance and recovery operations. Several sessions might interest the ocean observing community community, including one dedicated to intervention procedures with divers on shallow water equipment. All details on the workshop web site wwz.ifremer.fr/rd\_technologiques/Actualites/WorkShops/Workshop-On-Sea-Operations-EMSO.

### 1st – 5th October 2019: Ecological Modelling Global Conference

Salzburg, Austria





This global conference, to be held at the Salzburg Congress Centre, is the 22nd biennial conference of The International Society for Ecological Modelling (ISEM) and will bring together scientists from all professions and applications that deal with the use of ecological models and systems ecology. The Conference Chairs are:

*Gudrun Wallentin*, Department of Geoinformatics, University of Salzburg

Tarzan Legović, Ruđer Bošković Institute

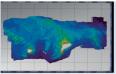
Brian Fath, Department of Biological Sciences, Towson University

2nd - 4th October 2019: MASTS ninth Annual Science Meeting (ASM), Bold Science to Meet Global Challenges.

Glasgow, Scotland, UK

The 9th ASM, will take place at the Technology and Innovation Centre, and will examine the science we need to meet the modern challenges that face our marine waters and seas. This crossdisciplinary 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. Register here https://www.eventsforce.net/standrews/84/ register.









MASTS Annual Science Meeting 2019

"BOLD SCIENCE TO MEET GLOBAL CHALLENGES"

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The Marine Alliance for Science and Technology for Scotland will hold its ninth Annual Science Meeting (ASM) on Wednesday 2nd – Friday 4th October 2019 at the Technology & Innovation Centre, University of Strathclyde, Glasgow.

Science presentations and e-poster sessions will take place on the first two days Wednesday 2nd & Thursday 3rd October), together with Plenary Speakers (Dr Alan Jamieson & Prof Sergej Olenin) and opportunities to network. There will be special sessions on Technologies & Methods in Marine Science; Multiple stressors; Marine Biogeochemistry; The future of Scottish fisheries in a changing world; and the Deep Sea. On the third day the venue will host a number of workshops.

www.masts.ac.uk/annual-science-meeting







Science presentations and e-Poster sessions will take place on the first two days (Wednesday 2nd and Thursday 3rd October), together with Plenary Speakers and opportunities to network. – *note only a few spaces left for e-posters - .* An e-

Poster is an electronic version of the traditional poster boards, and is displayed on a TV monitor/screen. The e-Poster may include text. figures and images, as well as video and animation. E-Poster presentations are similar to regular presentations but should have a limited number of slides (3 at the maximum). All e-Posters will be presented by the author during specific e-Poster sessions. However, e-Posters can also be viewed any time during the Meeting. Simply use one of the computers located in the e-Poster area at a time convenient to you. You will be able to view all electronic posters as frequently, and as often as you wish by navigating through the menu. - www.masts.ac. uk/annualscience-meeting/2019-abstract-submission/.

On the third day, the venue will host a number of meetings and workshops. Confirmed workshops so far include:

- A science-policy workshop (Wed 2<sup>nd</sup> Oct)
- Aquaculture careers workshop (Wed 2<sup>nd</sup> Oct)
- Decommissioning and Wreck Removal (afternoon, Thurs 3<sup>rd</sup> Oct & morning, Fri 4<sup>th</sup> Oct)
- Arctic marine science: current research and opportunities for engagement in the Russian Arctic (9am-1pm) - theatre style (morning, Fri 4<sup>th</sup> Oct)
- NERC Innovation Programme for Oil and Gas (afternoon, Fri 4<sup>th</sup> Oct)
- An Introduction to Modelling in Scottish Water (full day training workshop, Fri 4<sup>th</sup> Oct)
- MEDIN Data Management Training for new Scientists and Surveyors (full day training workshop, Fri 4th Oct)
- Addressing the ecological implications of offshore renewable energy developments across receptor groups – shaping future marine energy research (all day, Fri 4<sup>th</sup> Oct)
- The Scoping and Ranking of Pressures in Scottish Marine Regions and Scottish Offshore Marine Regions

