

of Biennial Meeting for the presentation. The award is given for contributions to economic geology published before the author's 35th birthday. The recipient must be less than 37 years of age on January 1 of the year in which the award is presented. Any Society member in good standing may nominate candidates for the award. Details on when and how to nominate are available at the Society website at <http://www.e-sga.org>.

The SGA Young Scientist Award was presented for the first time at the 7th SGA Biennial Meeting (August 2003, Athens, Greece) to Dr. Noreen Mary Vielreicher

from the Centre for Global Metallogeny, Department of Geology and Geophysics, University of Western Australia.

The Second SGA Young Scientist Award will be presented at the 8th SGA Biennial Meeting (August 2005, Beijing, China).

## REFERENCES:

Bernard A (1966): Society for Geology Applied to Mineral Deposits – Society Notes and News. Mineralium Deposita vol. 1, 324.

Hutchinson RW (1987) The Society of

Economic Geologists. Episodes, vol. 9, 3, 166-168.

Pasava J (2003) The Society for Geology Applied to Mineral Deposits (SGA). Episodes, vol. 26, 4, 333-225.

Saupé F (1987) The Society for Geology Applied to Mineral Deposits (SGA). Episodes, vol. 10, 2, 107-109.

Table 1. SGA officers serving in the period from 1989 to date.

	President	Vice-President	Executive Secretary	Treasurer	Chief Editor(s), MD	Chief Editor(s), SGA News
1989-1990	V. Koeppel (Switzerland)	A. Evans (U.K.)	M. Pagel (France)	R. Hoell (FRG)	D.D. Klemm and H.J. Schneider (FRG)	None
1991-1992	F.M. Vokes (Norway)	J.C. Duchesne (Belgium)	M. Pagel (France)	R. Hoell (Germany)	I.R. Plimer (Australia)	None
1993-1994	I.R. Plimer (Australia)	J.C. Touray (France)	M. Pagel (France)	R. Hoell (Germany)	D. Rickard (UK)	None
1995-1996	Z. Johan (France)	B. Lehmann (Germany)	M. Pagel (France)	P. Herzig (Germany)	D. Rickard (UK)	L. Fontboté and M. Chiaradia (Switzerland)
1997-1998	E.F. Stumpfl (Austria)	J. Pasava (Czech Rep.)	M. Pagel (France)	P. Herzig (Germany)	D. Rickard (UK) and R. Goldfarb (USA)	L. Fontboté and M. Chiaradia (Switzerland)
1999-2001	H. Papunen (Finland)	B. Lehmann (Germany)	J. Pasava (Czech Rep.)	P. Herzig (Germany)	D. Rickard (UK) – replaced in 2000 by B. Lehmann (Germany) and R. Goldfarb (USA)	M. Chiaradia (Switzerland)
2002	P. Fenoll-Hach Alí (Spain)	D. Leach (USA)	J. Pasava (Czech Rep.)	P. Herzig (Germany)	B. Lehmann (Germany) and R. Goldfarb (USA)	M. Chiaradia (UK)
2003	D. Leach (USA)	P. Fenoll-Hach Alí (Spain)	J. Pasava (Czech Rep.)	P. Herzig (Germany)	B. Lehmann (Germany) and L. Meinert (USA)	M. Chiaradia (UK)
2004-2005	D. Leach (USA)	H. Frimmel (RSA)	J. Pasava (Czech Rep.)	P. Herzig (Germany)	B. Lehmann (Germany) and L. Meinert (USA)	M. Chiaradia (Switzerland)

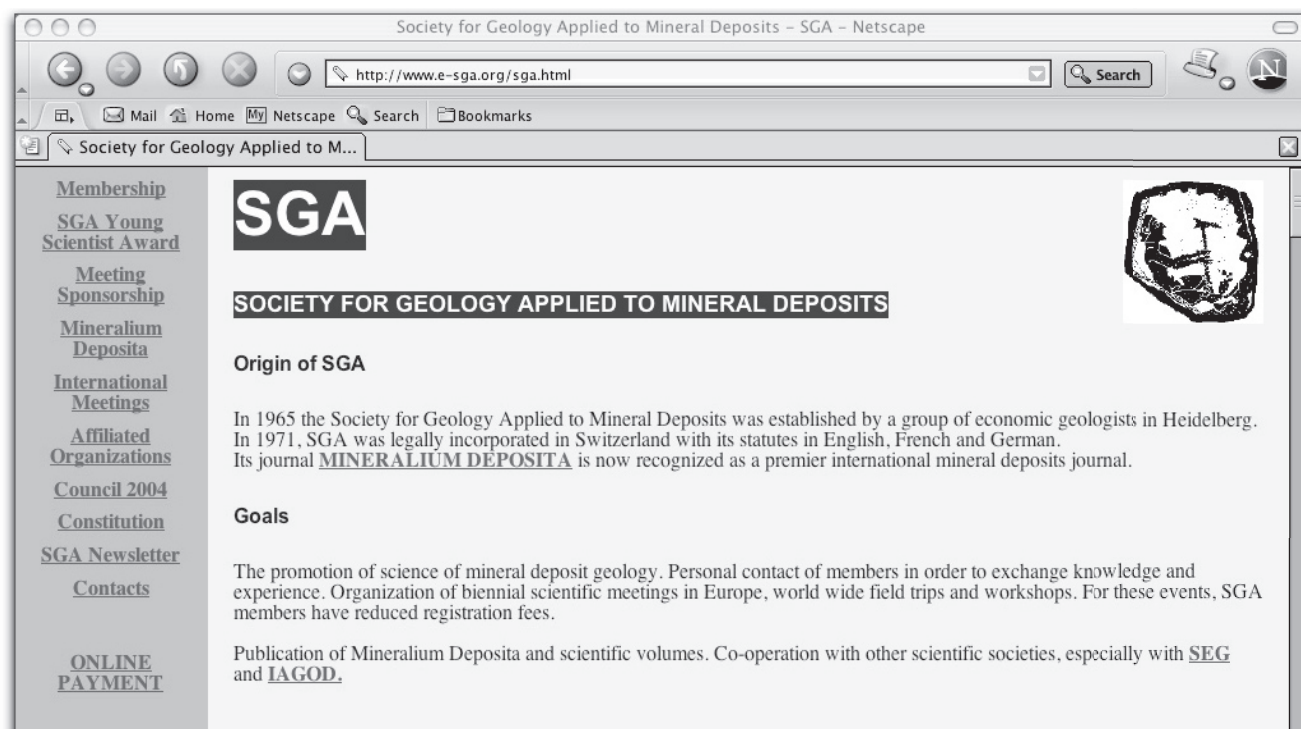
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The SGA homepage address on internet is <http://www.e-sga.org>. From this homepage you can get information about biennial scientific meetings in Europe, worldwide field trips and workshops, membership application form for the SGA and authors and titles of this year contributions to Mineralium Deposita as well as the electronic edition of SGA News.



