

# Challenger Wave



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

## NEWS

### Join the Challenger Council

There is a vacancy on the Challenger Council replacing an existing member rotating off at the end of their term. In each case the usual period for serving on the council is three years, although some Councillors extend this period.

The vacancy is for an enthusiastic and engaged scientist to take over the Communications role for the Society. This role involves coordinating and disseminating news and the work of the Society via Twitter and Facebook feeds and also maintains the Captain's Blog. You will be particularly involved with communications in the run up to the 150th celebration of the Challenger Expedition in 2022.

As a member of the Council, you join the managing board of the Society which usually meets four times per year in London, although it is likely that more of these will become remote meetings in future. You would contribute to all decisions made on behalf of the Society by the council.

If you are interested in joining the Challenger Society council to perform in this role, or would like further information, then please email our Honorary Secretary Professor Mattias Green ([m.green@bangor.ac.uk](mailto:m.green@bangor.ac.uk)). We do hope to hear from you.

### CBE for Professor Ed Hill

Prof Ed Hill, has been awarded a CBE in the Queen's Birthday Honours 2020 list, published last Saturday, in recognition of his services to ocean and environmental sciences. Ed is a world-leading authority on ocean science and is dedicated to raising awareness of ocean issues and advancing the science and technology to understand our seas. Having been part of the

Natural Environment Research Council (NERC) for over 20 years, he has recently led the National Oceanography Centre (NOC) into an independent charity, using its freedom and scientific expertise to drive forward greater innovation and influence.



Commenting, Ed Hill, said, "I am delighted and honoured to receive this award, which I feel is also recognition of the tremendous journey the NOC has been taking as a force for good all over the world. I am grateful for the help and support of my family, friends and colleagues throughout my career and remain dedicated to raising the profile of the vital role the ocean plays in our world."

### Newton Prize Winner



Congratulations to NOC's Professor Michael Roberts on winning the Newton Prize 2020 this

week for his work on establishing an 'innovation bridge' and network to provide eight developing Western Indian Ocean countries with immediate access to skills and infrastructure needed to tackle regional food insecurity. The bridge between world-class research institutions will develop capacity and encourage governments to protect the region's valuable yet vulnerable ecosystems.

#### **European Geosciences Union awards for NOC scientists**

Two National Oceanography Centre scientists are to receive awards from the European Geosciences Union (EGU). These individuals are honoured for their important contributions to the Earth, planetary and space sciences and will be celebrated during the EGU General Assembly 2021, held in April next year.

Prof Richard Lampitt will receive the Fridtjof Nansen Medal, established by the Ocean Sciences Division in recognition of the scientific achievements of Fridtjof Nansen. It is awarded for distinguished research in oceanography.



Dr Marilena Oltmanns has been awarded the Ocean Sciences Division Early Career Researcher Award. The Division Outstanding Early Career Scientist Awards (formerly Division Outstanding Young Scientists Awards) recognise scientific achievement made by an Early Career

Scientist in the field(s) covered by the related division.



#### **RRS *Sir David Attenborough* science users' workshop**

The RRS *Sir David Attenborough* is set to transform how the UK delivers and supports polar science. Join us for all or part of a three-day science-users' workshop, between Wednesday 25th and Friday 27th November 2020, to discuss the science and operation of the new polar research ship. Held online via Zoom we will bring you up to speed on the ship's science capability, and 'into service' planning, and give you a platform to ask questions and share your views about future opportunities and challenges.

This workshop is for anyone who has been involved with the planning and commissioning of the RRS *Sir David Attenborough* so far, or who is likely to use the new polar vessel to carry out research in the future. You can book your tickets for all or part of the workshop here: [www.eventbrite.co.uk/e/rrs-sir-david-attenborough-science-users-workshop-tickets-123650825949](http://www.eventbrite.co.uk/e/rrs-sir-david-attenborough-science-users-workshop-tickets-123650825949).

Day one will be opened by Director of British Antarctic Survey Professor Dame Jane Francis, and featuring a guest address by Professor Duncan Wingham, Executive Chair of NERC, this two-hour session focusses on the ship's new



features and key differences from the RRS *James Clark Ross*.

Day two takes a closer look at the layout of the ship, its science equipment and special features. We will explore science capability in the following disciplines: physics, biology, geology and geophysics, chemistry, atmospheric science and meteorology. This session sets the scene for day three break out discussions to explore how the science community can make the most of its new science capabilities.

