

Challenger Wave



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

NEWS

SAMS' Christine Campbell recognised for contributions to marine science in 2021 New Years Honours List

A scientist at the Oban-based Scottish Association for Marine Science (SAMS, www.sams.ac.uk) has been awarded an MBE for her dedication to and role in the flourishing of the Culture Collection of Algae and Protozoa (CCAP, www.ccap.ac.uk). Christine Campbell has been working with Europe's largest and most diverse collection of living algae and protozoa since 1986, most recently as the leader of the Collection team.



Christine Campbell MBE from the Scottish Association for Marine Science inside the Culture Collection of Algae and Protozoa to which she has been dedicating her professional life since 1986.

Algae are a hugely diverse group of organisms that are of immense importance to life on Earth. Despite their significance, we know little about algae. Culture collections like CCAP help scientists both from academia and industry to research them. With 3000 different strains, that can be ordered via an online catalogue, the CCAP team of seven support scientists have their hands full to keep the algae healthy, add new

species and support and contribute to research and development all over the globe.

SAMS Director, Professor Nicholas Owens, said: "On behalf of everyone at SAMS and the University of the Highlands and Islands I want to say how proud we are of Christine to receive this national recognition. Christine is a people person, who believes in teamwork, equality, clear communication and public service. Her greatest contributions have thus included the building of effective teams, promoting global networking and sharing best practices amongst algal culture collections and researchers. Just earlier this month she and her team won long-term funding from UK Research and Innovation to further expand CCAP's activities."

Christine Campbell said: "I was unaware that I had been nominated. When I first heard about the recognition I felt undeserving to be singled out for such an accolade, as I am always part of a team. I thus think of his honour as a reflection of the contributions made by my team workers in CCAP, the Prospect Union and Girlguiding Argyll, as all three areas of my activity were part of the case made."

SAMS Deputy Director, Professor Axel Miller, explained: "In parallel to her professional duties, Christine has been a stalwart of trade union representation at SAMS for 30 years. In roles including Secretary and Chair of the local Prospect branch, she has been holding SAMS management to account, ensuring that the voices of junior and more vulnerable colleagues are heard. She has thereby played a major role in developing and safeguarding the caring SAMS family culture that staff throughout the organisation value very highly."

For 20 years Christine, who lives in Bonawe, has also supported Girlguiding in Argyll: Since 2000 she has been a Guide leader in North Connel, spending Thursday evenings and some of the

holidays at summer Guide camps. More recently she has been active in the County as International Advisor and as District Commissioner for North Lorn.

OU academic named in the Queen's New Year's Honours

Mark Brandon, Professor of Polar Oceanography, at The Open University, stem.open.ac.uk/, has been awarded an MBE in the Queen's New Year 2021 Honours for services to Polar Science. Mark has been at The Open University for 20 years and has been Professor of Polar Oceanography since 2018. He is also the Associate Dean of Enterprise and External Engagement in the Faculty of Science, Technology, Engineering and Mathematics (STEM).



Professor Mark Brandon in the field at Paradise Harbour, Antarctica. Credit: Sue Forbes (www.sueforbesphoto.com)

Professor Brandon, with a PhD in polar oceanography and over 25 years' experience, has led successful large-scale international projects in research and teaching around the way the oceans interact with the frozen parts of our planet in Antarctica and the high latitude Arctic and how that affects us all through sea level rise and changing weather patterns. As one of the UK's most experienced polar researchers Mark has spent over three years conducting fieldwork in the Arctic and Antarctic regions and his pioneering research led him to be the first person to use robots to explore beneath the Antarctic sea ice.

Mark is committed to public outreach and has also been the Lead Academic Advisor on BBC *Frozen Planet*, www.bbc.co.uk/programmes/b00mfl7n, in 2012 and more recently was a

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member of The Open University Academic team on *Blue Planet II*, www.bbc.co.uk/programmes/p04tjbtX, in 2017. He was also involved in many other leading BBC programmes over the last two decades shaping and developed the narrative of geographic knowledge in broadcast projects watched by more than 200 million people worldwide.

Professor Mark Brandon said: "I am accepting this award with great pride and much humility, my work at The Open University has allowed me to work with world-leading research scientists and broadcasters, visit and explore extraordinary places and science frontiers, and thanks to the OU's unique partnership with the BBC, I have been in the privileged position of being able to share that work with a global audience of millions. Through *Frozen Planet* we were able to bring front-line research into people's homes and actually show them the effects that climate change is having on our world. Giving people that understanding is the first step in encouraging them to change behaviours which may allow us to slow the inevitable changes and the impact these will have. I'm delighted to accept this award and am incredibly proud of the work we've done and am extremely grateful to the OU and its staff and students who have supported and shared this journey with me."

