# THE VICTORIAN GEOLOGIST



April 2011

THE GEOLOGICAL SOCIETY OF AUSTRALIA Victoria Division

### **Annual General Meeting**

Thursday 28th April at 6:15 p.m. See inside for committee nomination form

## Biotic connections between Australia and South America - a tour of key fossil sites in Patagonia

### **Prof. David Cantrill**

Chair GSAV National Herbarium of Victoria Royal Botanic Gardens

Fritz-Loewe Theatre, Earth Sciences Building, The University of Melbourne Preceded at 5:30 p.m. by drinks and nibbles in the tea-room, 4th floor. Cost \$2



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#### Victoria Division

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### 2011 Annual General Meeting of the Victoria Division of the Geological Society of Australia

### **Notice of Meeting**

The 2011 Annual General Meeting of the Victoria Division of the Geological Society of Australia will be held at 6:15 p.m. on Thursday 28th April 2011 in the Fritz Loewe Theatre at the University of Melbourne (to be followed by the regular monthly address).

David Cantrill will present his Chairman's Report for 2010 – 2011 and the meeting will elect a new Geological Society Victoria Division Committee for 2011 – 2012.

### Agenda

- 1. Minutes from 2009–2010 of the GSA Victoria Division AGM on Thursday 29th April 2010.
- 2. GSA Victoria Division Chairman's Report for 2010–2011
- 3. GSA Victoria Division Financial Report for 2010–2011
- 4. Bicentennial Gold 88 Endowment Report for 2010–2011
- 5. Heritage Subcommittee Report for 2010–2011
- 6. Awards Committee Report for 2010-2011
- 7. Election of Committee Members for 2010–2011
- 8. Other business.

#### A. Seymon

Secretary of the Division, 7th April 2011

### Minutes of the 2010 GSA Victoria Division Annual General Meeting

### 1. Opening: time and place

- a. The meeting opened at 6.15 pm on Thursday 29th April 2010 in the University of Melbourne Fritz Lowe Theatre
- b. Apologies: Leon Costermans, Susan White

### 2. Minutes of the previous meeting on Thursday 30th April 2009

a. Minutes were taken as read, with one correction to Item 5a (\$19k corrected to \$10k). Moved: Bernie Joyce; seconded: Gerhard Krummei.

### 3. Chairman's report for 2009-2010

a. David Cantrill presented his *Chairman's Report for 2009 - 2010* and his report was accepted by the meeting. Moved: David Moore; seconded: Gemma Prata.

### 4. Treasurer's report for 2009-2010

- a. Stephen Gallagher presented the audited financials for 2009. This was accepted by the meeting. Moved: Noel Schleiger; seconded: Neil Philips.
- b. SG detailed sales of volumes, including readjustment of stock based on a physical count by Bill Birch. It was noted that stock of the Geology of Victoria could be gone in 5 years at the current rate of sale.
- c. SG noted that the society did not get many grant applications from students during 2009-10. He highlighted the importance of these grants for the AESC in July 2010.

### 5. Bicentennial Gold 88 Working Group report for 2009-2010

a. Gerhard Krummei presented the Bicentennial Gold 88 report for 2009-10. Have allocated another \$10k for distribution, and will be advertising these funds in TAG and AusIMM bulletin from the end of June. The report was accepted by the meeting. Moved: David Moore; seconded: Noel Schleiger.

### 6. Geological Heritage Subcommittee report for 2009-2010

a. Sue White was absent for this meeting, however DC tabled the geological heritage subcommittee report for the year ended 2009. This was accepted by the meeting.

### 7. Division Awards Subcommittee report for 2009-2010

a. Ingrid Campbell presented the awards subcommittee report for the year ended 2009. The report was accepted by the meeting.