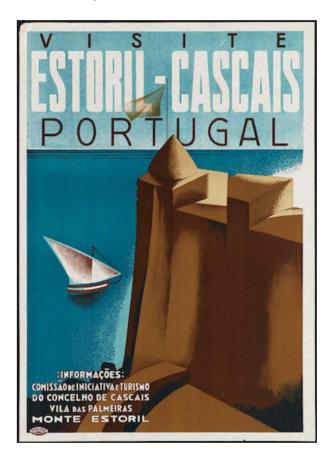
If you would like to exhibit at the event, or showcase a piece of equipment please contact masts@st-andrews.ac.uk for detail. We look forward to welcoming you at the MASTS ASM.

### 7th - 11th October 2019: 42nd CIESM Congress

Cascais, Portugal

Come and join our 42nd CIESM International Congress in the second week of October. A Congress conceived and designed to compare the approaches, findings and perspectives of Atlantic and Mediterranean researchers on a great number of common issues. So come to Cascais (Portugal) and meet hundreds of marine scientists from the Atlantic and Mediterranean shores. This will allow you, inter alia, to:

- actively participate in a number of debates (40 in total) covering all marine disciplines, and listen to four cross-disciplinary panels. See program sessions, ciesm.org/marine/ congresses/sessions\_cascais.php;
- engage discussions with all authors in three Plenary Poster sessions, and with friendly moderators, ciesm.org/marine/congresses/ mosaic cascais.php;
- enjoy the various, informal receptions and the free visit and guided tour of the world-famous Lisbon Aquarium mid-week.



Do not wait much longer: Cascais is a picturesque town, highly popular with tourists and so hotels and pensions in the vicinity will fill up quickly. Have a close look at the Congress webpage, www.ciesm.org/. - Cordially, The CIESM Congress Team

### 10th - 13th October 2019: Seventh Arctic Circle Assembly

Reykjavik, Iceland

Registration is now open for the 7th Assembly of the Arctic Circle, the largest annual international gathering on the Arctic. The Arctic Circle is an open, democratic forum where anyone can ask a world leader a question during Plenary Sessions, bring innovative ideas to interactive workshops, or organize Sessions in their own name: the platform is yours.



Following consultations with Arctic Circle partners and participants, it has been decided to open the Arctic Circle Assemblies ONE day earlier, on Thursdays. Plenary Sessions will end on Saturdays and the party for all participants will take place on the Saturday evening. On Sunday, thematic Excursions and Tours devoted to areas of interest to Arctic Circle participants will be offered. Arctic Circle Assembly participants are advised to arrive in Reykjavík on Wednesday, October 9th in order to participate in morning Sessions on October 10th. Participants who wish to attend October 9th Pre-Events should arrive on October 8th or earlier.

The Arctic Circle is attended by over 2000 participants from more than 60 countries: confirmed speakers represent governments, businesses, scientific institutions, indigenous associations, environmental organizations and other Arctic partners. Breakout Sessions will begin on Thursday morning and the Opening Session will be held after lunch on that day. In addition opportunities will be created for those who so desire to hold Breakout Sessions, working or networking meetings on Sunday morning. Pre-

- Ocean Observation and Sensing
- Positioning and Navigation

Have something important to say ?, submit your paper for consideration. Papers may be presented in English as live Chinese translation will be provided. If you would like to submit your paper in Chinese please contact Penny Pei at penny.pei@reedexpo.com.cn alternatively submit in English to Dominic.coyne@reedexpo.co.uk by 16th August.

# Programs from previous Assemblies, which list all past Breakout Sessions, may be found at www.arcticcircle.org. The Arctic Circle provides an open, democratic forum for discussion and cooperation on Arctic Affairs.

Events will consequently be on Wednesdays. The Arctic Circle Secretariat has received over 180

proposals for Breakout Sessions at the upcoming

2019 Arctic Circle Assembly; a record high.

### 12th – 14th November 2019: Marine Autonomy and Technology Showcase (MATS) 2019 Southampton, UK



The Delivery Committee for MATS 2019 are pleased to announce that Abstract Submission is now open. During MATS 2019, our aim is to explore the information needs of users of Marine Autonomous Systems (MAS), review the current technologies available to enable the data gathering for MAS users and explore the methods of taking that data and making it exploitable information for the user need. Presentations must focus on work undertaken in the 12 months since MATS 2018 or be a forward look into the next 5 years.

