International Geoscience Education Organisation Newsletter 01/05

Web address: http://www.geoscied.org/
Newsletter editor: Dr Bronte Nicholls: Nicholls.bronte2@saugov.sa.gov.au or slab@internode.on.net

FROM THE CHAIR

Although the most obvious activity of our organization takes place leading up to and during our GeoSciEd conferences there are lots of things that happen that are not as obvious. Since Calgary the Senior Officers have been involved in activities on behalf of the organization in quite a number of areas. Presently we are in close contact with our German friends who are working hard to bring the 2006 conference $(18^{th}-21^{st}$ September) to fruition. Chris King visited the Organising committee at the beginning of the month and reports later in the newsletter that the conference planning is proceeding well. I am looking forward to visiting Germany for the first time and plan to extend my visit to go to the UK and hopefully Spain after the conference.

In December last year we participated in a meeting at Boulder Colorado to determine the role of IGEO in the IUGS Commission for Education & Training. Gary Lewis and his staff at GSA hosted the meeting and after some lengthy discussions during and subsequent to the 3 days in Boulder we have worked out what our role will be. The first task in promoting and disseminating geoscience education to a wider world audience has been the distribution of a follow-up questionnaire to as many countries as we can. With the aid of our Council and the resources of IUGS we have been able to reach many. There are still many responses to come but we hope to begin collating the results later this year and have a good picture of the worldwide state of geoscience education ready to present at the conference next year.

Chan-Yong Kim has been very busy planning and International Earth Science Olympiad. His group which includes several IGEO council members met late last year and developed an extensive network of participants. We are looking forward to a bright future for this and expect that there will be an increasing interest in it.

Alan Morgan has been busy managing our money and attending to all of the other Secretarial duties of the organization as well as maintaining a watching eye over the development of the "International Year of Planet Earth".

Bronte Nicholls has been busy upgrading our membership records and monitoring all of these other activities to ensure that all members are kept informed via these newsletters.

It goes without saying that we all appreciate this volunteer work which is undertaken on top of their busy employment, but the purpose remains just as important today as it was when the Organisation first formed – the promotion of geoscience education. The IYPE will help with this and we must ensure that we continue to be involved. I hope that by the time we go to Germany next year we will be able to report our role in more detail and involve as many members as are willing. The importance of geoscience education in promoting an understanding of the way the Earth System works has not been more dramatically underlined than it has been this year with the impact of the Boxing Day Tsunami on the SE Pacific region and more recently the devastation of New Orleans by Hurricane Katrina. The impact of these and the other kinds of natural hazards can be reduced by a better and wider community understanding of the way Earth works.

These and other topics will be some of the themes for GeoSciEd V. I look forward to seeing many of you again and meeting new members and wish you good health and good luck in your continued pursuits of teaching and promoting geoscience education.

Ian Clark

Dr Ian Clark, President IGEO: lan.clark@unisa.edu.au

INTERNATIONAL GEOSCIENCE EDUCATION ORGANISATION (IGEO) ANNUAL REPORT 2004

IGEO has been involved in three major projects during 2004 as well as its continuing role in promoting and supporting geoscience education worldwide. As well as the 3 projects described below we have begun and made considerable progress in preparation for our 2006 Conference to be held in Germany. More detailed information about these and our other activities are contained in newsletters that are available through our website http://www.geoscied.org/index.htm

32nd International Geological Congress Florence, 21 to 28 August 2004

IGEO convened three sessions on geoscience education at the Congress.

- G-08.05 Promoting geoscience education worldwide at school level
- G-08.06 Promoting geoscience education worldwide in colleges and universities
- G-08.07 Promoting geosciences through public outreach and communication

The sessions included oral and poster presentations. The review process which was undertaken by the convenors gave priority to research-based oral presentations, but no such limitation was applied for the posters. More than 50 abstracts were submitted indicating the high level of interest. Interest was also reflected by good attendance at the sessions.

