

Challenger Wave

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



Scottish polar explorer who helped map Antarctica retires

A leading polar scientist, who is credited with helping to map Antarctica and has worked with the French Space Agency, has retired. Professor David Meldrum, a Research Fellow at the Obanbased Scottish Association for Marine Science (SAMS), studied the Arctic and Antarctic regions for nearly 50 years. His outstanding contribution to UK polar research was recognised in 2012 when he was awarded the UK Polar Medal at Buckingham Palace.



Professor David Meldrum was awarded the UK Polar Medal for his work in both polar regions

Between 1974 and 1979 he was a key part of an airborne Radio Echo Sounding programme in Antarctica that for the first time identified internal layering and the configuration of land surface beneath the ice. The pioneering work, which included the discovery of Lake Vostok, mapped an area of the Antarctic ice sheet equivalent to the USA in size. In 1978 Prof Meldrum joined SAMS (then known as Dunstaffnage Marine Laboratory) and helped to develop technical innovations still in use today in polar research and oceanography, such as drifting buoys, GPS navigation, smart sensors and satellite communication systems. Prof Meldrum, who was integral to the creation of SAMS' Scottish Marine Robotics Facility, said: "I have been very fortunate to be able to enjoy a career that has taken me to the ends of the Earth, and has allowed me to work with amazing people here at SAMS and elsewhere. It is marvellous to have been honoured and decorated for having had a career that was a lot of fun."



SAMS Director Prof Nicholas Owens, left, and Associate Director Prof Mark Inall, right, congratulate Prof David Meldrum on his remarkable career

The St Andrews and Cambridge graduate is the author or co-author of more than 100 papers in glaciology, oceanography, satellite communications and technology development. He is a leading designer of modern, smart, low cost communications units for use in polar regions and these continue to be deployed. His expertise led to him becoming chairman of the Data Buoy Cooperation Panel of the Intergovernmental Oceanographic Commission and World Meteorological Organisation (IOC/WMO) between 2004 and 2009. In 2013 Prof Meldrum, who lives in Taynuilt, was made a Fellow of the Institute of Physics and a professor of the University of the Highlands and Islands, SAMS Director Prof Nicholas Owens said: "It is clear that the range and depth of David's experience and expertise in both polar regions mark him out as having made a hugely significant contribution to our knowledge. This has been through classical expeditions, technological innovation and a legacy of data collection that will continue to reveal the secrets of the polar regions for decades to come."

While at SAMS, Prof Meldrum spent two years on secondment at Collecte Localisation Satellites (CLS) Argos in Toulouse, part of the French Space Agency (CNES).



Challenger Medal 2016

The Challenger Medal is awarded to Professor Karen Heywood in recognition of her major contribution to physical oceanography in the UK and worldwide. This medal is awarded biennially by the Challenger Society to recognize an outstanding contribution to UK marine science.

Professor Heywood is particularly well known for her contribution to the observation and understanding of physical oceanographic processes in the Antarctic, and for her work in applying new techniques, particularly glider operations. With this medal the UK oceanographic community is also recognizing her wider work in developing UK marine science, particularly within SCOR, the international Scientific Committee on Oceanic Research.



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



6th-8th January 2016: AMBIO VII, Advances in Marine Biogeochemistry Conference University of Oxford, UK



AMBIO VII: Advances in Marine Biogeochemistry

Save the date!

Conference



January 6th-8th 2016 University of Oxford Coming to the Department of Earth Sciences: The 7th biannual meeting of The Marine Biogeochemistry Forum - Special Interest Group of The Challenger Society for Marine Science. Further announcements to follow



17th-18th February 2016: Society of Maritime Industries Annual Conference Hull. UK

Maritime Engineering: Exploring Business Opportunities in a Diverse Sector. As per previous editions the 2016 conference will include industrial visits, one-to-one meetings and an evening reception and dinner The programme will soon be announced info@maritimeindustries.org

7th-9th March 2016: The Annual Science Meeting of the Ecosystem Studies of Subarctic and Arctic Seas (ESSAS)

Yokohama, Japan

The title of the meeting is Scientific Challenges in a Changing Arctic and Subarctic. The various sessions cover paleo-ecology, biogeochemistry, physical oceanography, biological oceanography, fisheries and human dimensions.

