



# The Queensland Geologist

Bi-monthly Newsletter of the Geological Society of Australia Inc. Queensland Division  
Volume 106 No. 4 – August 2006

## INSIDE THIS ISSUE:

- **From the Chair: IMPORTANT!!! Please read Greg Webb's segment if you do not read anything else in Queensland Geologist this year! Significant changes that affect the structure of the Society are being mooted. We are interested in your opinion.**

## IMPORTANT DATES:

**Thursday 24 August 2006.**

### **GSAQ Meeting and presentation of Dorothy Hill and Neville Stevens medals**

Speaker: Professor Nick Oliver, James Cook University  
Topic: Geochemical and structural controls on the formation of replacive lode gold deposits in BIFs of the Iron Quadrangle, Brazil  
Where: The Theodore Club, 333 Adelaide Street, BRISBANE  
Time: 5:30 for 6pm; finger food and cash bar  
Cost: \$6 Members, \$8 Non-member, Students, \$2. Cash bar

Abstract: Lode gold deposits of the Iron Quadrangle in Minas Gerais, Brazil, are hosted in Neo-Archean BIFs, and share some similarities but important differences relative to Yilgarn deposits. The deposits, which include the famous Morro Velho deposit (c. 20 MOz gold) and the productive Cuiaba deposit (about 5 MOz gold) are structurally controlled, sitting in fold hinges developed early in the 2.65 to 2.50 Ga structural history, and probably localized by anomalies in the pre-shortening basin architecture, in contrast with the 'late orogenic' model for many Yilgarn deposits. Novel geochronological techniques (laser-ablation Ar-Ar of alteration mica trapped in ore-related pyrite) reveal a c. 2.6 Ga age for the deposits, approximately the age of the onset of exhumation and commencement of deposition of clastic sediments at the base of the overlying Minas Group. Detailed mapping in the mines, coupled with district-scale mapping, has identified crucial feeder structures in the footwalls to the deposits, as well as distinctive replacement architecture that can be used to constrain ore genesis models and the mining method. Comprehensive geochemical data, and hydrothermal geochemical modelling, indicates that very reduced fluids originating from the basalt pile and/or deeper (mantle?) sources precipitated gold upon sulfidation of the BIF, and that the high grades (e.g. 12 g/t) and large size of the deposits was produced as a consequence of the initial, distributed graphite content of the host BIFs. The geochemical models have implications for understanding field gradients in sulfide/oxide assemblages, and their potential role as an exploration tool, in the Yilgarn and elsewhere.

### **27 August-1 September 2006: 16th Annual V.M. Goldschmidt Conference**

Where: Exhibition and Convention Centre, Melbourne  
Website: [www.goldschmidt2006.org](http://www.goldschmidt2006.org)

### **5-8 November 2006: 2006 AAPG International Conference & Exhibition**

Theme: 'Reunite Gondwana - Realise the Potential'  
Where: Perth, Western Australia  
Website: [www.aapg.org/perth/](http://www.aapg.org/perth/)

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**13-15 December 2006: Joint 9th Australasian Environmental Isotope Conference and 2nd Australasian Hydrogeology Research Conference**

Where: Stamford Grand Hotel, Glenelg Beach, Adelaide South Australia

Website: <http://groundwater.com.au/07-A3-Brochure-135399.pdf>

**29 July-6 August 2007: International Union for Quaternary Research**

Where: Cairns, Australia

Website: <http://www.inqua2007.net.au/>



It has been an eventful June and start to July for the Queensland Division of GSA. Thank you for those who attended our June meeting where we presented medals to the state's top high school and university geoscience students! It is important that we continue to support Queensland's up-and-coming geoscientists, particularly in view of current concerns regarding the low numbers of geoscience graduates and declining GSA membership (more on that to follow). Thank you also to Gilbert Price for an interesting and entertaining talk on the extinction of Australia's Pleistocene megafauna.

Presentation of the Dorothy Hill and Neville Stevens Medals was held over until this month so both recipients could (hopefully) be present.

