

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

Challenger Wave



Introduction to Data Analysis and Ecosystem Modeling summer school

The Institute for Chemistry and Biology of the Marine Environment (ICBM), University of Oldenburg (Germany), will hold a summer school between the 30th July and 12th August 2017, in Wilhelmshaven and Oldenburg, dealing with diverse modeling approaches to marine processes and systems.

The central idea of the summer school is to follow the analysis chain ranging from data sampling over data analysis and conceptual process descriptions and numerical schemes up to the level of comprehensive ecosystem models. The aim is to acquaint participants with diverse up-todate modeling techniques at an introductory level. Since data acquisition will be an integral part of the summer school a focus will be on marine conditions met in the southern North Sea and Wadden Sea; one of the largest tidal systems world-wide and a UNESCO World Heritage site since 2009.

Main scientific topics are:

- Introduction to the coastal area of the southern North Sea and Wadden Sea
- **Excursions**
- Data acquisition and processing
- Introduction to R and Matlab
- Multivariate data analysis
- Time series analysis
- Hydrodynamic modeling •
- Networks: structure and dynamics •
- Dynamics of populations and ecological communities
- Biodiversity and ecosystem modeling

The summer school is aimed at young scientists, i.e. advanced (master) students and early stage PhD students, with a background in marine or environmental natural sciences of all disciplines. Applications, by CV and motivation letter, should be sent before 31st March, 2017 by e-mail to icbm.summer school@uni-oldenburg.de, in pdf format.

Further information can be found on our web site: http://icbm.de/summerschool/. Contact with the ICBM Summer School can be made through icbm.summerschool@uni-oldenburg.de.

Request for bids to host the IMBeR Open Science Conference in 2019

IMBeR (Integrated Marine Biosphere Research) is planning to hold its second Open Science Conference (OSC) in 2019. The five-day OSC will provide a focus for the integration and synthesis of IMBeR research activities with the goal of providing new understanding and guantification of the past, present and future structure and functioning of linked ocean and human systems in order to develop options for securing or transitioning towards ocean sustainability. Dr. Carol Robinson is the Chair of the OSC Scientific Steering Committee and appointment of the Scientific Steering Committee is underway.

IMBeR is requesting proposals to host the OSC. Expected participation is between 250 and 500 people. Bids should be submitted by 1st April 2017 and should include the following information:

- Scientists and organisations who will serve as local hosts, including the expertise of local planning committee members
- Suitability of the location to attract leading • scientists, provide outreach opportunities, and link with policymakers
- Suitability of the location for inexpensive international air travel, road and rail links and environmentally-friendly transport options (such as minimising connections)
- Description of the meeting venue and capacity of the meeting space available for

the duration of the meeting. Requirements include: reception area, one plenary room and 3 - 5 breakout rooms, area to exhibit posters, and additional smaller meeting rooms

- Availability of accommodation at a range of costs, including the number of rooms, distance from the meeting venue, and costs of rooms for high and low season
- Distance of meeting and accommodation facilities from major airport(s) or rail links and cost of transportation between airport and meeting and accommodation facilities
- Expected cost of meals per day
- Expected level of local support and associated funding, including ability to provide meeting space, audio-visual equipment, and staff support at no cost to the organisers
- Potential to raise other complementary support
- Dates when the facility is available in 2019
- Local entertainment and tourism possibilities
- Plans to minimize environmental effects of the symposium.

Enquiries and bids should be sent to Lisa Maddison Lisa.Maddison@imr.no at the IMBeR International Project Office; bids should be limited to about 10 pages.



Hundreds of International Exhibitors Set to Showcase the Latest Ocean Technology at Ocean Business 2017

Ocean Business 2017, which takes place in Southampton at the National Oceanography Centre between 4th-6th April 2017, is shaping up to be a vibrant international event for the ocean technology industry. Now larger than ever before, the team are delighted to be welcoming over 340 exhibitors; of these, almost 50 are first time exhibitors at the show, and from 26 countries around the globe. Cheri Arvonio, Ocean Business Event Manager, explains: "We have a fantastic diversity of exhibitors lined up for this year's show and are thrilled that so many companies are joining us for the first time this year. The fact that many exhibitors are from overseas proves that Ocean Business is recognised internationally as a leading event for innovation in ocean technology.

As well as this, we expect that over 40% of the show's visitors will be from outside the UK."