#### 8. Election of the Victoria Division Committee for 2010 – 2011

a. The following members of the Victoria Division were elected or appointed to form the Division's Committee for 2010 - 2011:

#### **Division Officers**

Chairman David Cantrill

Vice chairman

Secretary Adele Seymon Treasurer Barbara Wagstaff

#### **Division Committee Members**

David Cantrill Division Chairman
Vacant Division Vice chairman
Adele Seymon Division Secretary
Barbara Wagstaff Division Treasurer

Ingrid Campbell Division Awards Subcommittee Chairman
Vacant Division Membership Subcommittee Chairman

David Moore Division Investments Administrator

Vacant Division Newsletter Editor

Alison Fairmaid Melbourne University, ESPG (Earth Sciences Postgraduate Group) Representative,

Newsletter Assistant

Lindsay Thomas Division Webmaster

Noel Schleiger Division Education Subcommittee Chairman

Sue White GSA Heritage Committee Chairman

**Affiliates** 

Gerhard Krummei Bicentennial Gold 88 Working Group Chairman

### 9. Other business

a. David Moore presented on the share portfolio, breaking down the ~\$230k in shares. He discussed two performance charts (included in the annual reports), noting that 2.5 years is not necessarily long enough

to make any performance judgements. The portfolio is typically performs 8% better than the ASX200 (not including franking credits on the dividends of those shares). David Cantrill commented that the franking credits are used as operating cash for funding the Selwyn, grants etc. Also moved investment portfolio management from Goldman Sachs JBWere to Evans & Partners to regain unbiased advice (Goldman Sachs JBWere owned by NAB).

- b. Simon Sheen asked if the GSAV investment group has considered an online share portfolio?
- c. David Moore replied they had vaguely considered such a thing, but valued the knowledge and guidance provided by an advisor. Equally they didn't want to be solely responsible for the society funds.
- d. Stephen Gallagher commented that advisor fees in 2009 were \$2500, which was a good investment. He emphasized the importance of the third party/professional aspect of advisors.
- e. Gerhard Krummei wondered what happened to the funds that went to the Federal Division a few years ago? Is this gone, based on their share portfolio performance? SG replied that he had no knowledge of such a funds transfer. The Feds are evaluating the amalgamation of the divisions including whether all the Divisional accounts should be rolled into theirs for auditing purposes. This is to address procedural noncompliance.
- f. Neil Phillips observed that the GSAV portfolio contained 10-15 years operating dollars. This is a lot for a NPO. Could we be doing something with this funding? David Cantrill observed that producing the Geology of Victoria volume was very costly, and some funds need to be preserved to reproduce this when needed. NP commented that it could be possible to tie up the funds for GoV etc. DC replied that we can consider doing that when/if we get into discussions with the Feds.
- g. Gerhard Krummei observed that the AGM attendees consisted of 99% old stalwarts of the organisation. There were various societies at the universities in Victoria; could these be brought into the organisation in some way? Could the committee think about this?

AF commented that the University of Melbourne post-graduate group didn't hold regular meetings. The same kind of group should exist at Monash University.

DC raised the point that GSAV has over 300 members – yet it struggles to get 10% of its members at the monthly meetings.

LC wondered if the society was truly representing its members. There is a need to have up-to-date and relevant speakers to attract industry members.

John Webb commented that the hydrogeologists committee organise a breakfast in the city, which attracts a different demographic.

#### 10. Closure

a. The meeting closed at 6.50 pm.



### FORTHCOMING EVENTS

### **Nominations for 2011 Annual General Meeting**

The AGM will be held on the 28th of April. Nominations are now open for executive positions in the committee, along with general committee member positions (see back page). We encourage you to consider nominating yourself or someone else. If you have any questions about what the committee does and what the positions entail, please feel free to contact any of the committee members listed on the last page of this newsletter, or emailing our secretary Adele at secretary@vic.gsa.org

### 2011-2012 GSAV Committee Nomination Form

I nominate: For the position of:

Nominator: Seconded by:

All nominations will be presented and voted upon at the GSAV AGM on 28th April, 2011, commencing at 6:15 pm.

Please detach and mail this completed form specifying your 2010-2011 GSAV Committee nomination no later than 22nd April to:

The Geological Society of Australia Inc. (Victoria Division) GPO Box 2355 Melbourne VIC 3001

Alternatively you can bring your form along to the meeting!

