

UKPN Newsletter

Spring 2009



WORKSHOP NEWS

We recently received the fantastic news that we have been awarded funding from NERC for three workshops in 2009.

-Registration for the Atmospheres workshop in May is now open - See below....

-An Arctic themed workshop is scheduled for October 09. Plymouth has agreed to host the workshop. Anyone interested in helping with the organisation of the workshop, please get in touch with Geli.

-A workshop on Cryospheric sciences is scheduled for November 09. Anyone interested in helping with the organisation please get in touch with Nanna

Atmosphere and Modelling Skills Workshop

British Antarctic Survey 29th April - 1st May 2009

The first in a series of themed events to be held over the next two years for early career polar researchers, this workshop will combine the themes of polar atmosphere and climate modelling. Career development sessions will be interspersed between lectures, practical sessions and problem solving workshops. Ideas for sessions are listed below - this unique event allows the participants to have a say in the programme to ensure it is as relevant as possible to those present.

All participants are encouraged to present a poster, and will be given the opportunity to help in the organisation of the workshop, such as by chairing sessions

This event is free for all members of the UK Polar Network (so sign up here

<http://www.jiscmail.ac.uk/cgi-bin/webadmin?SUBED1=ukpn&A=1>) subject to being allocated a place - you need not be based in the UK to join!

Use the online form to register your interest and state your preferences for sessions

<http://www.polarnetwork.org/machform/view.php?id=11>

Ideas for sessions include:

Problem solving workshops where the problems posed by participants are discussed informally with a panel of experts

Climate modelling practical

Meteorological modelling practical

Flying kites / balloons used to hold instrumentation to measure the atmosphere

Cold room / chamber experiment

Talks by senior scientists on their career

Data analysis

Data visualisation

Practical session setting up field equipment

Poster session

The workshop will provide an opportunity for peer to peer networking and include a workshop dinner

If you need any more information please go to the website:

www.polarnetwork.org and go to **career skills workshops** on the left hand menu

or email workshops@polarnetwork.org

UKPN Newsletter

Spring 2009



Festival of Science - Report

Festival of Extreme Science: Liverpool 2008,

By Kate Hendry

On an unusually warm and sunny day in September, six members of the UK Polar Network congregated in Liverpool, the European City of Culture and, for that particular week, the host of the British Festival of Science. We were off to teach school students about the impact of climate change on the polar regions and to spread the word of working in the polar sciences.

The Festival of Science has been run by the British Science Association (formally the British Academy for the Advancement of Science, the BA) for 178 years. It features presentations and press releases by eminent scientists, such as Sir Robert Winston and Sir David King, as well as famous science presenters, such as BBC Radio 4's Quentin Cooper. A series of hands-on workshops are run for children and adults alike, to inspire interest in all types of science, from astrophysics to zoology. Every night there is the 'X-Change' where anyone can go and actively debate their questions and interests with scientists and science communicators.

For our part, students from three schools visited our workshop 'Polar meltdown? Scientific research in extreme environments'. Adrian McCallum, the previous co-ordinator of the UK Polar Network, started proceedings by showing the students how scientists live and work in the Arctic and Antarctic. The fully assembled tent and other survival gear were definitely a hit, and most of the students enjoyed trying on boots, thermals and down jackets. All groups were most fascinated, however, by the inevitable question of how scientists in deep field carry out their, for want of a better word, ablutions! After this presentation, we set the students a task: they had to imagine they were a government advisory body, asked to present information to politicians about an upcoming vote on a climate change bill. Each UK Polar Network volunteer took a small group and discussed various aspects of polar research, including polar lows, marine ecology, palaeoclimate and glaciers. The groups then made a short presentation to everyone explaining why the poles are so sensitive to climate change, and the importance of the bill for their preservation.

I had a fantastic time in Liverpool, and I came away with a satisfying feeling that we sparked some interest in future scientists. Not only did we teach both new science and familiar ideas from a new angle, but we also encouraged some of the students to consider, and may be even pursue, a career in polar sciences. Most of all, however, it was just a lot of fun! A huge thanks to Adrian, Emma Irvine (Education and Outreach), Emma Fiedler, Matt Simpson and Sam Burgess for all their hard work and for making it the success it was!

GET INVOLVED IN THIS YEARS EVENT:

The Festival of Science is heading to Surrey in 2009 from September 5th-10th. In the year of Darwin's bicentennial, the Festival has the theme 'Creativity, Innovation and Evolution' and promises to be another successful and jam-packed week in celebration of science. The UK Polar Network are hoping to head back again to run another workshop, so if you're interested in volunteering in a rewarding and fun event then let us know!



Adrian McCallum introducing polar research
Photo: Sam Burgess

UKPN Newsletter

Spring 2009

Cruise Report by Loic Jullion



ANDREX CRUISE: CAPE TOWN TO PUNTA ARENAS. DECEMBER 2008-JANUARY 2009

The goal of the ANDREX (ANtartic Deep Rate of EXport) cruise was to investigate the formation of Antarctic Bottom Water and how this water exits the Weddell Sea. Due to the severe climatic conditions around Antarctica, surface water loses buoyancy and sinks to the bottom of the ocean. This Antarctic Bottom Water then fills the bottom of the main oceanic basin participating in the general circulation of the ocean. With ANDREX we are trying to find out how this bottom water exits the Weddell Sea that is believed to be the major source of Antarctic Bottom Water. A second goal of ANDREX is to quantify the role of the Weddell Sea in the global biogeochemical cycle.