Professor Tim Blackman, Vice-Chancellor, The Open University, said: "Mark embodies our mission to be open to people, places, methods and ideas and his involvement and influence in some of the biggest reaching geographic documentary programmes of our time has helped people change the way they think about their impact on the earth. Everybody in our OU family is so proud of this much-deserved award for his huge contribution to Polar Science and the OU."

Blue whale community back from near extinction

An international research team led by the Scottish Association for Marine Science (SAMS) and the British Antarctic Survey (BAS) has revealed the return of critically endangered Antarctic blue whales to the sub-Antarctic island of South Georgia, 50 years after whaling all but wiped them out. The discovery, based on analysis of 30 years' worth of sightings, photographs and underwater sound recordings, is crucial evidence in learning how the species is recovering following a ban on commercial whaling in the

1960s. The findings are published in the journal *Endangered Species Research*, doi.org/10.3354/esr01077.

Blue whales were abundant off South Georgia before early 20th century industrial whaling, between 1904 and 1971, killed 42,698 of them there. Most of these were killed before the mid-1930s. The species all but vanished from the region, dedicated whale surveys from ships off South Georgia resulted in only a single blue whale sighting between 1998 and 2018, but more recent surveys suggest blue whales are making a comeback. A 2020 survey in February resulted in 58 blue whale sightings, and numerous acoustic detections.

Lead author, Susannah Calderan (www.sams.ac.uk/people/fellows/calderan-susannah/), of SAMS said: “The continued absence of blue whales at South Georgia has been seen as an iconic example of a population that was locally exploited beyond the point where it could recover. But over the past few years we’ve been working at South Georgia, we have become quite optimistic about the numbers of blue whales seen and heard around the island, which hadn’t been happening until very recently. This year was particularly exciting, with more blue whale sightings than we ever could have hoped for.”



*An Antarctic blue whale surfaces off South Georgia.
Photo: Amy Kennedy*

As well as looking for whales, the researchers used listening devices, which can detect the loud, low frequency calls of whales over long distances and can also work in rough weather. The team also had records of whale sightings reported to the South Georgia Museum by mariners and tourist ship passengers, and photographs of blue whales, which enable individual animals to be identified. In total, 41 blue whales have been

photo-identified from South Georgia between 2011 and 2020, although none of these matched the 517 whales in the current Antarctic blue whale photographic catalogue.

Susannah added: “We don’t quite know why it has taken the blue whales so long to come back. It may be that so many of them were killed at South Georgia that there was a loss of cultural memory in the population that the area was a foraging ground, and that it is only now being rediscovered.”

There are limited opportunities for dedicated whale surveys in the region, known for its harsh weather and inaccessibility but such surveys are crucial to the future management of South Georgia’s seas. Co-author and whale ecologist Dr Jennifer Jackson of BAS, who led the 2020 whale expedition, said: “This is an exciting discovery and a really positive step forward for conservation of the Antarctic blue whale. With South Georgia waters designated as a Marine Protected Area by the Government of South Georgia and the South Sandwich Islands, we hope that these increased numbers of blue whales are a sign of things to come and that our research can continue to contribute to effective management of the area.”

The team’s analysis was funded by South Georgia Heritage Trust and Friends of South Georgia Island, who also funded the collection of some of the data used. Acoustic and sightings data come from expeditions led by British Antarctic Survey, with funding from the Darwin Initiative and EU BEST; from the Swiss Polar Institute Antarctic Circumnavigation Expedition (funded by the ACE Foundation, Ferring Pharmaceuticals and the Australian Antarctic Division), and Government of South Georgia and South Sandwich Islands. For more information see: www.sams.ac.uk/news/sams-news-blue-whales-return-south-georgia.html.

Please save the date: NOCA AGM 2021

The 2021 AGM of the National Oceanography Centre (NOC) Association of Marine Science National Capability Beneficiaries will be conducted by Zoom on 11th and 12th May 2021, www.noc.ac.uk/partnerships/our-national-role/coordinating-uk-marine-science/noc-association. The timings for both days are 10:00 to 13:00. Detailed information on the agenda will be made available shortly.

Historical intercomparison of recording current meters

John Gould and Walter Zenk have published an invaluable insight into marine science 50 years ago. Most of you will be fascinated by this paper that they were invited to prepare by colleagues last year. It is not in a mainstream journal so may not be easily spotted, but it is available here: jor.ocean.ru/index.php/jor/article/view/582/349.

The world has changed greatly but at least we are now much better equipped to observe the oceans.