### STUDENT FUNDING OPPORTUNITIES

### Geological Society of Australia (Victoria Division) Student Research Scholarships

The GSAV are pleased to offer up to \$10,000 per year in scholarships available to honours and postgraduate students for assistance with travel costs associated with conferences and field work.



The scholarship is valued at up to \$500 for travel within Australia and \$700 for travel outside of Australia. The number of and value of the scholarships awarded each year is made at the discretion of the GSA(Vic) committee.

Funding will not be granted retrospectively and applicants are asked to submit forms no later than 6 weeks prior to their trip to give the committee time to consider the application.

Students that receive this scholarship are required to submit a report for publication in the newsletter, "The Victorian Geologist", following their trip. A presentation may also be requested by the committee, which will consist of a short, 10-15 minute presentation prior to the monthly seminar.

Applications forms can be scanned and emailed to: secretary@vic.gsa.org.au

or mailed to:

Geology Research Scholarships Victoria Geological Society of Australia (Victoria Division) GPO Box 2355 Melbourne VIC 3001

More information including eligibility criteria can be found on the form and by contacting Barbara Wagstaff (wagstaff@unimelb.edu.au)

### Something interesting to share? Want to see your name in print?

Don't be bashful, contribute to the GSA(V) monthly newsletter!

If there are any events, happenings, news, or views that would be of interest to the membership, please send your details and information to Gemma Prata at gemma.prata@monash.edu

We'd be glad to hear from you

### **News**

### Japan Earthquake Caused a Displacement of About Two Meters

Researchers at the Institute of Geomatics -- Research Centre of the Polytechnic University of Catalonia (UPC) and the Government of Catalonia -- have estimated the ground deformation suffered in the area of Sendai, Japan, as a consequence of the earthquake of March 11, 2011 and its aftershocks. The estimate was derived from radar observations acquired by the Envisat satellite of the European Space Agency. According to this estimate, obtained over an area of approximately 300 x 100 km around the city of Sendai, the terrain has suffered a co-seismic deformation -- permanent deformation of Earth's surface -- associated with the earthquake of up to 1.69 m.

This value refers to the line connecting the satellite and the observed area, which is tilted about 41° from the vertical. The estimated value of 1.69 m is a deformation value relative to the observed area: the absolute deformation (i.e., calculated over an area not affected by the earthquake) is surely larger and cannot be estimated with this technique.

The minimum distance from the epicentre to the study area is 100 km approximately. At these distances the vast majority of earthquakes do not cause co-seismic deformation. However, in this case, there has been considerable deformation due to the exceptional magnitude of this earthquake.

ScienceDaily, 8th April 2011

Google

Sendal

M9.0

M9.0

M7.3

FUKUSHITIAT DE 9

GEOMATICA

100 km
100 km
100 km
100 km

Coseismic deformation map of the Japan earthquake (March 11, 2011) overlapped to a Google Earth image. (Credit: Image courtesy of Universitat Politècnica de Catalunya)

The deformation can be seen in the map shown above, where the displacements are represented in a colour scale from black (no relative motion) to red (area of maximum deformation, which is the closest to the epicentre). There is relative deformation of 1.69 m from the area that appears black to the maximum area in red.

This study conducted by the Institute of Geomatics, and led by Dr. Michele Crosetto, head of the Remote Sensing Unit, is based on a well-known satellite-based microwave remote sensing technique called differential interferometry SAR (Synthetic Aperture Radar).

#### What does the observed deformation entail?

As mentioned above, the estimated 1.69 m deformation refers to the line connecting the satellite and the observed area. We know from other sources, such as measures of GPS (Global Positioning System), that the horizontal displacement has been of approximately 3 m eastwards, 0.5 m northwards and the vertical displacement varies between 0.5 and 1 m. The most important of these three components is probably the subsidence as it affects land elevation above sea level. Coastal areas are likely to be the most affected: in the worst case scenario, subsidence might lead to land loss. This is a phenomenon similar to what might result from climate change, although in this case, land would be lost as a result of sea-level rise.