We departed from Cape Town on the 26th of December and sailed south to our first station on New Year's Eve! The work consisted mainly of CTD casts. A CTD (conductivity-Temperature-Depth) measures salinity, temperature and pressure, the three main parameters used by physical oceanographers. Sampling bottles also allow to take water samples at different depths in the ocean. The water samples are used by the chemists to measure different chemical tracers. In our case, we were measuring CFCs, nutrients, carbon and several isotopes of oxygen. A current meter is also mounted on the package to measure the full depth vertical velocity profile.

The cruise was going well, with wonderful sceneries and wildlife until the 14th of January where a medical emergency forced us to break from the cruise track to head full speed to the nearest hospital (in the Falkland Islands, a five days trip from our position). And as a problem never comes alone, shortly after we departed, we encountered rough weather (whereas so far the weather had been brilliant) and a failure of the communication between the bridge and the engine left us with one engine and the speed of a snail. Fortunately, the problems were fixed quite quickly. One the way to Stanley, we stopped in South Georgia to pick up some medical kit. That was the chance for us to stop in one of the most beautiful places in the world. We spent 4 hours walking around the British Antarctic Base and the old whaling station at King Edward Point. Finally, we arrived to the Falkland Islands with no further incident. The injured person was sent to the hospital and is now safe.



Unfortunately, because of the distance between the Falklands the region of study, it was not possible to resume the cruise. We waited for a week in the Falklands before heading to Punta Arenas where the journey ended.

From a tourism point of view, it was a great cruise but from a science point of view, only half of the data have been collected. We are already applying for some ship time next year to finish the last leg of the work. This experience shows us the difficulties of polar research. Due to the remote locations where we operate, any problem can lead to major difficulties.

Send us your news... we would love to include more reports like this one in future news letters, so if you've been up to something interesting, please write a short piece describing what you're been up to and send it to Jen!



UKPN Newsletter

Spring 2009



Other News...

Committee:

Nanna B. Karlsson -
Coordinator and
webmaster

[nanna.karlsson@polar
network.org](mailto:nanna.karlsson@polar
network.org)

Libby Jones, Vice-
coordinator

Jennifer Hall, Secretary
and newsletter

[jennifer.hall@polarnet
work.org](mailto:jennifer.hall@polarnet
work.org)

Angelika Renner,
Finance Coordinator

Sinhue Torres, Finance
Group

[funding@polarnetwork
.org](mailto:funding@polarnetwork
.org)

Helen Atkinson,
Careers
[careers@polarnetwork
.org](mailto:careers@polarnetwork
.org)

Emma Irvine,
Education and
Outreach

Richard Gravelle,
Education and
Outreach

Kate Hendry

[education@polarnetw
ork.org](mailto:education@polarnetw
ork.org)

Once again we begin the year with a few changes to the committee. We would like to thank Helen Freeman, Adrian McCallum and Cameron Rye who have done a great job in the committee, but have chosen to step down due to other commitments. Nanna Karlsson and Libby Jones are taking over as coordinators. Jennifer Hall will be taking over the secretary and newsletter role.

International Polar Field School in Svalbard: An Interdisciplinary Experience in Polar Studies

Dates: **June 15- July 3, 2009**

Location: University Centre in Svalbard, Svalbard, Norway

Website: <http://arcticportal.org/apecs/svalbard2009>

Course description and information about UNIS:

http://www.unis.no/10_STUDIES/1020_Courses/IPY_field_school/IPY_field_school_2009.htm

In celebration of the International Polar Year (2007-09), this 3-week course will focus on environmental change in the Arctic and Antarctic through a series of lectures and field excursions in Svalbard, Norway. The course will cover topics on Glaciology, Geology, Meteorology, Oceanography, Marine/Terrestrial Biology, and the Human Dimension in Polar Regions.

Applicants should be Undergraduates or Masters students, with a minimum of 1 year in physical/technical and/or natural sciences.

Application deadline: **March 27th, 2009**

Interested in Outreach? Check

this out..... March 18th 2009 is the eighth quarterly International Polar day, on the theme 'polar oceans and marine life' see

<http://www.ipy.org/index.php?/ipy/detail/polaroceans>

And use the 'whats on and live events' tab on the left for more information about the events that are planned around the globe.

New look website: Please take a look at the ever-evolving website:

www.polarnetwork.org

We would like to encourage members to submit a short profile of their interests and current projects, and also to submit articles to the website on anything you think may be interesting to other Polar people!

Register with the webpage using the button on the left hand side to be able to upload your articles.

We are also looking for someone to join the webteam, please contact Nanna if you are interested.

A HUGE THANKYOU

UKPN are grateful to the following organisations for their support. British Antarctic Survey, Earthzine, International Arctic Science Committee, International Glaciological Society, Royal Geographical Society, Scientific Committee on Arctic Research, University of East Anglia, And to those who have involved in other ways, much appreciated!