First time exhibitor, Neil Manning, Chief Business Development Officer at US based 3D at Depth confirms this: "As one of the leading tradeshows worldwide, we are confident that Ocean Business will provide a great opportunity for us to directly connect with our customers in a unique environment with hands on demonstrations of new and innovative technology. We will showcase the success of our technology by providing real-world examples of how subsea LiDAR can increase offshore efficiencies especially in the areas of decommissioning and other applications where 3D mapping is critical to a project's success."

Another exhibitor new to Ocean Business is Norway's Ecotone which has developed a unique system for visual mapping and monitoring of the seabed and installations, such as pipelines, drill sites, environmental mapping and sea farm inspections. Ecotone's CEO, Ivar Erdal, comments: "We believe Ocean Business is a great place to show our latest products and developments, and to meet people with interest in our technology."

In addition to the three-day exhibition of technology and services, at the core of the event, there are a series of hands-on training and demonstration workshops which enable exhibitors to present their products in the most effective way, and for customers to actually try out the new technologies. The show's venue at the National Oceanography Centre in Southampton, provides unique dockside facilities that are fully integrated into the show so technology can be demonstrated on the dockside or onboard vessels throughout the show. Running alongside the exhibition is a conference focusing on maritime dual-use opportunities in autonomous systems and satellite applications, various associated meetings held by leading organisations in the industry, Ocean Careers providing career and recruitment advice and a full line-up of enjoyable social events for informal networking; from drinks and a wine trail, to an evening gala dinner.

Ocean Business once again presents an actionpacked programme. Visit the website at www.oceanbusiness.com for FREE visitor registration and for full details about Ocean Business 2017.



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

4th-6th April 2017: Ocean Business 2017 *Southampton, UK*

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23rd-28th April 2017: European Geosciences Union General Assembly

Vienna, Austria

Craig Smeaton from the University of St. Andrews will convene session BG3.3/OS3.9, entitled *Coastal Carbon: From Vegetated Coasts to Sedimentary Stores.* Details of the session can be found at http://meetingorganizer.copernicus.org/ EGU2017/session/24946.

The Copernicus Marine Environment Monitoring Service (CMEMS) session, OS4.6, will focus on

- scientific advances on thematics relevant to CMEMS that are needed for the short to long term evolution of the CMEMS products.
- verification, validation and uncertainty estimates of CMEMS products, forecasting skills.
- the use of CMEMS products for downstream applications.
- ocean monitoring and on the long-term assessment of the ocean physical and biogeochemical states.

A detailed description is available in the direct link to session OS4.6, http://meetingorganizer. copernicus.org/EGU2017/session/24345. General information on the General Assembly, is available at http:// egu2017.eu/home.html.

Session OS2.2 is entitled Advances in understanding of the multi-disciplinary dynamics of the Southern European Seas (Mediterranean and Black Sea). Introduced with a Keynote talk given by Professor Joaquin Tintoré, the session will overview recent developments and understanding, by observations and modelling. of the Southern European Seas (SES) general circulation, physical processes, their ecosystems biogeochemical and fluxes. For further information, visit the EGU Assembly site: http://meetingorganizer.copernicus.org/EGU2017/ session/23131.

27th-28th April 2017: Scottish Inshore Fisheries Conference 2017 Inverness, UK

The fourth Scottish Inshore Fisheries Conference kicks off on the Thursday with a session to introduce the EMFF funded Scottish Inshore Fisheries Integrated Data System or 'SIFIDS' Project. This project will focus on using new technologies and processes to improve data collection and use within Scotland's inshore fisheries, with the intent of reducing the reporting burden on fishermen and improving the information base on which fisheries management decisions are made. This session is then followed by the official opening of the conference at an evening reception at Eden Court and we welcome all delegates to attend this.

On the Friday, Fergus Ewing MSP, Cabinet Secretary for the Rural Economy and Connectivity will open the day, and delegates will also have the opportunity to attend sessions on a variety of subjects including fisheries management challenges and actions. Brexit, and marketing the local catch. There will be ample opportunity for networking. visiting stands. speaking to representatives from a range of organisations, celebrating our fantastic seafood, and sharing experiences and knowledge in an informal setting on a wide range of issues.

We look forward to welcoming you to the 2017 Inshore Fisheries Conference. For more information about the conference, the venue or help with accommodation contact masts@standrews.ac.uk.