## SUBSIDIZED SUBSCRIPTION PROGRAM

The SGA Council offers a limited number of free subscriptions to Mineralium Deposita to Institutions and, under special circumstances, also to individuals in an economically challenged situation. The grant period is for 2 years. Please send a letter of justification for the need and specify how the journal will be used. The written request including contact details of two SGA members supporting this request should be sent to the SGA Executive Secretary, Czech Geological Survey, Klárov 131/3, 118 21 Praha 1, Czech Republic.

>>> page 5 **News of the Society**

about his involvement in the preparation of a new IYPE brochure on "Mineral Resources".

#### SGA Prague/Freiberg Chapter

The Council highly appreciated various activities of the SGA Prague/Freiberg Chapter, presented by A. Vymazalová, which are often described in SGA NEWS (see SGA News N. 17 and 18).

#### Past Activities

- ☐ 32nd IGC (Florence, August 20-28, 2004) – several Symposia co-sponsored.
- ☐ UNESCO-SEG Latinoamerican Course in Metallogeny (August 17-28, 2005 Mendoza, Argentina).
- ☐ UNESCO/Geochim 2004/SGA – Post-graduate training course in geochemical exploration methods and their environmental applications (September 6-20,

2004 Prague and Dolní Rozínka, Czech Republic).

- ☐ SEG 2004 (September 27-October 10, 2004 Perth, Australia) – SGA run its own module at this conference and exhibit.
- ☐ IAVCEI Meeting (November 14-19, 2004 Santiago, Chile).

#### Future Activities

- ☐ GOLDSCHMIDT 2005 (May 20-24, 2005 Moscow, USA) – SGA special session on "Ore deposits in their temporal and orogenic framework -- new concepts and perspectives" (H. Stein et al.).
- ☐ The 20th World Mining Congress (November 7-11, 2005 Tehran, Iran) – M. Yazdi and G. Borg.
- ☐ Conference on the Geology of the Middle East (March 20-23, 2006 Al-Ain, United Arab Emirates).
- ☐ The 12th IAGOD Quadrennial Symposium (August 2006 Moscow, Russia) – H. Frimmel and J. Pasava responsible for SGA special session on „Black shale

hosted mineral deposits: from their origin to their environmental impacts" and exhibit.

- ☐ A joint meeting with the GAC and MAC in 2008 (May, Quebec City, Canada).

#### 10th SGA Biennial Meeting

The call for proposals for the 10th SGA Biennial Meeting (2009) is now open and can be addressed to Jan Pasava (SGA Executive Secretary), Czech Geological Survey, Klárov 131/3, 118 21 Praha 1, Czech Republic, e-mail: pasava@cgu.cz.



## CHANGE OF ADDRESS FORM

If you have changed (or will change in the near future) your address please fill in this form and send it to:

Peter M. Herzig, SGA Treasurer - Leibniz-Institut für Meereswissenschaften · IFM-GEOMAR  
Gebäude Ostufer · Wischhofstr. 1-3 · D-24148 Kiel, Germany  
phone: ++49-431-600-2800 · fax: ++49-431-600-2805 · e-mail: pherzig@ifm-geomarg.de

Name .....

Old address .....

Complete new address (including phone, fax and e-mail) .....

# A brief introduction of the Regional SGA Vice-President for Australia/Oceania

Frank P. Bierlein

*Regional Vice-President, Australia/Oceania since 2004*

First up (and as many of you know already) I have to admit that I am not a 'true blue Aussie' – born and bred in Germany, I studied geology at the University of Heidelberg and worked for several field seasons in the Scandinavian Caledonides before switching hemispheres and setting up camp in the Land Down Under. My PhD studies at the University of Melbourne focused on the origin and genesis of base and precious metal accumulations in the Proterozoic of outback South Australia, and included some of the most fascinating and hair-raising experiences an aspiring economic geologist can encounter. This was followed by an AMIRA-funded post-doc at the University of Ballarat to investigate the nature and timing of orogenic gold deposits in the western Lachlan Orogen – and resulted in my entirely succumbing to the lure of the yellow metal! For the last six years, I have been a Logan Fellow at Monash University in Melbourne, undertaking research that spans the fields of ore deposit geology, exploration geochemistry, the application of stable and radiogenic isotope techniques as tracers of geologic processes and in geochronological studies, igneous petrogenesis, and structural – tectonic controls of ore formation. As of May 2005, I will be relocating to beautiful Perth to take up a Se-

nior Research Fellowship with the Tectonics Special Research Centre and the newly created Centre for Exploration Targeting at the University of Western Australia.