Ocean Recovery – Ideas into Practice Online Conference, January 19-21, 2021

To attend the event online and watch the session in catch up after the event you will need to register for the event, site.corsizio.com/c/5f858525f7e089022bb8c1de. Booking will close on Friday 15th January at 5.00pm.

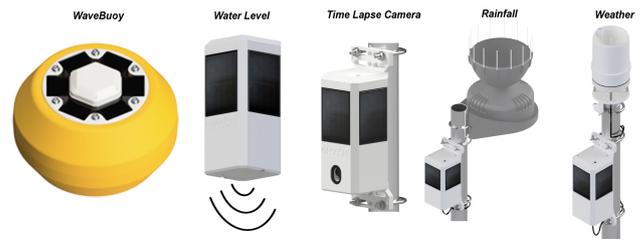
Many reports during the year have highlighted the need to move beyond the *status quo* and become much more active about recovering what we have lost. The urgency of the challenge over the next few years is the key message; to take the good ideas and turn them into routine practice. The organisers hope this conference will inspire you to play your part; and there are twenty one sessions and over 60 speakers; who are leaders in this work.

VIEWS

Planet Ocean Ltd is pleased to announce the signing of an exclusive distribution agreement with OBSCAPE B.v for the UK and Ireland.

Planet Ocean Ltd. are delighted to announce the signing of an exclusive representation agreement with Dutch manufacturer of Oceanographic, Hydrographic and Meteorological instruments **OBSCAPE B.v**. OBSCAPE instruments are based around their flexible and innovative PTM (Power Telemetry Module). The PTM is at the heart of all OBSCAPE systems. In essence it is a data acquisition and telemetry system that is modular in construct and can be configured with or without some of the features depending upon end user application. Key features of the PTM are multiple inputs, R-232, SDI-12, RS-485, inbuilt GPS, temperature and humidity for

housekeeping, solar regulation/charge control, and a choice of telemetry.



The PTM is pre-configured for use with the **time lapse camera, water level sensor, rain gauge and weather station** and of course **WaveBuoy**. The **WaveBuoy** for example has both 2G, 3G, 4G and Iridium satellite communication. The cellular modem has space for two SIM cards, so you have two networks enabled and the system will switch to the strongest, or to the other if one becomes unavailable. In addition, the system can be set to use both cell and satellite or use satellite as back up. All report directly to the free to use web data portal where your sensors can be networked into a coherent group.

Planet Ocean M.D Terry Sloane commented “We are extremely impressed with the innovative design of the OBSCAPE instruments, as well as their rugged construction, ease of use and end to end capability; sensor, telemetry, data display and archiving.”

Planet Ocean will be providing pre and post-sales support and first level service from their Camberley Surrey base. For more details about **OBSCAPE** products contact sales@planet-ocean.co.uk or Visit: www.obscape.com.

SALTS

Urgent mission launches to investigate giant iceberg

A research mission to determine the impact of the giant A-68a iceberg, www.bbc.com/news/science-environment-54798031, on one of the world’s most important ecosystems gets underway next month. A team of scientists, led by the British Antarctic Survey (BAS), will set sail on one of the National Oceanography Centre’s research ships bound for the sub-Antarctic island of South Georgia.

The huge iceberg, which broke away from Antarctica's Larsen C Ice Shelf in 2017, is now 3900 km² in area, and satellite images have revealed that it is currently heading towards South Georgia, with the potential to severely impact wildlife habitats in the region.



A glider in Antarctic waters

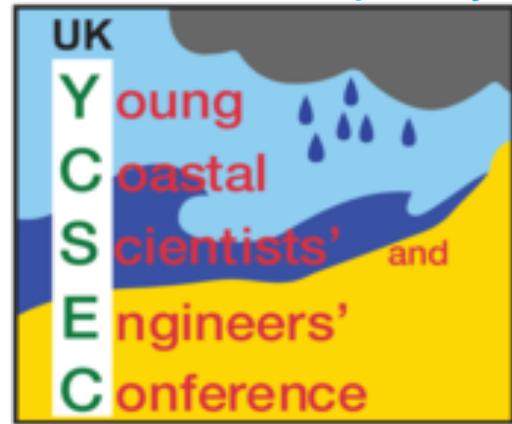
Underwater robotic gliders will be deployed from RRS *James Cook*, which will depart from the Falkland Islands for the iceberg in late January. The two 1.5 metre long gliders will spend almost four months collecting measurements of seawater salinity, temperature, and chlorophyll from opposite sides of the iceberg, piloted over satellite link by personnel from the NOC and BAS. The team will also measure how much plankton is in the water and compare their findings with long-term oceanographic and wildlife studies around South Georgia and nearby Bird Island. Find out more on our website, www.noc.ac.uk/news/mission-investigate-giant-iceberg-launches.