On Day three Professor Susan Waldron, Director of Research and Skills at NERC, will chair this session aimed mostly at Principal Investigators and early career researchers who will submit future grant proposals. We will focus on horizon scanning, and discuss what the optimal models might be for funding and planning ambitious new science on the SDA. Outcomes from breakout sessions will help shape future science and operation of the ship.

## VIEWS

### C-Innovation selects Sonardyne technology spread for its Brazilian fleet

Integrated marine services company C-Innovation (C-I) has chosen a suite of Sonardyne's underwater positioning and navigation systems to support its operations offshore Brazil. Remotely operated vehicles (ROVs) on board six ROV support vessels (RSVs) in the country will be equipped with Sonardyne inertial, gyrocompass and Doppler technologies, as well as hybrid acoustic-inertial systems.

Specifically, C-I has ordered SPRINT inertial navigation systems (INS), a Lodestar attitude and heading reference system (AHRS), Syrinx Doppler velocity logs (DVLs) and Sonardyne's hybrid acoustic-inertial underwater vehicle navigation instruments, SPRINT-Nav. C-I has also ordered a quantity of Sonardyne's Compatt 6+ transponders and Wideband Sub-Mini 6+ (WSM 6+) transponder/responders for tracking structures and vehicles.

Most of the vessels (including Bongo, Santos Service, Joe Griffin and Deborah Kay) will be working for Petrobras, and one vessel (Cabo Frio)

will be working for Karoon Energy. The scope of work is subsea inspection, maintenance and repair operations (IMR) and ROV support. Five of the six vessels, which start contracts in Brazil this year, are already equipped with Sonardyne's Ranger 2 Ultra-Short BaseLine (USBL) positioning system, which is used for both dynamic positioning (DP) reference and deep water target tracking.



*Sonardyne's hybrid navigator SPRINT-Nav has been chosen by C-Innovation for its ROVs in Brazil.*

SPRINT-Nav combines Sonardyne's SPRINT sensor, Syrinx 600 kHz DVL and a high accuracy intelligent pressure sensor packaged in a compact deep-rated housing that's simple to integrate on both remote and autonomous underwater platforms. The tight integration of inertial sensor and raw acoustic aiding data at a low level enables SPRINT-Nav to regularly exceed the most stringent of positioning specifications, making it an ideal choice for vehicle guidance, station keeping and long endurance navigation.

Tomás Peixoto, Survey Manager at C-Innovation, an affiliate of Edison Chouest Offshore and its family of companies, says, "We're pleased to continue the relationship we have with Sonardyne, building on a long-standing partnership and with the local technical support that they offer here in Brazil. With these latest orders, we're ensuring our fleet continues to provide unmatched services to our customers."



The Bongo RSV is one of C-Innovation's vessels being upgraded with Sonardyne technologies.

Speaking from Sonardyne's base of operations in Rio das Ostras, Brazil, Sonardyne Sales and Applications Manager Andre Moura, says, "With the region's majors committing to new and expanded field developments, the number, scope and value of engineering, procurement, installation and construction (EPIC) contracts placed here in recent months has risen significantly. The versatility and consistent high performance offered by our solutions means that C-Innovation can be confident they will see a return on their equipment investment throughout the life of the projects. That confidence, together with our in-country servicing and support, in turn helps to underpin their ongoing success in the market here."

## SALTS

### Royal Research Ships back in Southampton

RRS Discovery arrived back in Southampton at the end of October after three weeks at sea and a highly successful expedition. The science team from SAMS, along with NOC technicians on-board, turned around six moorings in the Rockall Trough and Iceland Basin, which had been in the water for 27 months. There are now six years of data from this location which will provide vital insight into the role of the North Atlantic on Europe's changing climate. Courtesy of NOC news; for the full blog visit: [projects.noc.ac.uk/class-project/blog/round-discovery-dy120-chief-scientist-stuart-cunningham](https://projects.noc.ac.uk/class-project/blog/round-discovery-dy120-chief-scientist-stuart-cunningham).



Image from @RV\_Callista on Twitter

RRS James Cook joined Discovery in Southampton on Wednesday after a short calibration and training exercise at sea. She'll remain alongside until the end of November before setting off for the Falkland Islands.



Credit to @theFosterlab on Twitter for this great picture captured on his beach walk.