#### 13th - 15th November 2019: Oceanology International China

Shanghai, China

### The deadline has been extended – don't miss your opportunity

The 2019 call for papers is now open at www.oichina.com.cn/en-gb. Oi China attracts 6,000 attendees from over 20 countries, this is your chance to position yourself as a leader in the industry and speak in front of professionals from across Asia's marine technology and ocean science community. This year we're accepting papers on:

- Unmanned Vehicles
- Ocean ICT

### 20th - 24th January 2020: 9th EUROLAG conference on coastal lagoons and transitional environments

Venice, Italy. www.eurolag9.it/



#### 16th February 2020: Ocean Obs Research Coordination Network (RCN) OceanObs'19 Conference follow-up meeting

San Diego, USA

The Ocean Obs RCN will host an OceanObs'19 Conference follow-up meeting immediately preceding the AGU/TOS Ocean Sciences Meeting (https://www2.agu.org/ocean-sciences-meeting/).

The OceanObs'19 Conference (Hawaii 16-21 September, 2019; (http://www.oceanobs19.net/) will be the third conference of this series, held once every ten years. The Ocean Obs RCN

annual meeting on 16 February 2020 will be dedicated to the synthesis of threads and recommendations emerging from the OceanObs'19 Conference. Of particular interest will be focusing the community on the planning for the implementation of initiatives emerging from OceanObs'19. The meeting will advance links between observation networks and operational users to facilitate the delivery of critical information to stakeholders, and to address critical policy issues that require multidisciplinary ocean observing systems.

Please circulate this 'Save the Date' reminder widely. We will follow up with an agenda after the OceanObs'19 Conference. Best wishes, on behalf of the organizing committee (Frank Muller-Karger, Jay Pearlman, Linwood Pendleton and Dawn Wright)

The OceanObs RCN is an NSF-sponsored forum on all aspects of ocean observing. Discussions identify advances and challenges in ocean observing and may identify new technologies and promote their cost-effective development, identify policy priorities, and highlight capacity building requirements for the next decade. This includes discussion od Decade of Ocean Science for Sustainable Development (2021-2030) being organized by the IOC (https://en.unesco.org/ocean-decade), and balancing ocean observations, science, use, and conservation requirements.

Jay Pearlman, Ph.D. Fellow IEEE, IEEE France, Director, Four Bridges jay.pearlman@ieee.org. "Submit your Best Practices in Ocean Observing for peer-review: https://www.frontiersin.org/research-topics/7173/best-practices-in-ocean-observing

### 16th – 21<sup>st</sup> February 2020: AGU Ocean Sciences meeting

San Diego, USA

Abstract deadline 11<sup>th</sup> September, agu.confex. com/agu/osm20/prelim.cgi/Home/0.

Announcing session PS011 – "Vertical Transport: Pathways from the Surface to the Interior".

The vertical transport of properties, including carbon, oxygen, and heat, is crucial for the production and export of organic carbon, ventilating the subsurface ocean, and modulating ocean-atmosphere exchange. However, vertical

transport is poorly constrained observationally, and a challenge for models because vertical velocity is highly sensitive to small-scale processes and model resolution. We will discuss both physical and biological mechanisms for vertical transport on scales ranging from the mesoscale to smaller scales, and including processes affected by surface forcing, seasonality of the mixed-layer, restratification, advection, subduction, mixing, sinking and topography. We will address the underlying dynamics and kinematics for vertical transport of water and properties using multi-platform observations, modeling and theory, while exploring threedimensional Lagrangian pathways and their spatial and temporal scales of coherence. The effects of such transport on the biological production and export of organic matter is of interest, as also, the large-scale and long-term implications for exchange between the upper ocean and interior. Primary Chair, Dhruv Balwada, Courant Institute of Mathematical Sciences. Co-chairs, Amala Mahadevan, Woods Hole Oceanographic Institution, Julius Johannes Marian Busecke, LDEO/Columbia University, Daniel L Rudnick, Scripps Institution of Oceanography. Primary Liaison, Daniel L Rudnick, Scripps Institution of Oceanography.