International Earth Science Olympiad

Chan-Jong Kim, Vice-President of IGEO hosted the first meeting of the International Earth Science Olympiad (IESO) at the Seoul National University in Korea during November 26 to 27, 2004. International leaders of Earth science education and Earth science from Korea, Argentina, Bangladesh, India, Indonesia, Israel, New Zealand, Philippines, Spain, and Taiwan attended the conference in order to present each nation's status and curriculum of earth science education, and share constructive ideas toward successful IESO. All conference participants had opportunities to contribute to the way in which IESO could contribute to improving the quality of international Earth science education, increasing student interest in Earth science and providing recognition for outstanding achievement in Earth science education by both students and teachers.

The IESO Coordination Committee was established: Afia Akhtar (Bangladesh), Miguel Cano (Philippines), Chun-Yen Chang (Taiwan), Xavier Juan (Spain), Dwikorita Karnawati (Indonesia), Chan-Jong Kim (Korea), Alan Munro (New Zealand), Nir Orion, (Israel), Shankar Rajasekhariah (India), José Sellés-Martínez (Argentina). Moo Young Song (Korea) was selected as the Chairperson of the committee. It was also decided that Korea will host the First IESO in 2007. Many other important decisions, such as the participants, methods of competition, organization and so forth, were also made during the conference.

A comprehensive report of the conference proceedings is available from Chang-Jong Kim, Department of Earth Science Education, Seoul National University – Korea

IUGS Commission on Geoscience Education, Training and Technology Transfer

At the August 2003 IGEO Council meeting in Calgary it was agreed that IGEO would act as the IUGS Commission on Geoscience Education, Training and Technology Transfer.

The Commission met for two days in November to discuss the future role of the Commission. An action plan was developed as well as discrete tasks for the next twelve months and a proposed budget.

Notes of the proceedings and the plans are available in the IGEO newsletter at http://www.geoscied.org/newsletter/index.htm

Dr Ian Clark, President, IGEO.

Upcoming conferences

GEOSCIED V - BAYREUTH, GERMANY, 18th – 21st SEPTEMBER 2006 – A REPORT FROM THE TRAIN

I write this while spinning through the lovely German countryside on my return from joining the GeoSciEd V Conference committee in Bayreuth, Bavaria. My travel plans didn't work well yesterday because the flight arrived late so I missed the first train. The train I then took missed its connection so, having planned to arrive in Bayreuth at 2.00, I didn't actually arrive until 5.00! However, I was met by an enthusiastic GeoSciEd conference planning committee.

The GeoSciEd V conference convenors are Gabi Obermaier, Sylke Hlawatsch and Uli Martin (details below) who are working with their colleagues Gabi Schruefer and Andreas Peterek.

- Sylke Hlawatsch from the IPN Institute at Kiel University, (Institut fuer Paedagogik der Naturwissenschaften)
- Uli Martin, from the outreach centre at the German deep borehole site at (GEO-Zentrym an der KTB)
- Gabi Obermaier from the geography education department at Bayreuth University, (Lehrstuhl fuer Didaktik der Geography)

Since I was late, I wasn't able to meet Uli, but I found the others still in active conference-planning mode after a long day's meeting, fortified only by some Bavarian speciality cakes (which are delicious!). We discussed all aspects of the Conference and you will see the details in the GeoSciEd V first circular to be circulated before the end of October.

I can tell you now though, that the main Conference will be held at the University, a short bus ride away from the hotel accommodation in Bayreuth from September 18th to 21st. The mid-conference field excursion will be to the KTB deep borehole drill site and nearby field venues, and sounds fascinating.