The other big news comes from the Australian Earth Science Convention, which was held in Melbourne the first week of July. That news relates primarily to the Federal GSA Council meeting, the AGM, and the open forum on the proposed merger between GSA and the Australian Institute of Geoscientists and the Australian Society of Exploration Geophysicists.

**Please read the following two points if you do not read anything else in this issue of the Queensland Geologist!**

**1. FYI**, the Federal GSA Council, including the new incoming Federal Executive Committee, is highly supportive of moving ahead with a proposed merger between GSA, AIG, and possibly ASEG. Many pros and cons have been discussed, but in general, many people agree that there are too many geological societies and a merger would benefit the profession. Although the details of such a merger and resulting society structure will take time to hammer out, the process has been effectively set into motion at the Council meeting in Melbourne. AIG has already poled its members on the proposal and a majority support the proposal. So far ASEG and GSA have not poled their memberships, but the new federal executive has been given the task of moving ahead with plans for the merger.

**2. Of more immediate concern** to the Queensland Division of GSA, the outgoing and incoming Federal Executives have questioned the role of state divisions within the society. Tony Crawford and Andrew Gleadow published comments supporting the idea of scrapping state divisions in the 23 June, 2006 issue of TAG (p. 23). There was very little time for discussion of such a proposal in the Federal Council meeting and there was by no means unanimous support for such a move, but there is clearly pressure from the Federal Executive, and even some state divisions, for such a proposal. The basic argument being put forward is

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that state divisions are struggling to maintain the interest of their members, resulting in declining and “aging” attendance at monthly meetings. They consider that state divisions are not doing enough to attract young geoscientists, and thus grow society numbers. In short, state divisional activities are largely seen as being ineffective and a waste of the society’s resources. At the same time, bear in mind that the Qld Division has been praised for its educational outreach, particularly such works as Warwick Willmott’s latest offering (*Rocks and Landscapes of the National Parks of Southern Queensland*), but in general, the Federal Executive seems to feel that state divisions are not benefiting their members. So far the Executive has communicated little about possible alternatives to state divisions or how a new scheme would better serve the membership. In the TAG article they suggested that regions could have annual special events of one type or another, such as special symposia and international conferences. It has not been made clear who would organise such events or how state or regional committees would organise big events without the ‘stalwarts’ who are currently perceived as keeping many state divisions going. Regardless, a move is afoot. So my question to you, the membership of the Queensland Division, is: **Do you want to see the state division scrapped?** In this regard I make the following personal comments and observations.

1. Geology is a highly regional discipline – each region has its own particular focus and interests. Qld is more interested in coal than iron ore – as opposed to WA, etc. Can regions be adequately served by specialist groups alone? What about areas that lack specialist groups, but have importance locally?

The comparison was made to the GSA (USA). Its regions serve exactly the same purpose as the state divisions in GSAust. They reflect the different regional geological issues in North America. It would obviously be crazy to have state branches (50 little divisions) – but the broader regions still require representation.

2. What about promotion to the public. We make large efforts in Qld, having run field trips for schools and especially in presenting medals for high-achieving High School and University students annually. This is an important means of promoting our science in a time of dwindling numbers.

3. Will we really push our membership levels up by making the society even more remote to potentially interested people? If they won’t come across town to monthly meetings, do you think they will take any active role in a national sense? I think engagement is much more easily done locally than centrally.

4. If monthly meetings are not effective – maybe we need something different. In Qld we have tried to collaborate with our fellow (and competing societies). We recognise that there are too many competing meetings – and I think several societies feel the same way. Yet on the other side, no society attracts the same members to a variety of talks on all different issues. In PESA we have trouble getting a broad membership to technical meetings. If an engineering talk is on, those guys come, if a petrology talk comes – the geos come, etc. A society like GSA that covers all areas of geology has an even greater task in attracting a large percentage of membership to any one talk.

**Could you please send me your comments.** I would be most interested in an answer to the question on the future of State Divisions, but also any feedback on the following questions.