#### 17th – 19th March 2020: Oceanology International

London, UK

By applying to be a speaker at Oi 2020, you have the opportunity to reach the world's largest marine science and ocean technology audience. This is your opportunity to connect with new technical and strategic audiences from academia, government and over 15 other industries, all unified by their use of ocean technology.



Your submission can include:

- Offshore energy development
- Asset integrity and monitoring
- Hydrography, geophysics and geotechnics
- Coastal zone and shallow water

- Navigation and positioning
- Imaging and metrology
- · Ocean observation and sensing
- Marine pollution and environmental stressors
- Automation and Al
- Unmanned vehicles and vessels
- Ocean ICT

Submit your abstract by 3rd October and, if successful, you can demonstrate your knowledge and strengthen your networks in London and across the world.

#### 3rd - 8th May 2020: European Geophysical Union (EGU2020)

Vienna. Austria

The opportunity to submit proposals for sessions for EGU 2020 is now open at meetingorganizer.copernicus.org/EGU2020/provi sionalprogramme. The deadline for session proposals is 5 September 2019. If you enjoyed a particular session at EGU2019, please suggest it again and maybe volunteer to convene it? Remember there is no automatic roll-over of sessions any more.

Please see the convener guidelines at egu2020. eu/quidelines/convener quidelines and rules.ht ml. Note that we are trying to increase the diversity of conveners in all senses. encourage early career scientists conveners, but bear in mind that no conveners can have an oral slot in their own session. I'd like to see more PICO sessions suggested - these have grown in popularity in OS but there is scope for more. I myself did one this year and am now a convert! If I can do one, anyone can. I look forward to seeing lots of exciting sessions for 2020! - Karen Heywood, EGU Ocean Sciences president

### 15th - 17th June 2020: INCISE 2020 "Canyons: human connections to the deep sea"

Cork, Ireland

On behalf of the international and local organising committee we would like to announce early details for this event hosted at University College. The official INCISE 2020 website can be found at <a href="https://www.incise2020.com/">https://www.incise2020.com/</a> where we will provide updates as the conference develops.

INCISE (International Network for Submarine Canyon Investigation and Scientific Exchange) is an annual forum bringing together scientists from

around the world working on all aspects of submarine canyon research, and to stimulate discussions across disciplines. This crossdiscipline approach allows scientists to collaborate and initiate a holistic approach to canyon research. The bi-annual conference brings together 80 - 100 geologists, biologists, engineers, oceanographers, ecologists environmental managers. It provides a truly multidisciplinary and exciting forum for the exchange of knowledge and generation of ideas that underpin sustainable submarine canyon management.

At this early stage, we also welcome proposals and suggestions for pre-conference workshops to 2020. For hosted at INCISE and suggestions proposals, please email: incise2020@gmail.com. We look forward to welcoming you to the City of Cork to experience our culture, engage in scientific discussion and discovery and enjoy the benefits that INCISE engagement offers. - Prof Andy Wheeler and Dr Aaron Lim

## 21st - 25th June 2020: 6th International EcoSummit Congress, EcoSummit 2020 - Building a sustainable and desirable future: Adapting to a changing land and sea-scape, Gold Coast, Australia

This conference series was founded in 1996 in Copenhagen, as a forum for scientists, practioners, and policy-makers working across disciplines to solve the integrated environmental, social, and economic problems facing the world today. Since 1996, EcoSummits have occurred around the world (Canada, China, USA and Europe), with EcoSummit 2016 hosting 1400 participants from 87 countries in Montpellier, France.

EcoSummit 2020 will have a focus on coastal and marine ecosystems including adjacent terrestrial ecosystems and all habitats that are integrated within those ecosystems, including river networks, wetlands and catchments. We expect all aspects of environmental modelling, engineering, science, and policy to be covered under the focus of climate adaptation and the need for developing socio- economic and environmental resilience and sustainable prosperity around the world. Further focus will be placed on fragile systems that are more likely to suffer the consequences of climate change and anthropogenic pressure such

as islands, coastal communities and arid landscapes.