I have been fortunate to be taught by numerous experts, collaborate with many dedicated professionals and visit some amazing places. I also believe we have an important role in bridging the interests of industry, academia and government organisations, encourage graduates to take up a career in economic geology, and contribute to educating the public on all aspects related to the minerals resource sector. I therefore consider it an honour and a great pleasure to serve as Regional Vice-President of the SGA and get actively involved in the development of our Society. These are exciting times for what is becoming a truly international society – the 'globalisation' of the SGA is wonderfully reflected by its Councils' hard-working and enthusiastic members representing six continents, the growing linkages and collaboration with other learned societies, the international standing of our journal, *Mineralium Deposita*, and of course this year's Biennial



*Frank Bierlein*

Meeting in Beijing, which I am very much looking forward to. I also look forward to our members' feedback and contributions, because it is your input that the society thrives on.

## News from other Regional SGA Vice-Presidents

### Mei-Fu Zhou - SGA Regional VP Asia

In the past several months, we had a conference entitled "recent Advances in magmatic ore systems in mafic-ultramafic rocks" held in December 2004, in Hong Kong. The conference was successful with over 90 participants from more than 15 countries. We displayed a SGA booth and promotion materials and introduced SGA to many participants in particular those from

Mainland China. Hopefully we will have more members from Asian countries in the near future as we plan to continue to increase the visibility of SGA in Asia.

### José Cabello - SGA Regional VP South America

As SGA South America representative I have been promoting the idea to increase joint economic geology research between

SGA members based out of this continent and South American geoscientists. The note circulated looking for expressions of interest follows:

"South America is one of the key continents regarding mining and mineral deposits. But the level of academic research to better understand this important mineral resources





**Laurentian University  
Department of Earth Sciences  
Mineral Exploration Research Centre**

**MERC**

## **Economic Geology**

The *Department of Earth Sciences* and *Mineral Exploration Research Centre* at Laurentian University invite applications for a tenure-track faculty position in **Economic Geology** to be filled in July 2006. We are particularly interested in candidates who have strong field and theoretical backgrounds in magmatic and/or hydrothermal ore deposits in Precambrian rocks. Applicants should have strong research records and be committed to excellence in teaching at the undergraduate and graduate levels. Supervision of graduate students within a vigorous, externally-funded research program is expected. Applicants must hold a PhD degree by the time of appointment.

The successful candidate will work and interact with faculty, undergraduate and graduate students, and post-doctoral fellows in the Department of Earth Sciences and Mineral Exploration Research Centre. The Department currently offers BSc degrees in Geology and Environmental Earth Sciences, thesis-based and applied MSc degrees in Geology, and PhD degrees in Ore Deposits and Precambrian Geology. Faculty and students have access to excellent light optical, electron optical, and geochemical analytical equipment, including FLINC, SEM, EPMA, WD-XRF, ICP-OES, ICP-MS, LA-ICP-MS, and EBSD. Additional information about the Department and MERC can be found at <http://www.laurentian.ca/geology>.

Send curriculum vitae, including a complete list of publications, a statement of teaching interests, long- and short-term research goals, and the names and mail/e-mail addresses of at least (4) academic references to: Faculty Search Committee, Department of Earth Sciences, Laurentian University, Sudbury, Ontario P3E 2C6, Canada, e-mail: [DES@laurentian.ca](mailto:DES@laurentian.ca), Fax: (705) 675-4898. Screening of applications will begin 01 November 2005, but applications will be accepted until the position is filled.

Laurentian University is a bilingual institution and an equal opportunity employer. It has a policy of passive bilingualism (English/French) as a condition of tenure. The university is committed to equity in employment and encourages applications from women, aboriginal peoples, members of visible minorities, and persons with disabilities.

## G. Christian Amstutz died on 23 June 2005

As reported in the main article of this issue, a group of European leaders in the field of ore geology met in Heidelberg in June 1965 and founded SGA. The meeting was chaired by G. Christian Amstutz, the first Editor of Mineralium Deposita. On the occasion of the 40th SGA Anniversary, the SGA Council had decided to pay a tribute to G. Christian Amstutz and interview him about those days during which SGA was created. I made several contacts with him between the end of May and the beginning of June to meet him and have the interview. He agreed enthusiastically to the idea and proposed to come to visit me in Geneva. Unfortunately, around mid-June his health started to deteriorate and he could not make the planned trip to Geneva and was hospitalized to be treated for a disease he had been suffering for the last years. His health deteriorated quickly over the last days and he passed away peacefully surrounded by his family on the morning of the 23 June 2005, at the age of 82 years.


I have decided to copy below his last letter showing his disappointment for not being able to make the interview for health problems and at the same time the willingness to respond to my questions via fax. I also know that even from the hospital he managed to have me sent an hand-written fax confirming that because of his health he could not come to Geneva. Even in his last moments he was thinking about SGA.

An obituary will appear in the next SGA News but already now I would like to honour the memory of G Christian Amstutz.



Massimo Chiaradia  
SGA News Editor

G. Christian Amstutz

<b>G. Christian Amstutz</b>	
em. Prof. Dr. Dres h.c.	Hausmatte CH - 3655 Sigriswil Switzerland phone & fax +41 +33 251 13 57 cristian.amstutz@univ-sg.ch
Sigriswil, 12 June 2005	
Dr. M. Chiaradia Département de Minéralogie Rue des Maraîchers 13 1211 Genève 4	
Dear Dr. Chiaradia,	
we intended to visit you on 12 or 11 June; but unfortunately I am unable to travel due to a heavy attacks of "nausée". X Please Fax me a copy of your questions.	
Very sorry. Sincerely,	
 G.C. Amstutz	
X and on 13 and 14 I have two medical treatments - on 14 June Operation of catatact.	



