



Number 2: March 2014

www.bolin.su.se

The aim of this newsletter is to inform Bolin Centre researchers of recent-past and upcoming activities.

The Bolin Centre for Climate Research is a multi-disciplinary consortium of more than 200 researchers led by Stockholm University that conducts fundamental research on the climate system. Founded in 2006, it involves collaboration between the Departments of Meteorology, Applied Environmental Science, Physical Geography and Quaternary Geology and Geological Science at Stockholm University together with FLOW at Royal Institute of Technology (KTH) and the Rossby Centre at the Swedish Meteorological and Hydrological Institute (SMHI). It also forges connections to other Swedish research institutions and to international research organizations.

The mission is to create and communicate fundamental climate and Earth system knowledge as part of an evolving global effort to understand and adapt to the Earth's changing climate. Our research is structured into six multidisciplinary and cross departmental Research Areas (RA):

1. Oceans-atmosphere dynamics and climate- A. de Boer, J. Nilsson, R. Caballero
2. Clouds, aerosols, turbulence and climate- A. Ekman, G. Svensson, I. Riipinen
3. Hydrosphere, cryosphere and climate - J. Jarsjö, Margareta Hansson, Magnus Mörth
4. Biogeochemical cycles and climate- C. Beer, V. Bruchert, Ö. Gustafsson
5. Historical to millennial climate variability- M. Kylander, Q. Zhang
6. Orbital to tectonic climate variability- H. Coxall, N. Kirchner

Directors' Message

Welcome to 2014 which promises to be an exciting one for Bolin Centre science. The annual report of the Bolin Centre was submitted in February 2014 to the Swedish Research Council. It was prepared by the Directorate and the coordinator for climate modeling with strong input from Research Area Leaders. It lays the groundwork for the very important review of the Bolin Centre and the other Swedish Research Initiatives that have been funded by the government since 2010. We are pleased to enter this review with a strong team of leaders and researchers with substantial accomplishments in Climate Science over the past years. The added-value of Bolin Centre collaborative research and graduate education at the doctoral level will be made in this review. Thanks to all of our Members we have a strong case to present. Please be prepared to support the Research Area leaders and us in responding to the written evaluation in March-May 2014. The evaluation will end with a site visit in the first week of December. The outcome of that review will determine what funds the Faculty of Science can continue to channel into multidisciplinary fundamental climate research.

We are very pleased to announce the appointment of the External Science Advisory Group of the Bolin Centre chaired by Prof. Hans Oerlemans. This group of six internationally recognized scientists has been appointed to assist us in nurturing high quality fundamental climate science that is well-connected nationally and internationally. The group has a clear mandate and modus operandi that will be posted on the website. We expect them to introduce themselves in a science event on the afternoon before the Bolin Days in November 2014. For details of some science accomplishments and upcoming events please read the rest of this newsletter.