CALENDAR

29th-30th March 2021: Young Coastal Scientists and Engineers Conference

Liverpool, UK

Registration is open for Young Coastal Scientists and Engineers Conference (YCSEC) hosted virtually by the National Oceanography Centre (NOC).



The event is free to attend and there will be prizes for the best presentations sponsored by our friends at Marlan Maritime Technologies, marlan-tech.co.uk. If you'd like to present your work or simply attend please register by 12th February. Abstract submissions for those wishing to present either a 15 minute talk or five minute single slide 'Hotplot' will also close on the same day. Get all the details and register here, noc-events.co.uk/young-coastal-scientists-and-engineers-conference-ycsec-2021.

7th-10th May 2021: Arctic Circle Japan Forum Tokyo, Japan

The Third Arctic Science Ministerial Meeting is co-hosted by the Icelandic Ministry of Education, Science and Culture, and the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT). Arctic Circle is collaborating with the Sasakawa Peace Foundation, www.spf.org/en/. Governments, universities, companies, research institutions, organizations, associations and other partners are invited to submit proposals for Sessions to the Arctic Circle Secretariat at: www.arcticcircle.org/forums/japan/proposals.

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

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.

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.

Registration is open for the new dates, ecosummitcongress.com/conference-register.asp, and we look forward to seeing you at EcoSummit 2021. So that you can 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.

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

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- 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
- 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 invite contributions within a broad range of topics, covering the diversity of threats and opportunities facing estuarine, coastal and marine ecosystems and the people they support. For our

full list of topics and special sessions please visit the website.

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.

5th - 9th September 2022: Challenger Society Biennial Meeting – celebrating the 150th 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 29th January.

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

JOBS

There are jobs on the IMBER web site

<http://www.imber.info>



Integrated Marine Biosphere Research

Jobs and opportunities

New

- Call for Expressions of Interest: Online Master of Arts: Ocean Governance, University of Malta, Malta
- Postdoc: Marine biogeochemistry or physical oceanography, IPSL, Paris, France. Apply by **28 December**. Contact [Laurent Bopp](#) and [Marina Lévy](#)
- Associate Prof/ Prof: Biogeochemistry, University of Cape Town, South Africa. Apply by **3 January**
- Postdoc: Open ocean predator-prey dynamics, University of Amsterdam, Netherlands. Apply by **6 January**
- 12+Postdocs: Ocean restoration and protection; sustainable marine resource use; ocean data, Ifremer, Brest, France. Apply by **19 January**
- Director: International Ocean Institute – Southern Africa, Kirstenbosch, South Africa. Apply by **20 January**
- Postdoc: Marine carbon cycle, LOCEAN, Paris, France. Apply by **31 January**
- Postdoc: Continental Shelf Dynamics, UBC, Vancouver, Canada. Review of applications starts **1 February**
- PhD: Marine microecology, University of Amsterdam. Apply by **5 February**
- Executive Director: Belmont Forum, Montevideo, Uruguay. Apply by **15 February**

In case you missed it...

- Postdoc: Ecological modelling. Yantai Institute of Coastal Zone Research, Yantai, China. **Send expression of interest now**
- Entry Level Natural Resources/Marine Scientist, AECOM, Chelmsford, MA, USA. No deadline given, **apply now**
- Postdoc: Coastal processes, hydrodynamics and sediment transport modelling. University of Melbourne, Melbourne, Australia. Apply by **23 December**
- Two postdocs for African candidates: Marine spatial planning and sustainable development, Nelson Mandela University, Port Elizabeth, South Africa. Apply by **6 January**
- PhD: Role of sponge competition in cold-water coral reefs, Aberdeen University, UK. Apply by **6 January**
- Three lecturer positions: Ecosystem resilience, energy transition and climate change and geohazards and risk, University of Plymouth, Plymouth, UK. Apply by **10 January**
- Postdoc: Acoustics obs technology for benthic mapping, Institute of Marine Research, Bergen. Apply by **10 January**
- PhD: Will climate change cause the ocean to run out of breath? UEA, Norwich, UK. Apply by **15 January**
- Antarctic Program Manager, WWF, Hobart/Melbourne, Australia. Apply by **21 January**
- IPBES Call for nominations of experts to assist with the scoping of a methodological assessment of business and biodiversity. Submit by **1 February**
- ECR Funding opportunity: 'Freigeist' fellowships. Apply by **1 April**

Visit the IMBeR Website

imber@imr.no