## CALENDAR

### 1st – 4th December 2020: Oceanology International

London, UK

Oceanology International 2020 is to be held virtually, bypassing the current doubts over worldwide travel and quarantine restrictions, whilst bringing the maritime industry together in a fresh, innovative way through the Oi Connect event and meetings platform. Moving to a virtual exhibition ensures that it will be open to everyone,



sidestepping travel times and logistics and uniting the global ocean tech community.

Introducing our new virtual hub for all things ocean tech – Oi Connect. It's all the best elements of Oi but online. From networking opportunities and interactive seminars to 1-2-1 meetings and video demonstrations, and much more. Oi Connect enables you to make valuable connections and discover the future of ocean tech all from the comfort of your home. Don't miss out and register today: [app.campaign.reedexpo.co.uk/e/er?utm\\_campaign=OI2020\\_Visit\\_Aware\\_Nurtu\\_E\\_30\\_Oct\\_October\\_Newsletter&utm\\_medium=email&utm\\_source=Eloqua&querytoken=tnPF%2FoCm13MglQMx5W0Z8DcGWzVwtmU2IMY7QCUPpzTcSKs4TR9c7S2zaM5Psaux4902QK0eN2V56e17Nk9HQw==&CampaignId=7013z000](http://app.campaign.reedexpo.co.uk/e/er?utm_campaign=OI2020_Visit_Aware_Nurtu_E_30_Oct_October_Newsletter&utm_medium=email&utm_source=Eloqua&querytoken=tnPF%2FoCm13MglQMx5W0Z8DcGWzVwtmU2IMY7QCUPpzTcSKs4TR9c7S2zaM5Psaux4902QK0eN2V56e17Nk9HQw==&CampaignId=7013z000).

Join Oi exhibitors like iXblue, General Dynamics, Hydro Group & Teledyne Marine and more, who will be engaging with ocean tech buyers, delegates and visitors on Oi Connect. Create a profile, identify key contacts based on product/service/sector interest, build relationships and create new business opportunities. To help you make the most of the four days we have designed a range of solutions that will help you deliver maximum value and put your business and your product in front of the right people.

There are limited opportunities available, so download the brochure today and then get in touch with the Oceanology International team, <https://www.oceanologyinternational.com/help/contact/>, to confirm your choice.

### 11th – 14th January 2021: The Fifth Xiamen Symposium on Marine Environmental Sciences

*Xiamen, China*

The State Key Lab of Marine Environmental Science (MEL), Xiamen University and the Earth Science Division of the National Natural Science Foundation of China (NSFC) are going to hold the fifth bi-annual meeting XMAS-V. The theme of XMAS-V is **Multidisciplinary Sciences Serving a Sustainable and Healthy Ocean**. More information about the meeting can be found at <http://melmeeting.xmu.edu.cn/xmas5/>.

**14th-18th June 2021: EMODnet Open Conference and Jamboree**  
*Ostend, Belgium*

**November 2020**

Due to the outbreak of the COVID-19 virus, the second EMODnet Open Conference and Jamboree which was initially scheduled to take place in September 2020 has been postponed. Save the date for this event, which will bring together the extended EMODnet family in Ostend (Belgium) to set goals for the next phase of EMODnet to 2030. More information will follow, [www.emodnet.eu/conference2021](http://www.emodnet.eu/conference2021).

### 14th-18th June 2021: the postponed EcoSummit 2020

*Gold Coast, Australia*

As a result of the spread of COVID-19, Elsevier and the EcoSummit 2020 Chairs took the decision to postpone the 6th International EcoSummit Congress to 2021, to be held in the same venue at The Gold Coast Convention Centre, Australia.



Call for abstracts open for our 2021 dates

14-18 June 2021 | Gold Coast, Australia

You can submit your abstracts and register with confidence as we are relaxing our cancellation terms due to the COVID-19 situation: we will refund your registration fee, with no penalty, should you wish to cancel during the uncertainty of the outbreak.

**IT'S LIVE!**  
*in Queensland*

Join mailing list

Sponsorship enquiries

The **6th International EcoSummit: EcoSummit 2021** (rescheduled to 14-18 June 2021) 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.  
**>> View our outstanding speakers and panelists**

Oral and poster abstract submission for symposia and general sessions is open until **30 October 2020**. Abstracts should be submitted using the online abstract submission system.  
**>> View symposia and submit abstracts**

Registration is open at the original 2020 rates for our new dates. Early-bird rates are available until **5 March 2021**. Remember you can cancel your registration at any time if affected by the COVID-19 outbreak.  
**>> View rates and register**

We send you our warmest wishes at this challenging time.