In the current context of an increasing world population, in particular in coastal regions, it is evident that building sustainable cities and using resources sustainably is inevitable. It is envisaged that the Summit will produce a declaration encompassing its vision and recommendations. We welcome your participation and look forward to seeing you at EcoSummit 2020. Abstract submission is now open; this is an open Call for Abstracts for presentations and posters to be submitted against the symposium topics listed on the conference website ecosummitcongress.com/. Abstract submission deadline: 15 November 2019

EcoSummit 2020 Co-Chairs:

Robert Costanza, Crawford School of Public Policy at Australian National University, Australia. Bai-Lian (Larry) Li, University of California, Riverside, USA.

Jan-Olaf Meynecke, Griffith University, Australia

### 7th - 11th September 2020: Challenger Society Biennial Meeting

Oban, Scotland

To be hosted by the Scottish Association for Marine Science, just a 'date for the diary', stayed tuned, more very soon.

5th - 9th September 2022: Challenger Society Biennial Meeting – celebrating the 150<sup>th</sup> anniversary of the Challenger Expedition London, UK

To be hosted by the National History Museum, just a 'date for the diary', stayed tuned.

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 27th September.

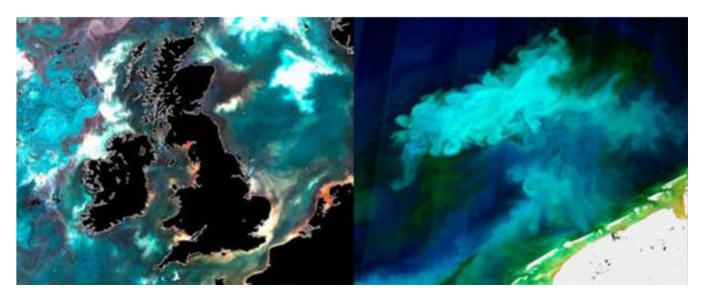
We continue to send printed copies of Challenger Wave to members of the CSMS without email addresses. However it is in everybody's interest to send your email address to Jennifer Jones, jxj@noc.ac.uk, as soon as possible



### Earth Observation Vacancies (up to 10) at Plymouth Marine Laboratory, UK

The Plymouth Marine Laboratory (PML) Earth Observation Science group has a world-class reputation in fundamental research on climate change and biogeochemical pools and cycles in aquatic systems; aquatic ecosystem and human health; and sustainable development issues in ocean, coastal and inland water environments. The group is one of the largest of its kind, with 30 open-ended (tenured) staff, and many international visitors and research students, creating a vibrant and dynamic working environment, comprising experts in ocean, coastal and inland water sensina. meteorology, in situ optics, biology, biogeochemistry and remote Biogeochemical-Argo data, software engineering and computing. The group works with a variety of satellite sensors (ocean colour, altimeter, synthetic aperture radar, sea-surface temperature) and is engaged in processing of large amounts of data at European and global scales, developing novel algorithms and innovative applications. The group works closely with a number of outside collaborators from UK, Europe and the rest of the world.

The group has its own state-of-the-art data processing facilities, including a new £1M GPU-cluster to support artificial intelligence / machine learning, a 600 node processing grid, over 5 petabytes of data storage and complete global archives of key satellite sensors. The group also benefits from a newly completed suite of optical laboratories, instrumentation and access to the annual Atlantic Meridional Transect between the UK and the south Atlantic and local research vessels and moorings. With a global Earth observation processing capability, PML leads international projects, such as for the European Space Agency, and is facilitating capacity building in developing countries. The group is highly successful at earning research projects with funding from ESA, UK Research and Innovation (UKRI), EC Horizon 2020, Copernicus, foundations (e.g. Simons Foundation) and international entities (e.g. KAUST).



The EO group is seeking to employ **up to ten (10) new open-ended posts** at either **Scientist** (post-doctoral or equivalent experience - salary up to £37,281) or **Senior Scientist** grade (salary up to £44,958).