Leonard Barrie
Director for Research

Alasdair Skelton
Director



Stockholm
University



Centre News

- **20 November 2013**, Kevin Noone, Professor in the Bolin Centre participated in a panel discussion in a Shell Energy Dialogue in Berlin on “**Energy, geopolitics, climate protection – What is next?**“ Global energy consumption continues to grow. How can we secure a responsible use of energy? And can rapid progress in climate policy be achieved simultaneously?
- **30-31 January 2014**, the Bolin Centre Research Area 2 co-sponsored the Nordic Society of Aerosol Research (NOSA) symposium in Stockholm (www.itm.su.se/nosa2014)
- **13 March 2014** the Board approved the appointment for a three year term (2014 to 2016) of the **External Science Advisory Group(ESAG) of the Bolin Centre**. Board Members are :
 - Professor Johannes Oerlemans, Chair and Ex Officio Member of the Board
 - Institute for Marine and Atmospheric Research Utrecht (IMAU), Utrecht University, Netherlands
 - Professor Eystein Jansen
 - Bjerknes Centre for Climate Research, University of Bergen, Norway
 - Professor Anders Lindroth
 - Lund University Centre for Studies of Carbon Cycle and Climate Interactions (LUCCI), Lund University, Sweden
 - Professor Susan Lozier
 - Earth and Ocean Science, Nicholas School, Duke University, USA
 - Professor Natalie M Mahowald
 - Dept. Earth and Atmospheric Sciences, Cornell University, USA
 - Professor Raymond Pierrehumbert,
 - King Carl XVI Gustaf’s Professorship in Environmental Science 2014/2015 Stockholm University, Meteorology and Geosciences, University of Chicago, USA
- **13 March 2014** , following a presentation by the Bolin Centre Research Director, Leonard Barrie, the Executive Committee of **the European Climate Research Alliance (ECRA:** <http://ecra-climate.eu>) approve the Bolin Centre as a full **participating member** . For details check the website of ECRA and discuss with Leonard Barrie. More information will be sent soon.
- Congratulations to the following Bolin Centre scientists in MISU for their achievements below:
 - Julien Roquet a "Young Researcher" grant from Vetenskapsrådet
 - Michael Tjernström a research grant from Vetenskapsrådet
 - Jörg Gumbel a substantial research grant from the Swedish Space Board
 - Jonas Hedin a research grant from the Swedish Space Board
 - Annica Ekman a research grant from the Swedish Space Board AND a research grant from the Swedish Environmental Protection Agency as part of a larger program.
 - Jonas Nycander was granted a sabbatical semester



Upcoming Activities

- **9 May 2014 Research Area 2 event:** Full-day workshop with science and other fun activities. Please save the date!
- **5-9 May 2014 The first Bolin Days for Schools** at Naturenshus for lower and middle schools and their teachers contact: Alasdair Skelton
- **21 May 2014 Science Forum "A Land/Sea-Scape Perspective on Climate: Science to Policy"**
Co-sponsored by The EkoKlim Centre and the Bolin Centre for Climate Research, Stockholm University, 14:00 to 16:30 Lecture Theatre Nordenskiöldsalen in Geovetenskap Building speakers are: Prof. Corinne Le Quéré Carbon-climate feedbacks in a changing environment, Prof. Patrick Crill, Lakes, ponds and landscape level changes in the Arctic under a changing climate; Prof. Sara Cousins A landscape perspective on land use impacts on biodiversity – how important is climate change; Prof. Emily Boyd, Governing for resilience under a changing climate. Lectures are followed by panel discussion and refreshments.
- **22 May 2014 Bert Bolin Climate Lecture** 14:00 at Aula Magna, Stockholm University. The lecture entitled **“The Role Of The Carbon Cycle In Regulating Climate”** will be delivered by Prof. Corinne Le Quéré, Professor of Climate Change Science and Policy, Director of the Tyndall Centre for Climate Change Research .
- **11-12 June 2014** Stockholm Bolin Centre Workshop on **“Southern Ocean physics and biochemistry during the last glacial cycle.”** Organized by Agatha De Boer
Confirmed speakers:
 - Karen Kohfeld (Simon Frazier University, Canada)
 - Julien Le Sommer ((CNRS-Grenoble, France)
 - Lesley Allison (University of Exeter, UK)
 - Nathaëlle Bouttes (Reading University, UK)
 - Laura Robinson (Bristol University, UK)
 - Jean Baptiste Sallee (British Antarctic Survey, UK)
 - Rafaele Ferrari (Massachusetts Institute of Technology, USA)
 - Irina Marinov (Penn State University, USA)
- **July to October** Bolin Centre led SVERUS Arctic Expedition on the Swedish Icebreaker Oden.
- **18 November 2014** 14:00 to 16:30 Geovetenskap lecture hall, **Bolin Centre Science Forum** featuring presentations by the six External Science Advisory Group researchers.
- **19-20 November 2014 Bolin Days Science Event** with oral and poster presentations.
- **14-19 December 2014 AGU San Francisco** Bolin Centre booth and science representation