# In Memoriam of Pierre Evrard (1914-2005) SGA President 1983-1984

Pierre Evrard died on February 8, 2005, in Liège, Belgium. He was born in Liège, on August 9, 1914, from a family whose roots were in Namur. In 1939, he married Georgette Deroisy, whom he had the pain of losing in 1990. They had four children: Pierre, Jacques, Jean and Suzanne, of whose achievements he was very proud.

Pierre Evrard graduated from the University of Liège as a Mining Engineer in 1939, then completed Geophysics and Photogrammetry and graduated as a Geological Engineer in 1942, obtaining for both degrees the qualification "magna cum laude". Firstly Graduate Assistant (1937/1938), he became Assistant (1938/1939 and 1941/1946) and Assistant Professor (1947/1950). After many years abroad he went back in 1961 to the University of Liège as a Professor of Applied Geology, at the well known 45, avenue des Tilleuls. Eventually, he became an emeritus in 1983.

The time gaps in this first university period were densely filled with many other activities. At the beginning of WW II, he was drafted and sent to the Manufacture of Arms at Gand, Belgium and after the German invasion, to Brive-la-Gaillarde, France. After the surrender of the Belgian army, he enlisted in the French Army. Independently, his family moved to Southern France. Two attempts to leave Europe failed and so he found himself and his family in Saint Amour, Beaujolais, in March 1941, working first in the vineyards as a labourer and later in Macon as a topographer.

In 1946, P. Evrard went on his first exploration mission to the Belgian Congo under the supervision of I. de Magnée, another President of the Society for Geology Applied to Mineral Deposits (SGA). During his appointment as an Assistant Professor (1947/1950) he started his impressive series of travels and visited mines in France, Spain, Portugal, Morocco, Algeria and other countries, especially in the United States and in Canada, where he spent five months, visiting mines, oil and geophysical companies as well. In 1950, he turned completely to industry, taking charge of the exploration of the Congo basin (half a million square km wide). The enterprise lasted five

years and led to many industrial discoveries (particularly the off shore oil of Zaire) and incidentally to a row of more than twenty volumes published by the Royal Central Africa Museum of Tervuren, Belgium. On his numerous travels, he visited amongst the largest number of mines in the World visited by any economic geologist. This did not prevent him from writing over sixty papers. During his tenure as a Professor, he remained in close and fruitful contact with industry and his wide ranging interests are well testified by the array of his lectures on mineral economics, ore deposits, fossil and nuclear fuels, prospecting and geophysics. Numerous post docs and visiting scientists stayed at his Institute.

He loved life in Nature and his Mierchamps cottage, amid of the rough Hercynian Ardennes Massive. Hence the affectionate nickname given to him of "Boar of the Ardennes" he was proud of. There he planted some seventy different trees, collected all over the World during his travels and raised sheep. One of the fascinating aspects of his personality was the urge to understand things in the light of physics, chemistry and engineering. Similarly, he stimulated his students and co-workers to do so. He enjoyed sharing his experience and the large knowledge he had of literature, economics, politics, history and oenology to quote few of his interests. He showed great fidelity; fidelity to his family and his friends, fidelity to the organizations he was involved in and fidelity to his ideas and ideals. He defended them with conviction and steadiness.

He was a member of various humanitarian or scientific societies. He served as Secretary General of the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) from 1967 to 1975, he was a President and later Honorary member of the Royal Belgian Overseas Academy and former Member of New York Academy of Sciences. Belgium be-

stowed upon him several national distinctions.

Pierre Evrard belonged to the group which in 1966, at the invitation of G.C. Amstutz, founded the Society at Heidelberg and included also A. Bernard, K.C. Dunham, E. Grip, G.L. Krol, I. de Magnée, A. Maucher, P. Ramdohr, P. Routhier and P. Zuffardi. Member of the Advisory Board of Mineralium Deposita (1966/1991), Councillor of the Society (1968/1973), he was elected President for 1983/1984 and during his term, launched the idea of the Biennial SGA Meetings. In recognition of the great services rendered to the Society, he was elected Honorary Member in 1989.

Finally, Pierre Evrard was very successful developing synergies and bringing people to collaborate in a friendly and efficient atmosphere. In his person he happily combined science and humanism, industry and university and this is how he will stay in our memory.

Francis Saupé



*Pierre Evrard*



## &gt;&gt;&gt; FORTHCOMING EVENTS &lt;&lt;&lt;

\* marks a new entry

## 2005

**June 27-July 1**

INTERNATIONAL CONFERENCE ON MINING AND THE ENVIRONMENT AND METALS AND ENERGY RECOVERY: SECURING THE FUTURE, Skellefteå, Sweden – Contact address: Expolaris Kongresscenter, Skellefteå, SE-931 78 Skellefteå, Sweden; phone: +46-919-736000; fax +46-910-736010; e-mail: kongresscenter@skelleftea.se, tomas.from@metallgruppen.se, manfred.lindvall@boliden.se or helenahornberg@kongresscenter.skelleftea.se

**\*July 6-9**

ECROFI XVIII: EUROPEAN CURRENT RESEARCH ON FLUID INCLUSIONS, Siena, Italy – Contact address: e-mail bonelli5@unisi.it or ecrofiXVIII@unisi.it; website: <http://www.unisi.it/eventi/ECROFIXVIII>

