

CANADIAN OCEAN SCIENCE NEWSLETTER LE BULLETIN CANADIEN DES SCIENCES DE L'OCÉAN

Newsletter Number 59, August 31, 2011 Bulletin numéro 59, le 31 août 2011

Contents

| 2 |
|---|
| 2 |
| 2 |
| 2 |
| 3 |
| 3 |
| 4 |
| 4 |
| 4 |
| 4 |
| 4 |
| 5 |
| 6 |
| 6 |
| |

OCEAN SCIENCE PROGRAMS

Errata

The July issue of the COSN/BCSO contained an article headed "SCOR Working Group 128 on Coastal Hypoxia - Final Status Report" This WG was co-sponsored by IAPSO, to whom apologies are extended for the omission.

PERSONNEL

Marty Bergmann



The Canadian Arctic has a way of making icons from humble scientists. On Saturday, August 20, 2011 with the crash of First Air Flight 6560 in Resolute, Martin Bergmann, or "Marty" as he was best known, prematurely joined a list of so many other greats of the North. As Director of the Canadian Polar Continental

Shelf Program (PCSP) of Natural Resources Canada, throughout the period of International Polar Year 2007-2008, Marty either greeted, assisted or facilitated visits to the high Arctic of more than a thousand scientists and graduate students from among the Canadian and extended international scientific community, not to mention many, many media teams. Marty organized annual receptions and tours at the PCSP which hosted national and international scientists who mingled with media, dignitaries and local residents. He was on his way to just such an event, to host Canada's Governor-General David Johnston and Prime Minister Stephen Harper, when the tragedy occurred.

As Director of the PCSP, it was up to Marty's group to organize transportation, equipment and other logistical services for researchers working in Canada's North. But he did so much more than that -- he viewed his role at PCSP as an "Ambassador for the North". Before that, he established the National Centre for Arctic Aquatic Research Excellence at Fisheries and Oceans Canada (DFO) and in previous roles, when it came to getting science done in the Arctic and scientists to where they needed to be, Marty knew what was needed, and did it. He

CNC-SCOR

<u>Members/ Membres</u>

Catherine Johnson (DFO-BIO) Markus Kienast (Dalhousie) Rob Macdonald – Chair (DFO-IOS) Gordon McBean (UWO) Alfonso Mucci (McGill) Paul Myers (U Alberta) Ian Perry (DFO-PBS) Garry Stern (DFO-FWI) Bob Wilson – Secretary Len Zedel (Memorial)

<u>Members Ex-Officio/</u> <u>Membres d'office</u>

Blair Greenan (IAPSO) Helen Joseph (DFO-HQ) Norm McFarlane (CMOS) Ian Rutherford (CMOS) Michael Scarratt (GEOTRACES) Bjorn Sundby (SCOR Past President)

The Canadian National Committee of the Scientific Committee for Oceanic Research (CNC-SCOR) fosters and facilitates international cooperation. It is a nongovernmental body that reflects the multi-disciplinary nature of ocean science and marine technology.

Le Comité national canadien du Comite scientifique de la recherche océanographique (SCOR) favorise et facilite la coopération internationale. Il reflète la nature multidisciplinaire de la science océanique et de la technologie marine. pioneered the Centre of Excellence approach within DFO's science program, which spoke to his exceptional networking skills, collaborative nature, and an understanding of the bigger picture beyond his individual program. He is well known as a mentor wherever he worked. At DFO he was famous for nabbing CBC National News anchorman Peter Mansbridge between flights in Frankfurt, a 10 minute interlude that resulted in a summer-long series of TV specials broadcast from the CCGS *Louis S. St Laurent* in 2006. Always an operations man, his approach to science and the facilitation of science was unfailingly cheerful, even if it sometimes broke the rules and occasionally rankled the hierarchy. His lovable character and love of the North endeared him to his colleagues and the Northern community at large. There is little question that the vision of the Canadian High Arctic Research Station set to be built in Cambridge Bay would not be as well articulated as it is today without Marty's sometimes insistent input. Like the rest of the extended public service community at Natural Resources Canada, at Fisheries and Oceans Canada, at Environment Canada, and at Aboriginal Affairs and Northern Development, we honour Marty Bergmann, his contribution to the public service of Canada and to Canadians. He leaves behind his wife Sheila and four children. *(submitted by Jill Watkins and Paul Lyon, DFO, Ottawa)*

Kate Moran



Kate Moran will take up the position of Director, NEPTUNE Canada in September. She arrives from a two-year term as assistant director in the White House Office of Science and Technology Policy in Washington, DC. In her White House role, Moran advised the Obama administration on the oceans, the Arctic and global warming. She was seconded to the position from a faculty appointment at the University of Rhode Island where she has been Professor of Oceanography and Associate Dean of the Graduate School of Oceanography.