Abstract submissions related to the subarctic or Arctic are encouraged for any of these sessions

with a deadline submission of January 31, 2016. Details on the various sessions of the meeting as well as logistics can be found at <u>http://www.arc.hokudai.ac.jp/en/essas2016/</u>. We hope to see a number of you in Yokohama.

12th-15th April 2016: IX International Congress on the History of Oceanography; Discovery of changes in the oceans of the World *Adelaide, Australia*

International congresses on the history of oceanography under the auspices of the International Commission of the History of Oceanography have been held over the years in Monaco (1966), Edinburgh (1972), Woods Hole (1980), Hamburg (1987), Scripps (1993), Qingdao (1999), Kaliningrad (2003) and Naples (2008). The ninth meeting (ICHO IX) is the first Congress to be held in the southern hemisphere, and will occur during the fiftieth year celebrations of the founding of Flinders University, which was the first institution in Australia to offer tertiary studies in oceanography.

Papers are invited over the following groups of subjects:

Observational oceanography International co-operations Interdisciplinary approaches Economic aspects of oceanography Institutional heritage Archival resources Mathematical simulation

Oral and poster presentations are welcome. It is proposed to run the Congress as a single stream in the main lecture theatre, with the inclusion of about 25 half-hour contributed oral presentations including discussions, together with two poster sessions in the adjacent facilities. The deliberations of ICHO IX will be reported in a proceedings volume. An attendance of between fifty and one hundred delegates is anticipated. The Congress will be hosted by the School of the Environment, of Flinders University.

Contacts:

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An abstract of about 250 words for either oral or poster presentation should be sent to *John Bye (Chair)* before December 31st 2015, and acceptances will be provided no later than January 31st 2016.

The registration for ICHO IX will open on 1st February 2016. Details including online payment options will be announced at the congress Webpage to be hosted at http://www.flinders.edu.au /science_engineering/environment/activities/. The anticipated Registration fees are:

Participant: AU\$ 440

Student participant: AU\$ 55

Accompanying person AU\$ 110

Registration includes the ICHO IX Dinner on the evening of Thursday April 14th, and for Participants, a Congress handbook and welcome late afternoon refreshment on Tuesday April 12th, and the electronic copy of the volume based on the Proceedings.

Authors are invited to submit a manuscript of their contributed oral or poster presentation as a pdffile to lan Jones (Secretary) before April 30th 2016 for inclusion in a volume based on the Ninth Congress. Submission prior to the Congress will enable interaction with authors to occur. Manuscripts will be peer reviewed, and may be revised and copy edited. If you cannot attend the Congress, your manuscript is also welcome, and may be presented in absentia. This is a rare opportunity to contribute to a volume devoted to the history of oceanography, which ANU Press have agreed to publish, subject to review by their reader. ANU Press will sell both the electronic and hard-bound version of the book.

Adelaide usually experiences pleasant autumn weather in the second half of April, and the waters of Gulf St Vincent on which it is situated are at their warmest of about 22 °C. The ICHO IX venue is a short walking distance from Tonsley railway station for access to the city hotels and restaurants. Evening return to the city can also be made by bus. The Tonsley campus is also about one-half hour by car from Adelaide Airport. The Southern Ocean lies about 80 km to the south of the venue, and during the course of the Congress some bracing oceanic or warm desert wind events may be experienced. Climate model predictions for Australia indicate that the central southern coast is likely to be the most live-able region under global warming.

13th-15th April 2016: Workshop on "Highresolution ocean modelling for coupled seamless predictions"

Exeter, UK

The scope of this workshop, to be held at the UK Meteorological Office, is to look at the scientific development of ocean models and global coupled prediction systems at resolutions of order 1/12° for seasonal to decadal prediction and short-range weather forecasting and to:

- Identify expected improvements to processes and performance
- Clarify the key choices for ocean model configurations and parameterisations
- Discuss the development of coherent designs and collaborations for experiments and diagnostics

A first agenda is now available from the workshop website. Please use this link to always get the latest agenda version. Registration for the workshop is now open. To register please complete the workshop registration form which will also allow the submission of abstracts. Please submit your abstract with the registration form (see link above) and assign it to one of the session themes (please add relevant number(s)) on the form.