**July 31- August 5**

GORDON CONFERENCE “Inorganic Geochemistry, metals in ore-forming systems: sources, transport, deposition”, Proctor Academy, Andover, New Hampshire, USA – Contact address: e-mail: Steve.Garwin@geoinformex.com or christoph.heinrich@erdw.ethz.ch or cline@ccmail.nevada.edu; website: <http://www.segweb.org/GordonConf.pdf>

**August 7-11**

10TH INTERNATIONAL PLATINUM SYMPOSIUM: “Platinum-Group Element - from Genesis to Beneficiation and Environmental Impact, Oulu, Finland – Contact address: Congress Oulu, P.O. Box 56, Fin-90015 Oulun kaupunki, Finland; e-mail: congressoulu@ouka.fi; website: [www.congressoulu.fi](http://www.congressoulu.fi) and <http://platinum-symposium.oulu.fi/>

**\*August 8-11**

EARTH SYSTEM PROCESSES 2, by the Geological Society of America, Geological Association of Canada, Westin Hotel, Calgary, Alberta, Canada – Contact address: Diane Matt, P.O. Box 9140, Boulder, CO 80301-9140; phone: +1-(303) 357-1014; fax: +1-(303) 357-1074; e-mail dmatt@geosociety.org; website: <http://www.geosociety.org/meetings/esp2/>

**August 18-21 - SGA-Cosponsored**

8TH BIENNIAL SGA MEETING “MINERAL DEPOSIT RESEARCH: MEETING THE GLOBAL CHALLENGE”. Beijing, China – Contact address: 8th SGA Biennial Meeting, Secretary: Dr. Jingwen Mao, Institute of Mineral Resources Chinese Academy of Geological Sciences, 26 Baiwanzhuang Road, Beijing, 100037 China; fax: +86-10 68 33 63 58; e-mail: mail@sga2005.com; website: <http://www.sga2005.com>

com; website: <http://www.sga2005.com>

**\*August 23-27**

GES-7: 7TH INTERNATIONAL SYMPOSIUM ON THE GEOCHEMISTRY OF THE EARTH'S SURFACE, Aix-en-Provence, France – Contact address: Jean-Dominique MEUNIER, CEREGE, Europole Mediterranee de l'Arbois - BP 80, 13545 Aix-en-Provence cedex 4 - France; phone: +33 442 971 524; fax: +33 442 971 540; e-mail: ges7@cerege.fr; website: <http://www.cerege.fr/GES7/index.htm>

**August 29 - September 2**

STOMP - STRUCTURE, TECTONICS AND ORE MINERALIZATION PROCESSES, Townsville, Australia. Organised by the Economic Geology Research Unit at James Cook University – Contact address: e-mail: Timothy.Baker@jcu.edu.au or Thomas.Blenkinsop@jcu.edu.au; website: [www.es.jcu.edu.au/STOMP/](http://www.es.jcu.edu.au/STOMP/)

**August 30 - September 13**

MODULAR COURSE IN STRUCTURE, TECTONICS, AND MINERAL EXPLORATION, Sudbury, Ontario, Canada – Contact address: Bruno Lafrance, Mineral Exploration Research Centre, Department of Earth Sciences, Laurentian University, Ramsey Lake Road, Sudbury, ON, Canada, P3E 2C6; phone: +1.705.675.1151 x2364; fax: +1.705.675.4898, email: blafrance@laurentian.ca; website: <http://earthsciences.laurentian.ca>

**September 11-16**

URANIUM MINING AND HYDROGEOLOGY, Freiberg, Germany – Contact address: fax: +49 3731 392720; e-mail: UMH@geo.tu-freiberg.de; website: [www.geo.tu-freiberg.de/umh](http://www.geo.tu-freiberg.de/umh)

**\*September 11-16**

6TH INTERNATIONAL SYMPOSIUM OF APPLIED ISOTOPE GEOCHEMISTRY (AIG-6), Prague, Czech Republic – Contact address: Dr. Martin Novak, Czech Geological Survey, Geologicka 6, 152 00 Prague 5, Czech Republic; phone: +420-251816540; fax: +420-251818748; e-mail: novak@cgu.cz or aig6@natur.cuni.cz; website: [www.aig6.cz](http://www.aig6.cz)

**September 19-23**

GEOCHEMICAL EXPLORATION AND 1ST INTERNATIONAL APPLIED GEOCHEMISTRY SYMPOSIUM, Perth, Australia – Contact address: Promaco Conventions Pty Ltd, ABN 68 008 784 585, PO Box 890, Canning Bridge, Western Australia 6153; phone: +61 8 9332 2900; fax: +61 8 9332 2911; e-mail: promaco@promaco.com.au; website: [www.promaco.com.au/conference/2005/iges](http://www.promaco.com.au/conference/2005/iges)

**September 20-23**

MINERAL DEPOSITS OF SOUTH AMERICA:

NEW VISIONS, XVI Congreso Geológico Argentino, La Plata, Argentina – Contact address: website: [www.congresogeologico.org.ar](http://www.congresogeologico.org.ar)

**\*September 25-29**

MINPET 2005. MINERALOGY: FUNDAMENTAL RESEARCH AND APPLICATIONS, Schladming, Austria – Contact address: Sekretariat Mrs. J. Bergthaler, Department of Applied Geosciences and Geophysics, University of Leoben, Peter Tunner-Straße 5, 8700 Leoben, Austria; phone: +43 3842 402 6201; fax: +43 3842 47016; e-mail: minpet2005@unileoben.ac.at; website: [minpet2005.unileoben.ac.at](http://minpet2005.unileoben.ac.at)