EcoSummit 2021 Co-Chairs

Jan-Olaf Meynecke, *Griffith University, Australia*

Robert Costanza, *Crawford School of Public Policy at Australian National University, Australia*

B. Larry Li, *University of California, Riverside, USA*

Supporting publications



Due to this rescheduling, oral and poster abstract submission for symposia and general sessions is open until 30 October 2020. Abstracts should be submitted using the online abstract submission system, [ecosummitcongress.com/submit-abstract.asp](http://ecosummitcongress.com/submit-abstract.asp). We continue to look forward to welcoming our speakers and plenary panelists to the Gold Coast in June 2021.

Registration is open for the new dates, [ecosummitcongress.com/conference-register.asp](https://ecosummitcongress.com/conference-register.asp), and we look forward to seeing you at EcoSummit 2021. So that you can submit your abstract and register with confidence we are relaxing our cancellation terms due to the Coronavirus COVID-19 situation. Rest assured that we will refund your registration fee, with no penalty, should you wish to cancel during the uncertainty of the outbreak.

EcoSummit 2021 Co-Chairs:

**Jan-Olaf Meynecke**, Griffith University, Australia  
**Robert Costanza**, Crawford School of Public Policy at Australian National University, Australia  
**B. Larry Li**, University of California, Riverside, USA

**16th - 18th June 2021: 9th International Workshop on Marine Technology - MARTECH 2020**

*Vigo, Spain*



The organising Campus de Excelencia Campus do Mar (University of Vigo, Spain) and the Universitat Politècnica de Catalunya (UPC, Spain) will call for papers for MARTECH 2021, [www.martech-workshop.org](http://www.martech-workshop.org).

The main objective of the MARTECH Workshop is to show latest investigations and exchange of information and points of view on current research in MARine TECHnology. The Program Committee cordially invites you to participate and submit your contribution in one of the proposed topics:

- Operational Oceanography
- Instrumentation, Metrology, Signal processing
- Seafloor observatories and sensor networks
- Observatories, remote sensing
- Marine Robotics: ROVs, AUVs, ASVs, Gliders
- Underwater imaging and communication
- Seafloor and Water Column characterization
- Technology for Marine Biology and Aquaculture
- Renewable energies
- Coastal, regional, and offshore research vessels and platforms
- Marine Geophysics technology and solutions
- Marine Data Interoperability and data flow

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

- Technologies for a sustainable dredging
- 2021 as a point between the past and the future

Yours sincerely, Dr. Ana Bernabeu, General Chair and Dr. Joaquin del Rio, Steering Committee Chair

**9th - 13th August 2021: IMBeR ClimEco7 summer school**

*Vancouver, Canada*



**6th - 10th September 2021: Postponed Challenger Society Biennial Meeting**

*Oban, Scotland*

The biennial Challenger conference attracts around 300 leading UK marine scientists, science managers and early career scientists. 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.



Once again the call is out for sponsors and exhibitors wishing to participate in next year's conference. The conference is a great place to be if you are recruiting marine science graduates.



For the only the third time, the conference will be held at SAMS (Scottish Association for Marine Science in beautiful OBAN. SAMS hosted the first post war conference back in 1946 and since then only once more since in 2006.

### 6th - 10th September 2021: Estuaries and coastal seas in the Anthropocene



The ECSA 58 - EMECS 13: Estuaries and coastal seas in the Anthropocene will take place at the University of Hull, UK. The submission deadline for oral and poster abstracts is 9 April 2021 and we look forward to receiving submissions from new authors.

One of the Co-Convenors, Professor Victor de Jonge, recently passed away suddenly and unexpectedly. As such, the symposium will be held as a tribute to Victor and we are encouraging sessions and presentations which reflect Victor's enormous contribution to estuarine and marine science and management.

We look forward to welcoming you and our keynote speakers to Hull in September 2021.

Conference Chairs:

Mike Elliott, University of Hull, and International Estuarine & Coastal Specialists Ltd

Tim Jennerjahn, Leibniz Centre for Tropical Marine Research, Bremen, Germany

Masataka Watanabe, Chuo University, Japan

### 20th - 22nd September 2021: Oceanology International Middle East

Abu Dhabi, UAE

Whilst it is hugely disappointing to postpone the launch, and not a decision we have taken lightly, we believe it is the best course of action for all involved. In the last couple of months, we have been speaking to customers, partners and supporters to understand their views and to ensure we make the best decision - in such challenging circumstances - for the ocean communities we serve.