All presenters must register in order to attend the HRCP workshop. The registration fee will cover costs for lunches, breaks, ice-breaker and poster boards and will be in the range of GBP 75-100 (exact level to be confirmed soon). The fee will be collected on-site in cash (only). The deadline for abstract submissions is the 20 January 2016.

The deadline for registration is the 31 March April 2016. Venue, directions and accommodation information is available from the workshop website:

https://www.godaeoceanview.org/outreach/meetingsworkshops/external-meetings-supported-bygov/international-coupled-seamless-predictionmeeting/local-information/.

This is an International workshop supported by GOV and the GOV CP-TT (Coupled Prediction Task Team). For more detailed information about the workshop, agenda, sessions and local information please visit the workshop website.

12th-17th June 2016: Gordon Research Conference on Ocean Biogeochemistry Hong Kong, China

The 1st Gordon Research Conference (GRC) on Ocean Biogeochemistry will be held at the Chinese University of Hong Kong. The topic of this first conference will be *The Biologically-Driven Ocean Carbon Pumps*.

Interested researchers, postdoctoral fellows and graduate students are invited to apply for participation as soon as possible on the GRC website (Online Application):

<u>http://www.grc.org/programs.aspx?id=17297</u> <u>Nianzhi Jiao</u> and <u>Eileen E. Hofmann</u> (Chairs) <u>Louis Legendre</u> and <u>Sylvia Sander</u> (Vice Chairs)

5th-7th July 2016: UK Antarctic Science Conference

UEA, Norwich, UK

We welcome everyone working on Antarctic or Southern Ocean science, including techniques such as in situ measurements, numerical models, laboratory experiments or remote sensing. The conference welcomes all science disciplines, including cryosphere, earth, atmosphere, marine, climate and life sciences.

There are rooms booked for associated meetings Monday - Tuesday and Thursday - Friday, so if you would like to organise a side meeting (e.g. UK Polar Network, Sea Ice group) then please contact us. We also look forward to hearing from you if you are interested in sponsoring the conference or having a stand or display at the conference.

We look forward to welcoming you to Norwich. Details of the conference website, deadlines, registration and abstract submission will follow shortly.

5th-8th September 2016: 17th Biennial Challenger Society Conference: Oceans and Climate

Liverpool, UK First announcement and call for sessions http://www.liv.ac.uk/challenger-conference-2016/

We are pleased to announce the next biennial Challenger Society for Marine Science conference will be held in Liverpool in September 2016.

The call for abstracts under the successful session programme will be announced in February

2016. Where significant overlap exists between proposed sessions the committee will approach conveners to arrange joint or amalgamated sessions. The conference will provide space for up to 24 sessions, including oral presentations and dedicated poster sessions with multimedia capability over 3 days.

Space and funding is also available to support special interest groups (SIGs), large project meetings and education/outreach events, with free facilities offered on Monday 5th and Friday 9th September. Please submit proposed events of this type using the same format as for scientific sessions with the subject prefix "SIG:".

Further enquiries can be made via <u>csms_enquiry@noc.ac.uk</u>. We look forward to seeing you in Liverpool next September, - *Dr Matthew R. Palmer*

On behalf of the conference local organising committee.

12th-16th September 2016: CIESM Congress *Christian Albrechts University, Kiel*

To All CIESM Friends, this will be the first time that our Congress takes place in Germany, which has been a Member of our Commission since 1969.



