Major geoscience event comes to Oceania

Paul Kay

Australia will host the country's largest ever international geoscience event when the 34th International Geological Congress (IGC) is held at the Brisbane Convention and Exhibition Centre between 5 and 10 August. This will be the second time in the IGC’s 134 year history that the Congress has been held in Oceania: the 1976 IGC was held in Sydney and attracted more than 3500 delegates.

The 34th IGC will combine a comprehensive resources and energy program with opportunities for attendees to connect with world-leading geoscientists. It will feature international expertise in environmental impacts, energy sources, mineral exploration and climate change. The importance of the minerals and petroleum industries to Australia will be strongly reflected in the Scientific Program and exhibits at the GeoExpo to be held during the Congress.

The Congress will also encompass other events, including meetings of the International Union of Geological Sciences’ Commissions, Task Groups and Joint Programs as well as the second Young Earth Scientists (YES) Congress. There will also be the launch of a new book on Australia's geology—Shaping a Nation: A Geology of Australia—co-published by Geoscience Australia and the Australian National University E Press.

The scientific sponsor is the International Union of Geological Sciences; while Vale, the world's second largest mining company, is the major commercial sponsor. The IGC also has the benefit of UNESCO patronage.

High level of interest

Based on confirmed registrations and the number of abstract submissions the Congress will attract more than 4000 delegates, making it the largest geoscience meeting ever held in Australia. Over five thousand abstracts were submitted from 110 countries for around 200 Symposia covering all facets of the geosciences. Interest and early registrations were strongest from Australia and north Asia, particularly China, while Russia and the Americas are well represented. To date, the level of interest from Western European countries appears to be down on previous Congresses.

The 34th IGC will also include a large GeoExpo featuring commercial, government and academic exhibitors. Over 250 booths in the GeoExpo, which will fill two of the Brisbane Exhibition and Convention Centre’s exhibition halls, have already been sold.

Plenary sessions and Keynote Speakers

The overall theme for the Congress is ‘Unearthing our Past and Future—Resourcing Tomorrow’, recognising the crucial contributions of the geosciences in meeting societal needs and sustaining planet Earth. The program, which emphasises future minerals and energy supplies, is underpinned by Australia’s experience in developing a strong and sustainable mineral and energy resources sector. Other major
themes include climate change and its impacts on natural resource management and communities, as well as understanding and mitigating geohazards.

Plenary sessions planned for the Congress will cover high profile topics:

- Resourcing Tomorrow: meeting the needs of a growing population
- The Earth and man: living with a restless Earth
- What does the geological record tell us about past climates in relation to projected climate change?
- Energy in a carbon-constrained world
- Digital Earth—the information explosion

Plenary Speakers confirmed to date include: Professor Iain Stewart (the BBC's *How Earth Made Us* series), former Shell chairman Lord Ron Oxburgh, Vale's Executive Director for Exploration, Energy and Projects Management, Eduardo Ledsham, and the Chinese Minister for Land and Resources.

The final scientific program for the Congress will be included in the Fifth Circular which will be available by the end of June 2012.

**Major data releases and field trips**

A highlight of the Congress will be the release of information from major geological and geophysical surveys conducted over a large area of central and eastern Asia. The maps and datasets are the result of collaboration between China, Russia, Kazakhstan, Mongolia and South Korea to provide new insights into the resource potential of this large under-explored region.

The 34th ICG has developed a diverse range of pre- and post-Congress field trips which will offer diverse opportunities to experience the fascinating geology of the Oceania region. These field visits will include all Australian states and the Northern Territory. There will also be field trips to New Zealand, Malaysia, New Caledonia and Papua New Guinea. A range of one-day tours will also be available during the conference.

**Professional Development and outreach**

Twenty nine optional Professional Development Workshops, which cover a wide range of topics for professional development and training, are being offered during the Congress. They include topics such as: sustainable mining, carbon sequestration, geohazards and groundwater.

The GeoHost program, which supports attendance by selected delegates from developing nations, has benefited from financial support for geoscience training workshops provided by the Australian Agency for International Development (AusAID) and the Global Carbon Capture and Storage Institute.

Special sessions for educators and high profile public lectures will be also be held during the Congress to ensure that positive messages about the contribution of geoscience to our everyday life reaches the broader community.

**Support and contributors**

The Organising Committee is delighted to have the support of the Australian and Queensland governments, major global resource and related service companies. The legal entity responsible for the 34th IGC is the Australian Geoscience Council (AGC), the peak body for Australia’s major professional and learned societies. These societies are all investing in the Congress which will take the place of a number of their regular meetings in 2012. GNS Science from New Zealand is a valuable partner in organising the Congress on behalf of the Oceania region. Geoscience Australia is making major in kind and financial contributions including providing the Secretary General (Ian Lambert) and Deputy Secretary General (Paul Kay).

**Release of new book on Australia’s geology**

The Congress will also include the launch of *Shaping a Nation: A geology of Australia* (figure 1).
The book is not intended as a definitive text on all aspects of Australia’s diverse geology, nor does it follow the ‘traditional’ time-based treatment of the topic. Rather, the book tells the story of Australia’s geological evolution through the lens of human impacts—illustrating both the challenges and the opportunities presented by the geological heritage of the ‘lucky country’. The book showcases the excellence of Australian geoscience by integrating geoscience disciplines into a systems framework that address many of the ‘big questions’ relevant to Australians today.

The opening two chapters set the spatial, temporal and cultural contexts for the book. The following eight chapters are arranged into themes around the various geological influences on Australian society, environment and wealth. These chapters cover the evolution of life in Australia, development of post-Gondwana hydrocarbon systems, evolution of the landscape, the coastal zone, groundwater, minerals and bulk commodities, and, finally, future energy. The concluding chapter considers the major challenges facing the nation and the vital role that geosciences will play in meeting these challenges. The appendices are a very important component of the book and are available on a dual-layer DVD that is bound with the hard-copy printed version.

Though the book is aimed at geoscientists, the narrative and messages are relevant to society as a whole. Many new advances in the understanding of Australia’s geology are covered in a way that minimises discipline-specific jargon. The text is brought to life by the large number of high-quality colour photographs, maps and images.

Accommodation

Accommodation near the venue and elsewhere in Brisbane is already heavily booked. The organisers suggest delegates make their accommodation bookings as soon a possible as prices could rise closer to the event.

For more information or to register or receive regular updates
email info@igc.org
web www.34igc.org

Figure 1. The cover of Shaping a Nation: A Geology of Australia which will be launched during the Congress.