We trust that postponing Oceanology International Middle East will enable us to deliver the true value of this world-leading brand next year. Amid these challenging times, we would like to reiterate our commitment in creating new opportunities and connections for our industry. Over the next several months, we will offer our support to the global community by hosting various digital activities that will connect our exhibitors with their targeted clients. In advance, we thank you for your understanding and support. If you require any further clarification or information regarding this situation, please feel free to email us at [info@oceanologyinternationalmiddleeast.com](mailto:info@oceanologyinternationalmiddleeast.com).

### 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](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 November.

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



### Postdoc position

**Title:** Synergy between ocean observing systems over boundary currents

#### Description

We are looking for a "data scientist" to come and work at LOPS in the Ocean and Climate team. The objective of this postdoc is to develop a new ocean product that will statistically combine complementary information from satellites and in situ ocean measurements to produce a 3-dimensional time series with sufficient resolution to track eddies in the Gulf Stream region.

**Location:** Laboratory for Ocean Physics and Satellite remote sensing, Ifremer – Brest, France.

**Contract:** 18 months

**Starting date:** As soon as possible

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#### How to apply

Applications (detailed CV including a list of publications, cover letter explaining how your interests and experiences would make you a suitable candidate, name/email of at least 2 referees) and/or informal inquiries should be sent to Guillaume Maze ([gmaze@ifremer.fr](mailto:gmaze@ifremer.fr)).

**Deadline:** November 15<sup>th</sup> 2020

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#### Who can apply:

A PhD in mathematics or information and communication science and technology with experience in environmental science, but also a PhD in physical oceanography, meteorology or climate science with strong experience in statistics.

**For more information:** [docs.google.com/document/d/1JGvmFwu2HJ5RhBbe9Z8UVkqTRCMCQz7hLev2c9tInbo/edit](https://docs.google.com/document/d/1JGvmFwu2HJ5RhBbe9Z8UVkqTRCMCQz7hLev2c9tInbo/edit)

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There are jobs on the IMBER web site

<http://www.imber.info>



Integrated Marine Biosphere Research

## Jobs and opportunities

### New

- 2 Postdocs: Marine phytoplankton, WHOI, Woods Hole, MA, USA. Applications reviewed on submission. **Apply now**
- Research associate: Biogeochemistry/data analyst, WHOI, Woods Hole, MA, USA. No deadline given. **Apply now**
- Manager: Research and Innovation, 5 Gyres, Los Angeles CA, USA. No deadline given, **apply now**
- PhD: Fishy Food: The power of politics of food systems, Lancaster University, Lancaster, UK. Apply by **23 November**
- Senior Research Scientist: Numerical ecology, Marine Biological Association, Plymouth, UK. Apply by **24 November**
- 2 Postdocs: Numerical ecology/Machine learning/Plankton, Marine Biological Association, Plymouth, UK. Apply by **24 November**
- Software engineer/database developer, Marine Biological Association, Plymouth, UK. Apply by **24 November**
- Programme Management Officer: Marine litter, UNEP, Bangkok, Thailand. Apply by **29 November**
- Postdoc: Physical oceanography, WHOI, Woods Hole, MA, USA. Apply by **30 November**
- Call for nominations for ASLO Fellows. Submit by **13 December**
- Postdoc: Climate and global change, UCAR/NCAR, Boulder, CO, USA. Apply by **8 January**
- PhD student fellowships: Dynamics of global change. Young Scientists Summer Program, IIASA, Apply by **14 January**
- 2021 Postdoc Fellowships, MBARI, Moss Landing CA, USA. Apply by **20 January**

### In case you missed it...

- Senior Program Officer: The Ocean Foundation, Seattle or Washington DC, USA. No deadline given. **Apply now**
- Postdoc: Fish stock assessment, Ocean Frontier Institute, Newfoundland, Canada. Open until filled. **Apply now**
- Call for 2021 SCOR Visiting scholars. Apply by **1 December**
- PhD: Carbon, water and energy fluxes in Arctic tundra under climate change. University of Alaska Fairbanks, USA. Apply by **15 January**
- International Climate Protection Fellowship: Alexander von Humboldt Foundation, Germany. Apply by **1 March**

Visit the IMBeR Website

[imber@imr.no](mailto:imber@imr.no)