As many of you as possible, we hope, will join us next September on the Baltic coast to take part in the 41st triennial CIESM Congress. You will be able to present a paper (2 max) at the Congress on the double condition that (a) your paper is accepted by the relevant Committee Chair, and (b) it matches the list of themes selected by the CIESM Science Council <u>www.ciesm.org/marine</u> <u>/congresses/themes.php</u> If one or more of these themes match your research, you now have until early 2016 to prepare a brief Congress paper following the instructions given at www.ciesm.org/marine/congresses/CIESM41s tCongress.pdf. The submission period will be open online from **4 January - 15 February 2016.** Precise info on the online submission procedure will be published in mid-December. With my best regards, Frederic Briand,Director General, The Mediterranean Science Commission, CIESM

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

London, UK

Abstracts are now invited for submission of papers for the SUT Future of Underwater Technology Conference 2016. The conference will be held in London (UK) to celebrate the 50th anniversary year of the Society. It aims to attract the best authors in their field from across the world to showcase new technologies, products, best practices and in particular foresight the next generation of subsea engineering, marine science, and all aspects of underwater technology.

It will be a flagship event for the Society and it is the intent for it to become a regular occurrence and be held in future at SUT global centres around the world.

The SUT Technical Conference 2016 will offer:

- · First class sessions and networking
- Opportunity to connect with underwater engineering, science, and business professionals from around the world and progress your knowledge
- A showcase for the latest technologies in subsea engineering, marine science, and allaspects of underwater technology
- An opportunity to see and meet the talent of students and young professionals that are emerging as the next generation in our industry
- The conference will have an intimate exhibition area which will provide excellentopportunities for networking and knowledge exchange.

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

alongside.

General Guidelines

- Abstracts will be reviewed and a decision on acceptance will be made by the Technical Steering Committee (TSC).
- You must obtain the necessary permissions from your management/superiors to present/publish your paper.
- A brief abstract of 250-500(max) words is required for assessment and must be submitted on the abstract submission form (see below). Your abstract should include a description of the proposed paper, any results/conclusions, and the technical category most applicable to your paper (See website).
- Abstracts can be received any time up to 9th May 2016.
- Final written papers must be original and approximately 3000-5000 words.
- If accepted your paper will be published in the conference information media including the SUT website.
- Papers are to be technical in nature and SUT policy does not support the use of commercial trade names, company logos, or text that is overtly commercial in nature in the paper title, text, or slides. Use of such terms will result in careful scrutiny by reviewers evaluating abstracts.
- Presentation of papers at the conference will be in MS PowerPoint and are to be in a common conference format (template to be provided). Twenty minutes will be allotted to each paper, including introduction, presentation, questions and answers.
- Authors will be required to pay a fee (giving right to full registration – see website for registration fees) and present the paper at the conference. Failure to present the paper at the conference may exclude from publication.

• SUT have an Open Access policy. Papers will be published in digital format by SUT and will be archived on OnePetro.org. Selected papers will be assessed for publication in the Society's Journal, *Underwater Technology*.

The programme will consist of plenary sessions, technical sessions, and student poster displays. Substantial effort will be made to ensure the highest quality programme with emphasis on the theme of the event. The final programme will be developed by the Technical Steering Committee which will be made up of representatives from the whole SUT organisation including Branch Committees, Special Interest Groups, and Council. Provision has been made for approximately 200 papers to be presented in plenary and parallel sessions throughout the 3 day event.

Call for abstracts open: Oct 2015 Deadline for abstract submissions: 9 May 2016 Authors notified: 10 Jun 2016 Deadline receipt of publication quality papers: 23 Sep 2016 Deadline receipt of conference presentation: 7 Oct 2016

Please use the abstract submission form, which can be downloaded from www.sut.org/event/ sut2016. Abstracts should be submitted in English and in Microsoft Word format; please do not send PDF format abstracts. Abstract forms should be submitted by the deadline bv email to sut2016@sut.org. A notice of receipt will be emailed by return. Student poster submissions should use this call process and mark submissions as "Poster"; no paper will be required. If you have any queries about your submission please David Liddle, Business Develcontact either opment Executive david.liddle@sut.org , or-Kir-Webster. Events Manager: stv kirsty.webster@sut.org

CSMS email addresses are president, admin, membership, secretary and treasurer@challengersociety.org. 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



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