There will be a call for abstracts soon and the committee plan to publish the short abstracts in a conference booklet and while asking conference contributors to submit longer papers to be refereed and published after the conference. Conference themes are still being debated, but are likely to include:

- Best practice in geoscience teaching at different levels:
 - Kindergarten
 - Elementary (primary)
 - Secondary (high school)
 - Tertiary (Higher Education)
- Public understanding of earth science (including geoparks, museums, science centers, etc.)
- Educational geoscientific research
- Geosciences in international comparisons (eg. Program for International Students Assessment – PISA)

- Internet and multimedia in geoscientific education
- Highlights of recent geoscientific research

The aim is to provide a range of sessions attractive to teachers and educators of Earth science at all levels, whether the Earth science forms part of geography, of natural science, of biology, chemistry or physics, or stands alone. Sessions will also cover the wider public understanding of earth science fields and there will be sessions specifically for German-speaking school teachers.

A range of pre-and post-conference field trips is also being planned for their geological and educational potential, including:

- the Ries meteorite impact crater
- the Bohemian-Bavarian Geopark
- 'From the Baltic to Bayreuth'
- 'From the Franconian lineament to the Bohemian Massif'
- Volcano tour

Several workshops and social events, including the Bavarian Conference Dinner, are also planned around the Conference.

With the enthusiasm of the Convenors and their committee, the geological and educational potential of Bavaria and the surrounding areas and its base in the historic small town of Bayreuth – GeoSciEd V promises to be a great success and we are looking forward to a great gathering of geoscience educators from all over the world. Various funding options are being explored to support people from developing countries in Europe, Africa, Asia, Australasia and the Americas.

After all that detailed planning, I was happy to experience some typical Bavarian hospitality in a celebrated Bavarian restaurant in the town, complete with the local beer, before falling into bed.

And now - as the train travels on down the Main valley (the Main is a tributary of the river Rhine), past picturesque German towns (and on time this time) I can reflect on a short but very constructive visit. I'm looking forward to my return next year – I hope to see you there.

Chris King

Note: The best way to get to Bayreuth, I have found, is to fly to Frankfurt and take the train. Frankfurt is about three hours by train from Bayreuth, with one change at Nuremberg. It is possible to fly to Nuremberg airport – but that would have been much more expensive. You could also come via Munich airport and a 3 hour train journey – but the train journey from Munich Airport to the main train terminal in Munich is much further than Frankfurt (where the airport to main station journey took me about 15 minutes and there seems to be a train every half hour or so).

Chris King: Past President: c.j.h.king@educ.keele.ac.uk

International Geological Congress (IGC), Oslo, Norway - August 2008.

Upcoming courses

Applied Earth Sciences: A New Education Programme at ITC, the Netherlands

Applied Earth Sciences will be offered for the first time starting in September 2005. As a new programme, it is building on a strong tradition in earth science education, and has its roots in ITC's Earth Resources and Environmental Geosciences programme (EREG).

The new AES programme offers a curriculum that integrates modern principles of geo-information and earth observation with sound earth science application development.

The entire 18-month AES curriculum will lead to an academic Master of Science degree, accredited under Dutch law. The successful completion opens the possibility to pursue doctoral (PhD) studies at ITC and elsewhere. The course is divided into nine months of coursework and nine months of research. The first nine months can conclude with a Postgraduate diploma (NFP funding is an option). The first part can also be taken as three short courses, each of three months' duration (NFP funding is an option).

For more information:

http://www.itc.nl/education/programme info/earthresources.asp

Events

The International Year of the Planet Earth

The geoscientific base of the International Year has expanded significantly. The International Union for Quaternary Research (INQUA), the American Geological Institute (AGI) and the American Association of Petroleum Geologists (AAPG) joined the Initiative as Founding Partners. Also its political base grew considerably, now 36 countries together representing 58% of the world population have promised to support the Initiative in the General Assembly of the United Nations and in the UNESCO's General Conference. A new web-site www.yearofplanetearth.org has been launched. Thematic brochures can be downloaded from the web-section entitled Science and Outreach Downloads.

Other organisations

International Union of Geological Sciences Keep up with what's on through their Electronic Bulletins available on http://www.iugs.org/