Kate Moran has led several major oceanographic expeditions, including the first drilling expedition to the Arctic Ocean in 2004. The following year she led the first expedition to find the source of the earthquake that caused the 2004 Indian Ocean tsunami. She has also made major contributions to the assessment of hazards in Canada's offshore regions.

Dr. Moran holds degrees in marine science and engineering from the University of Pittsburgh, the University of Rhode Island and Dalhousie University. Her research focuses on marine geotechnics and its application to the study of paleoceanography, tectonics and seafloor stability. She has authored more than 45 publications.

MEETINGS GEOTRACES Data-Model Synergy Workshop, Barcelona, 14-17 Nov 2011

Registration closes **September 30** for the 3rd GEOTRACES Data-Model Synergy Workshop from 14 to 17 November 2011 at the Universitat Autònoma de Barcelona, Spain (<u>click</u>). The workshop will focus on ocean particles, with emphasis on their role in the biogeochemical cycle of trace elements & isotopes (TEIs). The first

COSN August 2011

three days of the workshop will consist of three sessions: 1) Observing particles in the ocean: Methods, Results, & Lacunae; 2) Role of particles in the cycle of TEIs; and 3) Transport & transformation of particles. Each session will consist of invited keynotes followed by topical talks and then a round-table discussion. The last day of the workshop will be used to recommend future studies that would further our understanding of ocean particles, both in the context of GEOTRACES and beyond.

2012 Ocean Sciences Meeting, 20-24 February 2012, Salt Lake City

The Oceanography Society, the American Society of Limnology and Oceanography, and the American Geophysical Union are sponsoring a joint ocean sciences meeting in Salt Lake City next February. With 4,000 delegates expected, it's expected to be a busy gathering. Almost anyone should be able to find a session of direct relevance among the large number offered in physical oceanography and limnology, biological oceanography and aquatic biology, and chemical oceanography and water quality. Abstract submission closes on **October 7, 2011** (click).

IPY 2012 Conference, 22-27 April 2012, Montreal

Abstract submission is open for the 2012 IPY Conference in Montreal with a deadline of **September 30** (click). The conference includes a session on Polar Processes and Global Biogeochemical Cycles (Session 1.1.3), convened by Søren Rysgaard. This session will address the impact of change in polar regions on biogeochemistry, with a focus on integrative studies that aim at resolving the past, present and future interrelations between polar processes and global biogeochemical cycles.

SOLAS Open Science Conference, 7-10 May 2012, Washington State

Registration is open for this event at Suncadia Resort, on the eastern slope of the Cascade Mountains. The programme has sessions on: sea-ice biogeochemistry and interactions with the atmosphere; ocean-derived aerosols: production, evolution and impacts; atmospheric control of nutrient cycling and production in the surface ocean (including dry/wet deposition and ship plumes); air-sea gas fluxes at eastern boundary upwelling and oxygen minimum zone (OMZ) systems; SOLAS and the future ocean; long-lived greenhouse gases: sea-air exchange and impact (incl. ocean acidification); physics of air-sea exchange; and emerging Issues. The programme is arranged with talks in the morning and discussion and poster sessions in the afternoon and evening. Abstract submissions close **11 January 2012** and the conference is also open to topic proposals for the afternoon discussion sessions (<u>click</u>).

JOBS & TRAINING

Assistant Professor, Interdisciplinary Oceanography, UBC, Vancouver

The University of British Columbia is staffing a tenure-track faculty position at the Assistant Professor level in the Department of Earth and Ocean Sciences. The candidate should have a Ph.D. in physical oceanography, preferably post-doctoral research experience, and a strong commitment to the multi-disciplinary study of the physical dynamics which drive important biogeochemical and/or climate processes in the oceans. Examples of

areas of interest include the factors influencing thermohaline circulation and its impact on climate, the ocean carbon cycle and the development of low oxygen zones, global ocean energy budgets and heat distributions, and the influence of changing Arctic Ocean dynamics on circulation, biogeochemical cycles and ecosystem structure. A demonstrated commitment to exploiting emerging new field-based methods would be helpful. The successful candidate will be expected to effectively teach undergraduate and graduate courses in oceanography, climate or environmental sciences offered by the Department of Earth and Ocean Sciences.

Further information can be found on the Department of Earth and Ocean Sciences website (<u>click</u>). Applications close **1** November 2011. A companion, tenure-track position in Atmospheric Dynamics is being staffed concurrently.