#### How were the results derived?

SAR interferometry is a remote sensing technique used to monitor surface deformations. This technique, based on the analysis of SAR satellite data, has been used in various applications such as studying the dynamics of glaciers, earthquakes, volcanoes, mining, civil works, landslides and deformations due to exploitation of aquifers. The results of this study were obtained using SAR data from the sensor ASAR mounted on the satellite Envisat of the European Space Agency. Specifically, in this case, two SAR images acquired before (19/02/2011) and after the seismic event (03/21/2011) have been used.

Source: Universitat Politècnica de Catalunya (2011, April 8). Japan earthquake caused a displacement of about two meters. ScienceDaily. Retrieved April 11, 2011, from http://www.sciencedaily.com/releases/2011/04/110407121640.htm

### FORTHCOMING EVENTS

### **Monash University upcoming seminars**

### Friday 29th April, 2011

12 noon, Theatre S9, Building 25, Monash Unviersity, Clayton Campus:

**Prof. Gordon Southam**, University of Western Ontario

"Economic Geomicrobiology"

### Friday 20th May, 2011

Time and venue TBA:

Mr Richard Lane, Geoscience Australia

TBA

For more information contact:

Ben Gilfedder (benjamin.gilfedder@monash.edu) or Ph: 9905 1140

Or go to:

http://www.geosci.monash.edu.au/seminar/index.html

### **University of Melbourne upcoming seminars**

### Friday April 29th, 2011

4:00pm, Fritz Loewe Theatre, School of Earth Sciences McCoy Building, University of Melbourne, Parkville

**TBA** 

### Friday May 13th, 2011

4:00pm, Fritz Loewe Theatre, School of Earth Sciences McCoy Building, University of Melbourne, Parkville

**Dr. Phil Marren**, University of Melbourne TBA

### Friday May 20th, 2011

4:00pm, Fritz Loewe Theatre, School of Earth Sciences McCoy Building, University of Melbourne, Parkville

### Dr. Russell Drysdale, University of Melbourne

"Unlocking the drivers of Pleistocene glacial-interglacial cycles: insights from speleothems in Antro del Corchia (Italy)"

For more information contact:

Matt Bliss (mbliss@student.unimelb.edu.au)

Or ao to:

http://www.earthsci.unimelb.edu.au/php/seminars\_upcoming.php

### FORTHCOMING SEMINARS AND EVENTS

to be presented at GSA (Victoria Division) meetings

Note: unless otherwise indicated, all 2011 talks will be held in the Fritz Loewe Theatre, Earth Sciences Building, University of Melbourne.

April 28 Annual General Meeting

May 26 TBA

June 30 Royal Society of Victoria and the Geological Society of Australia

(Victoria Division) present:

The **ANNUAL AW HOWITT LECTURE** 

more details in the next newsletter

Visit the GSAV on www.vic.gsa.org.au or the GSA on www.gsa.org.au • Renewing your GSA membership is easy - it can now be done online. •

### **CONSIDER CONTRIBUTING TO TAG!**

It is member contributions which make TAG a member magazine – please keep the contributions coming and assist with informing all of the membership (not just your Division) about your activities.

Please send your news to: tag@gsa.org.au



### GSA (VICTORIA DIVISION) COMMITTEE

Please address all correspondence to the GSA Victoria Division GPO Box 2355, Melbourne, VIC, 3001 Internet address: www.vic.gsa.org.au

OFFICE BEARERS			COMMITTEE	
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Vice-chair:	position vacant		David Moore	0409 911 120
Secretary:	Adele Seymon	9658 4523 (BH)	Noel Schleiger	9435 8408
Treasurer:	Barbara Wagstaff	8344 6537 (BH)	Lindsay Thomas	0427 354 828
			Stephen Gallagher	8344 6513 (BH)
			Gemma Prata	9905 1098 (BH)
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OTHER CONTACTS Newsletter deadline:

Geology of Victoria: Bill Birch 9270 5049 (BH) First Friday of the month except Dec & Jan gemma.prata@monash.edu

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