**October 16-19**

GEOLOGICAL SOCIETY OF AMERICA: ANNUAL MEETING, Salt Lake City, Utah, USA – Contact address: GSA Meetings Department, P.O. Box 9140, Boulder, CO 80301-9140, USA; phone: +1 303 447 2020; fax: +1 303 447 0648; e-mail: meetings@geosociety.org; web-site: <http://www.geosociety.org/meetings/index.htm>

**\*October 17-19**

INTERNATIONAL LEAD-ZINC PROCESSING SYMPOSIUM 2005, Kyoto, Japan – Contact address: e-mail: akiofuwa@waseda.jp

**\*October 27-28**

6th CERCAMS WORKSHOP ‘MINERAL DEPOSITS OF THE URALS’, The Natural History Museum, London, UK – Contact address: Dr. Reimar Selmann, Natural History Museum, Dept. Mineralogy, CERCAMS (Centre for Russian and Central Asian Mineral Studies), Cromwell Road, London SW7 5BD, UK; phone: +44 207 942 5042; fax: +44 207 942 6012; e-mail: rs@nhm.ac.uk or Richard Herrington, e-mail R.Herrington@nhm.ac.uk; website: <http://www.nhm.ac.uk/mineralogy/cercams/index.htm>

**\*November 6-11**

SOCIETY OF EXPLORATION GEOPHYSICISTS (SEG) INTERNATIONAL EXPOSITION & 75TH ANNUAL MEETING, Houston, Texas, USA Contact address: e-mail: meetings@seg.org; website: [meeting.seg.org](http://meeting.seg.org)

**November 7-11**

20TH WORLD MINING CONGRESS & EXPO 2005, Teheran, Iran – Contact address: Mr. A. Almasi, Chief of Executive Committee, No. 25, Ostad Nejatollahi Avenue, Teheran 1599913717, Iran; e-mail: info@wmce2005.com; website: [www.20wmce2005.com](http://www.20wmce2005.com)

**\*November 13-15**

GEOLOGY FORUM 2005: FOCUS ON MINERAL EXPLORATION, Cape Town, South Africa – Contact address: website: <http://www.min-eng.com/geologyforum05/index.html>



**November 30-December 2**

5TH FENNOSCANDIAN EXPLORATION AND MINING, Rovaniemi, Finland – Contact address: Regional Council of Lapland, Ms. Riitta Muhojoki, Project Secretary, P.O. Box 8056, Fin-96101 Rovaniemi, Finland; phone: +358-16-3301230; fax: +358-16-318705; website: [www.lapinliitto.fi/fem2005](http://www.lapinliitto.fi/fem2005)

**December 8-17**

MODULAR COURSE IN EXPLORATION GEOPHYSICS, Sudbury, Ontario, Canada – Contact address: Michael Leshner, Mineral Exploration Research Centre, Department of Earth Sciences, Laurentian University, 933 Ramsey Lake Road, Sudbury, ON, Canada, P3E 6B5; phone: +1.705.675.1151 x2364; fax: +1.705.675.4898; e-mail: [lesher@laurentian.ca](mailto:lesher@laurentian.ca); website: <http://earthsciences.laurentian.ca>

**\*December 16-22**

GEOLOGICAL SOCIETY OF AFRICA, 13 INTERNATIONAL CONFERENCE, Cairo, Egypt – Contact address: Dr Mahmoud Abdeen, GSAF Vice-President; e-mail: [m\\_m\\_abdeen@hotmail.com](mailto:m_m_abdeen@hotmail.com); website: [gsaf.narss.org/001\\_home.htm](http://gsaf.narss.org/001_home.htm)

**2006****\*March 26-29**

18TH INDUSTRIAL MINERALS INTERNATIONAL CONGRESS, The Palace Hotel, San Francisco, USA – Contact address: fax: +22 (0)20 7827 5292; e-mail: [conferences@indmin.com](mailto:conferences@indmin.com); website: [www.indmin.com](http://www.indmin.com)

**\*April 2-7**

EUROPEAN GEOSCIENCES UNION (EGU), General Assembly, Vienna, Austria – Contact address: EGU Office, Max-Planck-Str. 13, 37191 Katlenburg-Lindau, Germany; phone: +49-5556-1440; fax: +49-5556-4709; e-mail: [egu@copernicus.org](mailto:egu@copernicus.org); website: [www.copernicus.org/EGU/egu\\_info/prevga.html](http://www.copernicus.org/EGU/egu_info/prevga.html)

**\*April 3-7**

BACKBONE OF THE AMERICAS - PATAGO-

NIA TO ALASKA, International Conference, Convened by the Geological Society of America and the Asociación Geológica Argentina, Mendoza, Argentina – Contact address: GSA Meetings Dept., P.O. Box 9140, Boulder, CO 80301-9140, USA; phone: +1 303 447 2020; fax: +1 303 447 1133; e-mail: [meetings@geosociety.org](mailto:meetings@geosociety.org); website: [www.geosociety.org/meetings/06boa/index.htm](http://www.geosociety.org/meetings/06boa/index.htm)

**April 5-16**

MODULAR COURSE IN EXPLORATION FOR MAGMATIC ORE DEPOSITS, Sudbury, Ontario, Canada. Information: contact Michael Leshner, Mineral Exploration Research Centre, Department of Earth Sciences, Laurentian University, 933 Ramsey Lake Road, Sudbury, ON, Canada, P3E 6B5; Ph. +1.705.675.1151 x2364; fax: +1.705.675.4898; e-mail: [mlesher@laurentian.ca](mailto:mlesher@laurentian.ca); website: <http://earthsciences.laurentian.ca>