Graduate & Postgraduate Positions in Arctic Marine Science, U Manitoba, Winnipeg and Elsewhere

The Centre for Earth Observation Science (CEOS) at the University of Manitoba is seeking at least 30 new graduate students at the MSc, PhD and Postdoctoral levels, as a major new intake of students to conduct research in a variety of Arctic marine system studies in Canada, Greenland, northern Europe, Eurasia and Pacific sectors of the Arctic. More specifically, CEOS seeks students in each of the following areas:

- Atmospheric and oceanic forcing of sea ice dynamic and thermodynamic processes (D. Barber; click)
- Sea ice geomicrobiological processes and benthic-sea ice coupling (S. Rysgaard; <u>click</u>)
- Geochemistry and materials science in sea ice related processes (N. Halden; <u>click</u>)
- Carbon and contaminant cycling and process in Arctic marine and freshwater ecosystems (G. Stern; click)
- Arctic physical oceanography and linkages to physical forcing of the ocean-sea ice-atmosphere (OSA) interface (I. Dmitrenko; <u>click</u>)
- Trace elements, contaminant pathways and mercury deposition (F. Wang; <u>click</u>)
- Air-sea and air-sea ice exchange of trace gases and energy, with linkages to surface ocean and sea ice biophysical and biogeochemical processes and properties (T. Papakyriakou; <u>click</u>)
- Arctic geochemistry and inorganic processes linking freshwater and marine systems (Z. Kuzyk; click)
- Solar radiation interactions with the sea ice environment, linkages to physical and biological processes governing sea ice formation, evolution and melt (J. Ehn; <u>click</u>)
- Biological and physical processes controlling the timing, magnitude, location and fate of ice and ocean primary production (C.J. Mundy; <u>click</u>).

Most positions will be located in Winnipeg but some could be located elsewhere, for example at a partner institution. Candidates should send a CV and letter of intent directly to the indicated faculty members. General inquiries can be sent to Prof. David G. Barber, Director of CEOS (<u>click</u>). Further details about the application process can be found at the University of Manitoba's website (<u>click</u>).

Looking for work? Try the CMOS site (<u>click</u>)

GENERAL

New Textbook Modeling Methods for Marine Science

Cambridge University Press has published a new textbook on modeling, data analysis and numerical techniques for marine science written by David Glover, William Jenkins and Scott Doney. This advanced textbook has been developed from a course taught by the authors for many years at the Woods Hole Oceanographic Institute. The first part covers statistics: singular value decomposition, error propagation, least squares regression, principal component analysis, time series analysis and objective interpolation. The second part deals with modeling techniques: finite differences, stability analysis and optimization. The third part describes case studies of actual ocean models of ever increasing dimensionality and complexity, starting with zero-dimensional models and finishing with three-dimensional general circulation models. Throughout the book the general principles and goals of scientific visualization are emphasized through technique and application. Ideal as a textbook for advanced students of oceanography on courses in data analysis and numerical modeling, the book is also an invaluable resource for a broad range of scientists undertaking modeling in chemical, biological, geological and physical oceanography.

CANADIAN OCEAN SCIENCE NEWSLETTER

LE BULLETIN CANADIEN DES SCIENCES DE L'OCÉAN

Previous newsletters may be found on the CNC/SCOR web site. Les bulletins antérieurs se retrouvent sur le site web du CNC/SCOR.

Newsletter #60 will be distributed on October 28, 2011. Please send contributions to Bob Wilson, <u>wilson@telus.net</u> Bulletin #60 sera distribué le 28 octobre 2011. Veuillez faire parvenir vos contributions à Bob Wilson, <u>wilson@telus.net</u>

If you wish to subscribe to this newsletter, please send an email to <u>listserv@lists.mcgill.ca</u> with the following message: SUBSCRIBE OCEAN-NEWSLETTER.

If you wish to cancel your subscription, please send an email to <u>listserv@lists.mcgill.ca</u> with the following message: SIGNOFF OCEAN-NEWSLETTER.

Si vous désirez vous abonner à ce bulletin de nouvelles, veuillez envoyer un courriel à <u>listserv@lists.mcgill.ca</u> incluant le message: SUBSCRIBE OCEAN-NEWSLETTER.

Si vous désirez annuler votre souscription, veuillez envoyer un courriel à <u>listserv@lists.mcgill.ca</u> incluant le message: SIGNOFF OCEAN-NEWSLETTER

Do you use Twitter to communicate marine science? Follow the newsletter editor @rbtwilson - I'm always looking for material.

WWW.CNCSCOR.CA