Scientist grade posts will work in a variety of UK and international projects including:

- research in the Red Sea and western Indian Ocean;
- optical water-type classification in coastal and transitional waters;
- monitoring the Carbon cycle from space;
- investigating marine ecosystems and human health;
- climate data records on ocean colour and lake colour.

Scientist-level applicants would have a PhD or equivalent experience in a relevant numerate discipline and will undertake and support high-quality research, data analysis and software development, with some flexibility in their weighting dependent on interests. You need to be highly motivated, capable of working independently as well as collaboratively with a multi-disciplinary team, and possess effective time management skills, to perform effectively in this busy and successful group. Furthermore, over time Scientist-grades would be given the opportunity in time to develop their own ideas into research proposals.

Senior scientists are expected to have demonstrated success in supporting their own research with funding in EO of marine or freshwater science complementary to existing EOSA areas. They will also take leading roles in new or ongoing projects, and manage and mentor scientists working

in related areas.

Finally, we would consider applications from candidates who do not hold a PhD or equivalent but who have demonstrated EO experience at undergraduate or postgraduate level and strong numerical and/or programming ability (at **Junior Scientist** level up to £28,652) who may wish to develop their career in Earth Observation within the group.

If you are interested in a role with our Earth Observation Group, please use the following link: https://www.pml.ac.uk/Working\_with\_us/Vacancies/Earth\_Observation\_Vacancies\_(up\_to\_10\_posts). Closing date for applications: 30th September 2019. If you have questions contact: careers-at-pml.ac.uk

Please visit our new website at www.pml.ac.uk and follow us on Twitter @PlymouthMarine. We have updated our Privacy Notice which is available at http://www.pml.ac.uk/Systempages/Privacy\_Notice

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#### There are jobs on the IMBER web site

#### http://www.imber.info



#### Integrated Marine Biosphere Research

#### Jobs and opportunities

- Deputy Director: Science, Stanley, Falkland Islands. Apply by 15 Sep
- Ocean Biogeochemical Data and Model Analyst, NOC, Southampton, UK. Apply by 15 Sep
- Shelf Seas Modelling Scientist, NOC, Liverpool, UK. Apply by 15 Sep
- PhD Fellowships in interdisciplinary climate research at Max Planck Earth System Modelling School. Apply by 15 Sep
- Postdoc: Marine biogeochemistry, University of Southern Denmark. Apply by 20 Sep
- EUROGOOS Secretary General, Brussels, Belgium. Apply by 27 Sep
- 10 Scientist/Senior Scientist Earth Observation posts. PML, Plymouth, UK. Apply by 30 Sep
- Applied Ocean Sciences MSc, University of Cape Town. Apply for 2020 by 30 Sep
- Postdoc: Earth System Model learning and training centre
- Assistant Prof: Climate change and marine biology/ecology, University of Tsukuba, Japan. Apply by 11 Oct
- PhD assistantship: Ocean acidification in the northwestern Gulf of Mexico, Texas A&M University, Corpus Christi, TX, USA. Apply by 15 Oct
- Physical and chemical oceanographers: Join the US GO-SHIP cruise (March-April/May 2020).
  Apply by 15 Oct
- Assistant Prof: Earth and Planetary Science, University of Berkeley, Ca, USA. Apply by 30 Oct
- Postdoc: Physical Oceanography, WHOI, Woods Hole, USA. Apply by 31 Oct
- Postdoc: Coupled biological-physical modelling and ecological data analysis, WHOI, Woods Hole, USA. Apply by 31 Oct
- Postdoc: Develop data assimilative models. SAEON, Cape Town, South Africa. Open until filled
- Science Intern: Plastics, Oceana. Apply by 31 Oct
- Assistant Scientist, NOAA Ocean Chemistry and Ecosystems, Miami, USA. No deadline given
- Director: International Government Relations, Ocean Conservancy, Washington DC, USA
- UNESCO/Japan Research Fellowships for postgraduates from developing countries: Apply by 29 Nov
- Postdoc: Marine chemistry, University of Southern Mississippi, USA. Position open until filled

Visit the IMBeR Website

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