**May 14-16**

SOCIETY OF ECONOMIC GEOLOGISTS: "WEALTH CREATION IN THE MINERALS INDUSTRY" (2006 CONFERENCE), Keystone, Colorado, USA – Contact address: e-mail: [seg2006@segweb.org](mailto:seg2006@segweb.org); website: <http://www.segweb.org/meeting.htm>

**\*July 2-7**

THE AUSTRALIAN EARTH SCIENCES CONVENTION 2006, ASEG, 18TH INTERNATIONAL CONFERENCE AND EXHIBITION, AND GSA'S 18TH AUSTRALIAN GEOLOGICAL CONVENTION, Melbourne, Australia – Contact address: website: <http://www.aseg.org.au/>, [www.earth2006.org.au](http://www.earth2006.org.au)

**July 16-23**

ZEOLITE '06, Socorro, New Mexico, USA – Contact address: Dr. Bowman; e-mail: [bowman@nmt.edu](mailto:bowman@nmt.edu)

**July 23-28**

19TH GENERAL MEETING OF THE INTERNATIONAL MINERALOGICAL ASSOCIATION (IMA2006-Kobe): Expansion to Nano,

Bio, and Planetary Worlds, Kobe, Japan – Contact address: Secretariat 19th General Meeting of the International Mineralogical Association, c/o Congress Corporation, 3-6-13 Awajimachi, Chuo-ku, Osaka 541-0047, Japan; phone: +81-6-6229-2555; fax: +81-6-6229-2556; e-mail: [2006ima@congre.co.jp](mailto:2006ima@congre.co.jp); website: [www.congre.co.jp/ima2006](http://www.congre.co.jp/ima2006)

**\*August 27-September 1**

16TH ANNUAL V.M. GOLDSCHMIDT CONFERENCE, Melbourne, Australia – Contact address: e-mail: [goldschmidt2006@tourhosts.com.au](mailto:goldschmidt2006@tourhosts.com.au); website: <http://www.goldschmidt2006.org>

**\*October 22-25**

GEOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, Philadelphia, Pennsylvania, USA – Contact address: GSA Meetings Department, P.O. Box 9140, Boulder, CO 80301-9140, USA; phone: +1 303 447 2020; fax: +1 303 447 0648; e-mail: [meetings@geosociety.org](mailto:meetings@geosociety.org); website: <http://www.geosociety.org/meetings/index.htm>

**2007****\*October 28-31**

GEOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, Denver, Colorado, USA – Contact address: GSA Meetings Department, P.O. Box 9140, Boulder, CO 80301-9140, USA; phone: +1 303 447 2020; fax: +1 303 447 0648; e-mail: [meetings@geosociety.org](mailto:meetings@geosociety.org); website: <http://www.geosociety.org/meetings/index.htm>

**2008****\*August 5-14**

33rd International Geological Congress (IGC 2008): Nordic Countries: Norway, Sweden, Denmark, Finland and Iceland. Lillestrom, Norway – Contact address: website: [www.ngu.no/igc2008](http://www.ngu.no/igc2008)

>>> page 14 News from SGA Regional Vice-Presidents

is not enough. I am working essentially with the idea of increasing the exchange of research, students, and senior scientists between South America and SGA members in other parts of the world. I really would like to impulse studies about the South American Metallogenesis, especially ore models, age dating and isotopic reviews. And a good way to do this is by taking advantage of the infrastructure and equipment in Europe, USA, China, Japan, Australia, New Zealand and others regions or countries with equi-

valent academic infrastructure. And in our region( Andean and Shield setting) we have plenty of good examples to study. So I am putting together this proposal to the SGA Council and the South American academic community . If this proposal is accepted and supported , we will outline a specific set of objectives and how we might start to work on these objectives. I would like to have a plan that is small in scope initially - simply to help insure that it is successful - and then build on this eventual success. I am cur-

rently working in the identification of some universities , institutions , and companies that would like to participate. This idea will require support from a number of sources; therefore any help from the interested parties (especially researchers) to undertake this task will be most welcomed.

&gt;&gt;&gt; page 19

Richard Herrington - SGA Regional VP Europe

With regard to activities in Europe, in January I promoted the Beijing SGA meeting at the Mineral Deposits Studies Group mee-

ting in Belfast (5-8 January 2005) where 130 geoscientists attended. At least 5 abstracts were submitted to the Beijing meeting by students as a result of this advertisement and personal invitations by me! Hopefully they will sign up as student members given the cost advantages involved!

Discussions with students at the meeting

indicated that many had been unaware of SGA activities and the direct linkage to Mineralium Deposita. The fact that members could publish in colour free of charge was highly appreciated by the students. It was noted that Econ Geol charges \$750 per page of colour images.

## News from joint Prague-Freiberg Student Chapter

Anna Vymazalová

for Joint Prague-Freiberg SGA Student chapter  
Czech Geological Survey

Our chapter recently hosted two speakers, Beate Orberger from the University of Paris XII (France) and Peter Kodera from the Slovak Geological Survey (Slovakia). They presented two very interesting topics: 1. The N-story of a BIF bearing Archean chert from the Pilbara Complex, Australia: A key for understanding N-isotopic signatures; and 2. Epithermal gold veins in a caldera setting: Rozália Mine, Banská Hodrusa, Slovakia.

Presentations were held at the Institute of Geochemistry, Mineralogy and Mineral Resources, Faculty of Science, Charles University, Prague on December 2nd, 2004.

Over 20 participants, Czech and German students from the Chapter, guests from Czech Geological Survey and other people from the Charles University were listening talks and took an active part in discussion.