22nd-26th May 2017: The 49th International Liege colloquium on Ocean Dynamics, the 8th Warnemünde Turbulence Days

Liège, Belgium

Almost four decades after the "Marine Turbulence", 11th Liège Colloquium in 1980. Three decades after the "Turbulence in the ocean. From the millimeter to the megameter", 19th Liège Colloquium in 1987. Two decades after the "Marine Turbulence Revisited", 29th Liège Colloquium in 1997. One decade after the "Turbulence Re-revisited", 39th Liège Colloquium in 2007. The exciting topic of marine turbulence will be revisited for the 3rd time during "Marine Turbulence Re³-visited" as the 49th Liège Colloquium in 2017.

As in 2007, the workshop will be co-organised together with the Warnemünde Turbulence Davs (its 8th edition), a biennial workshop on specific challenges in marine turbulence, organised by the Leibniz Institute for Baltic Sea Research in Warnemünde (Germany). Combining the historically approach of the broad Liège Colloquium with the specialized Warnemünde this Turbulence Days, joint venture will concentrate on five focal topics :

Turbulence-wave-interaction

- Turbulence-(sub)mesoscale interaction
- Turbulence and the marine ecosystem
- Turbulence observations in the ocean
- Turbulence modelling in the ocean

Contributions to these focal topics as well as to related problems of marine turbulence are invited to the Liège Colloquium in 2017.

Further details (registration, deadlines, venue, etc.) are available on the web site http://labos.ulg.ac.be/gher/home/colloquium/

colloquium-2017/. We are looking forward to welcoming you in Liège on behalf of the Organizing Committee.

19th-22nd June 2017: Oceans '17 conference Aberdeen, Scotland



30th July-12th August 2017: Introduction to Data Analysis and Ecosystem Modeling Wilhelmshaven and Oldenburg, Germany



July 30 – Aug. 12, 2017 in Wilhelmshaven and Oldenburg (Germany)



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marine or environmental natural sciences of all disciplines

Send your application until March 31, 2017 by e-mail to icbm.summerschool@uni-oldenburg.de (as pdf file, including a CV and a motivation letter).

Please visit our web site for further information: http://icbm.de/summerschool/

Contact: ICBM Summer School icbm.summerschool@uni-oldenburg.de Dr. Jürgen Köster, Phone +49-(0)441-798 3350 PD Dr. Jan Freund, Phone: +49-(0)441-798-3231

- Main scientific topics are: Introduction to the coastal area of the southern North Sea and Wadden Sea
- Excursions Data acquisition and processing Introduction to R and Matlab Multivariate data analysis
- Time series analysis Hydrodynamic modeling
- Networks: structure and dynamics Dynamics of populations and
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6th-7th September 2017: Advances in Marine Biogeochemistry Conference VIII

Oban, Scotland

Save the date for AMBIO VIII, more information nearer the time, www.challenger-society.org.uk/ Marine_Biogeochemistry_Forum



AMBIO meetings set the stage for Marine Biogeochemistry in the UK, connecting disciplines within the field and establishing networks for the integration of early career scientists. The AMBIO VIII meeting in September 2017 is to be hosted at the Scottish Association for Marine Science in Oban. Save the date! Registration will open in early 2017.

Info: www.challenger-society.org.uk/Marine_Biogeochemistry_Forum Contact: kirsty.crocket@sams.ac.uk, natalie.hicks@sams.ac.uk

2nd-6th October 2017: the 5th IMBIZO

Woods Hole, MA, USA

Mark the dates !, IMBER will hold its fifth IMBIZO (the Zulu word for a gathering) at the Woods Hole Oceanographic Institute. The theme of IMBIZO V will be: *Marine biosphere research for a sustainable ocean: Linking ecosystems, future states and resource management.* We will follow the usual IMBIZO format of three concurrent but interacting workshops – topics to be announced soon. Please spread the news widely.



13th-15th October 2017: Fifth Arctic Circle Assembly

Reykjavík, Iceland

Proposals are now being accepted for Breakout Sessions at the Fifth Arctic Circle Assembly to be held October 13-15, 2017 in Reykjavík, Iceland. Participation will be granted based on session topic, area of focus, goals, and room availability at the Harpa Reykjavík Concert Hall and Conference Centre, https://player.vimeo.com/ video/152251225?autoplay=1. When proposals are submitted, 50% of speakers need to be confirmed.

Submission Deadline: MAY 12th, 2017

Proposals must follow guidelines, please submit proposals to Secretariat@ArcticCircle.org. The Arctic Circle provides an open, democratic forum for discussion and cooperation on Arctic Affairs. We hope to see you in Reykjavík this fall.

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 31st March.

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



There are jobs on the IMBER web site

http://www.imber.info