Do you attend monthly meetings of the GSAQ? Why or why not?

Do you feel that the GSAQ does anything for you? Why or why not?

Why should state divisions be maintained?

Why should state divisions be scrapped?

What can your state executive do to better serve you – the members?

It is absolutely critical that your Divisional GSA Committee knows what you, the membership, think on this issue. Please let us know so that we can properly represent your views to the Federal Executive.

#### **Other News from Melbourne –**

- 1) The GSA Council and AGM overwhelmingly supported rule changes to lower the student membership fees to \$10.00 starting in 2007. That is a great and welcome move and should help us attract new members into the Society.
- 2) The Council is also pushing for applications for ‘Fellow of the GSA’. Rule changes were made to increase the diversity of contributions needed to be eligible for the Fellowship, and the new Federal Executive Committee would like to be flooded with applications/nominations. So who do you know who should be a Fellow of the GSA?
- 3) The incoming Federal Executive is also seeking to co-opt state members as councillors to provide the Executive with wider geographic representation.
- 4) Finally, the declining membership of the Society is a serious challenge to the GSA and the driving force behind many of the proposed changes and restructurings. Please consider carefully what GSA membership means to you. The society belongs to its members; it is not run by decree from above, either at state or federal level. Let us know what we can do to make GSA relevant to you and importantly, realise that GSA is in your hands. You can make it whatever you want it to be by participating. I look forward to seeing you at the next meeting in August!

Gregg Webb

#### **Applications for Fellowship of the GSA**

As Gregg Webb stated above, the Council is strongly encouraging GSA members to apply to become a “Fellow of the GSA”.

In the current Standards, the criteria for recognition as a Fellow are;

Any person who is a voting member of the Society, who,

(a) being an earth scientist with a minimum of ten (10) years employment in the earth sciences, and

(b) having served in an executive function (e.g. Council, Executive, Divisional Committee, Specialist Group committee, or as a Standing Committee member) on behalf of the Society for a minimum of two years.

All applications for Queensland members are to be sent to the Queensland Division Honorary Secretary Paul Blake for so they can be processed by the Divisional Committee and forwarded onto the Executive Committee. The postal address can be found towards the bottom of page 6.

### New Members

After our bumper crop of new members last time, we have only one new member to report:

- #100485 Carl Cross – new ordinary member

### Member Advantage

The Geological Society of Australia is delighted to offer Member Advantage, an organisation that specialises in offering member benefit programs to a number of professional organisations.

Member Advantage uses the combined buying power of participating organisations to provide members with a range of outstanding benefits and significant savings on lifestyle and business products and services.

You can access savings on:

- Car hire
- Health insurance
- Home loans
- And more through many other affiliated partnerships.

The GSA encourages you to experience the unique benefits of your membership by taking full advantage of these value-added financial and lifestyle member services.

Visit the official GSA Member Advantage website (<http://www.member-advantage.com/gsa/>) to find out more information or call on 1300 853 352.



### THE INTERNATIONALLY RENOWNED INFORMAL WEEKLY GET-TOGETHER FOR EXPLORERS AND MINERS UNION JACK'S ALE HOUSE –

English, Irish, Scottish & Welsh Pub - 127 Charlotte St, Brisbane CBD 5.30pm  
on every Wednesday evening if your work/spouse/budget/health allows

#### Advertising and Sponsorship Rates:

Our newsletter is circulated to about 500 members across Queensland, as well as being posted on our web page. It represents an ideal opportunity to advertise your company and services.

Size	width x height	1 issue	12 months (5 issues)
Full page	17.2 x 24.1 cm	\$120	\$300
Half page	17.2 x 11.9 cm or 8.4 x 24.1 cm	\$75	\$375
Quarter Page	17.2 x 5.8 cm or 8.4 x 11.9 cm	\$40	\$200
Business card	8.4 x 5.8 cm	\$20	\$100
Pamphlets and Flyers (as inserts)		~ \$100	

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