Later on, the scientific debate continued at the social evening of St. Barbara (patron of mining) celebration, traditionally held at the Faculty of Science, Charles University.

### What we learnt from Beate Orberger

Chemical fossils, such as N and C isotopes, are tracers of a past biological-mediated activity left in rocks. The correct interpretation of these biosignatures is reliant to the knowledge of the depositional environments of the host rocks. However, the origin of Precambrian rocks containing early traces of life, mainly cherts, is far to be settled. Here, we present the results of a detailed petrological, mineralogical and geochemical study of an Archean chert from the 3.45 Ga Marble Bar area, Pilbara, Western Australia. Previous studies on nitrogen sho-

wed the occurrence of two N components having respectively  $\delta^{15}\text{N}$  of 6.7-7.5‰ and  $12.1 \pm 2.9$ ‰. The aim of the present study was: 1) to clarify the origin of the chert and its the depositional environments; 2) identify the mineral phases hosting chemical fossils N and C and finally 3) quantify N and C elemental contents by using in situ, non-destructive NRA techniques.

Mineralogical and geochemical investigations at micron scale revealed that the chert is composed of three micro-environments: 1) a silicified protobasalt having preserved its initial porphyric texture with euhedral hydrothermal Fe-sulphides precipitated in cryptocrystalline quartz pseudomorphs after protomafic minerals; (2) Fe, Mn-oxyhydroxide (BIFs) laminae and

associated Ni-Cu-Mn-Au-Pd alloys and HREE-Y phosphates alternating with micrometric cryptocrystalline quartz bands, the latter hosting magnetite inclusions. BIFs were initially composed of magnetite and carbonates segregated from a Fe-Ca-Mg-enriched fluid, resulting from hydrothermal fluid-rock interactions; (3) cryptocrystalline quartz with interstitial K-feldspar, Ba-K-mica and Fe-sulphides representing residual hydrothermal fluids. K-Al-silicates incorporated 710 to 1780 ppm of N, likely as ammonium ( $\text{NH}_4^+$ ) replacing  $\text{K}^+$ , and 1790 to 4190 ppm of C, both from hydrothermal fluids. Later oxidizing and slightly acid fluids infiltrated along the permeable BIFs and quartz veins that formed during diagenesis. Goethite and hydrous Mn-Fe minerals of





vermicular and laminated textures and heterogeneous chemical compositions replaced carbonates, sulphides and magnetite. They contain 210 to 4550 ppm of N and 2833 to 6050 ppm of C. N may occur as ammonium, replacing  $K^+$  that is dispersed in the Fe-Mn oxyhydroxide grains. Minerals textures, C/N atomic ratios from 1 to 10 and  $\delta^{15}N$  from 6.7 to 7.5‰, which are similar to values measured in starved bacteria and modern OM fossilized in marine sediments suggest that these oxyhydroxides might be mediated by microbial autotrophic processes.

### What we learnt from Peter Kodera

The central zone of the large Miocene Stiavnica stratovolcano in the Western Carpathians hosts epithermal Au mineralization of intermediate-sulfidation type, located at deep levels of the historic Rozália base metal mine at Banská Hodruša. The Au mineralization occurs as subhorizontal veins at the base of pre-caldera andesites, close to the roof of a subvolcanic granodiorite intrusion. The veins are dismembered by a set of quartz-diorite porphyry sills and displaced by the younger, steeply dipping, Rozália base-metal vein, and parallel structures. The base-metal vein structures are related to resurgent horst uplift in the caldera centre. The Au mineralization formed during two stages. Based on fluid inclusion evidence both stages formed from fluids of low salinity (0-3 wt% NaCl eq.), which underwent extensive boiling at moderate temperatures (280 – 330°C). Variable pressure conditions (39 – 95 bars, neglecting the effect of  $CO_2$ ) indicate continual opening of the system and a transition from supra-hydrostatic towards hydrodynamic conditions at shallow depths (~550 m). The fluid inclusions of the Rozália base-metal vein show homogenization temperatures peaks at ~ 285 and 187°C and salinities between 1 to 4 wt% NaCl eq. Precipitation of Au is considered to be the result of prolonged boiling of fluids and associated decrease in Au solubility. Oxygen and hydrogen isotope data for quartz and carbonate from the Au veins show a relatively homogeneous fluid composition (-2.7 to 1.1 ‰  $\delta^{18}O$ , -78 to -62‰  $\delta D$ ) plotting in the field of mixed magmatic and meteoric fluids. The combined  $\delta^{18}O_{fluid}$  and  $\delta D_{fluid}$  values suggest a mixed character of fluids, falling between the fields of typical magmatic and meteoric water influenced by  $\delta^{18}O_{fluid}$  shift due to fluid-rock isotopic exchange. Significantly lower isotopic composition of meteoric fluids associated with Au mineralization

compared to those associated with the intrusion-related mineralizations could have resulted from changing paleoclimate and/or analytical problems of extraction of water from fluid inclusions. The proposed genetic model for the Au deposit at Rozália mine highlights the importance of hydrothermal activity during the early stage of caldera collapse. Caldera subsidence established new, convective, fluid-flow paths along marginal caldera faults, which acted as infiltration zones. Major metal precipitation occurred within subhorizontal structures that formed as the result of a collapse-re-

lated stress field. A shallow, differentiated magma chamber at the base of the volcano was the likely source of heat and magmatic components for the mineralizing fluids.

The presentation given by Peter Kodera was an introduction to a field trip to Banská Hodruša, which we plan to visit in summer 2005.

Our SGA Student Chapter would like to invite all interested students to attend our meetings. For more information about us, please visit our web page: <http://sga.dictor.net>. We look forward to meeting and greeting you.

