



Canadian Federation  
of Earth Sciences

The unified voice of Earth Science in Canada

Fédération canadienne  
des sciences de la Terre

La voix unifiée des sciences de la terre au Canada

## Newsletter no. 11

January 2012

### Marc D'Iorio Congress President of IGC2020 Bid

[www.igc2020.ca](http://www.igc2020.ca)



The CFES Council, gathered in Ottawa for its 2011 Fall meeting, unanimously and enthusiastically approved the nomination of Marc D'Iorio as President of the International Geological Congress 2020 Bid. Everyone is extremely pleased that Marc is willing to take on this formidable task.

Marc is Director General of the Office of Energy R&D of Natural Resources Canada and was previously Director General of the Geological Survey of Canada (Atlantic and Pacific Branch). Marc is a mathematical geologist by training with extensive scientific and management experience in the public service. If Canada wins the Bid to host the IGC in 2020, Marc will also become the Congress President.

The IGC2020 Bid project, chaired by CFES Past President Bill Mercer, is now in its final stages. The preliminary bid will be discussed by the IGC Committee of the IUGS Executive during their meeting in San Sebastian (Spain) in mid February. As we reported earlier, Vancouver has been selected as the Congress venue and CFES has been working with Tourism Vancouver, the Vancouver Convention Centre and with NRC Conference Services

to prepare the business side of the bid.

The bid has received support from more than thirty Canadian and American governmental, academic, industrial and professional organizations.

The Bid committee executive will travel to the IGC in Brisbane in August, where the vote will be held. India and Spain will also bid for the IGC2020.



### Otto van Breemen wins the 2012 CFES mentorship medal



Otto van Breemen learning that he is the recipient of the 2012 CFES mentorship medal.

Photo Wouter Bleeker

Otto van Breemen is a research scientist with the Geological Survey of Canada in Ottawa where he established the Geochronology Laboratory of the Geological Survey of Canada and built it into one of the most recognized and productive age dating facilities in Canada and the world.

As a highly respected scientist, colleague and mentor who has been involved first hand in the U-Pb zircon dating revolution of the last 30-40 years, he hired, supervised and watched over numerous younger scientists, all of whom have gone on to build pre-eminent careers of their own

in Canada and elsewhere in the world.

From early on in his career, as a young professor in England, he has been an outstanding mentor to younger scientist, to students and colleagues, always willing to offer a helping hand and to let younger scientists grow in their fields of endeavour. As one of his former colleagues stated clearly: Otto is a master in 'leading from behind'.

The medal will be presented to Otto during a special session at the GAC-MAC Convention in St. John's (May 27-29).

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## Career videos are up!

The Canadian National Committee for the International Year of Planet Earth (which ran from 2007 to 2009) initiated and planned projects that would leave a lasting legacy in Earth Science outreach in Canada.

One of those projects is the Careers website, which is targeted at junior high school students, inviting them to explore a career in the earth sciences. The website also showcases a diverse group of earth scientists across Canada. Students made clear to the Careers team, however, that they are more likely to be captivated by videos than by static CVs.

The Careers team managed to get financing from Natural Resources Canada to get a number of videos developed by CareerCrate ([www.careercrate.com](http://www.careercrate.com)) and these videos are now accessible on the

website. They show our world through the eyes of six 'under 35' (!) Canadian geoscientists: Jenn Sabeen, Thomas Hadlari, Nicole Januszczak, Jeremy Major, Hassan Odhwani and Wendy Kemp. These videos are truly a wonderful testimony of why we love our profession, why it is relevant to society and how you can become part of our lucky global community.

The other projects of CNC-IYPE are the WHERE challenge, the 'Four Billion Years and Counting' book (to be published later this year) and the GeoVistas project, which is developing geologic explanations of iconic vistas in National Parks.

[www.earthsciencescanada.com/careers](http://www.earthsciencescanada.com/careers)



*This image is a screen grab from the video portraying Thomas Hadlari, a stratigrapher with the Geological Survey of Canada in Calgary.*

### "The View from Canada:

#### **Graduation, Retention rates and Job Market needs in the Earth Sciences"**

CFES and member organization CCESD presented this paper at the AGU convention in San Francisco (Dec. '11) and at the 4th International Professional Geology Conference in Vancouver (Jan. '12).

#### Most important conclusions:

1. Retention rates in Canadian Earth Science programs average 85%, in contrast to ca. 35% in the US.
2. Insufficient numbers of students graduate to fulfill immediate and long term job market needs.

The ppt is at [www.geoscience.ca/hr](http://www.geoscience.ca/hr)

## CFES Council meeting and AGM, Ottawa, Nov 19-20, 2011

Documentation about the meeting is on [www.geoscience.ca/council](http://www.geoscience.ca/council). Here we highlight the contributions of two special guests.

**Penny Park, executive director of the Science Media Centre of Canada** ([www.sciencemediacentre.ca](http://www.sciencemediacentre.ca)), of which CFES is a charter member, highlighted progress of the first year of the SMCC. The objective of the SMCC is to inform public debate, an issue close to the heart of every earth scientist. The complexity of reaching the public was discussed and provided food for thought especially for those actively engaged in earth science outreach.

**Daniel Lebel, newly appointed Director General of the Geological Survey of Canada for Atlantic and Pacific**, elaborated on the most crucial issues for GSC, including continuing to deliver on high profile programs, such as Geomapping for Energy and Minerals, the Targeted Geoscience Initiative (phase 4) and a series of programs related to economic development, public safety, and environmental & land stewardship, while adapting to the current fiscal regime.

Daniel emphasized that NRCan's science will likely continue to be a crucial instrument to support development of public policies. The most important issues at facing GSC at the

moment are: contribute to increased economic competition in view of the global economy, commodity cyclicities, global energy security concerns and regulatory reforms. Although GSC works on the basis of long-term science programming, it also responds quickly to government needs, a critical element of its success and longevity (GSC is gearing up for its 175<sup>th</sup> anniversary!). In the last 10 years, GSC made timely contributions to policy needs such as CCS, ground-water mapping, climate change impact adaptation, natural hazard mitigation and emergency management. NRCan continues to explore better linkages with other parts of the geosciences community in Canada.

## CanGeoRef

[www.cangeoref.org](http://www.cangeoref.org)



CanGeoRef went on Tour last Fall. After our launch in mid September, the database was promoted at the Geological Survey Open Houses of Nova Scotia, New Brunswick and Manitoba and at the Ontario Prospectors Association Meeting in Sudbury, where we were supported by the Ontario Geological Survey. As these words are written, CanGeoRef is also

promoted at the annual Roundup Meeting in Vancouver.

CanGeoRef currently contains more than 200,000 references to Canadian earth science titles by: Federal, Provincial and Territorial surveys, international journals, (chapters) in books and theses. We are rapidly updating the

database with missing titles from Provincial and Territorial Surveys, a process that will be complete in late 2013. Meanwhile, there is a wealth of information in CanGeoRef for a very competitive price and the first month is free!

**A demo can be downloaded from**  
[www.geoscience.ca/cangeoref](http://www.geoscience.ca/cangeoref)



## Andrew Miall's CSPG lecture on environmental monitoring of the oil sands

On Dec 6, Dr. Andrew Miall (University of Toronto) addressed the Technical luncheon of the Canadian Society of Petroleum Geologists on the Review of Environmental Monitoring Practice of the Oil Sands.

Andrew Miall was a member of the Federal Oil Sands Advisory Panel (Oct—Dec 2010) and of the Alberta Environmental Monitoring Panel (January—June 2011) that recommended a monitoring Commission. These assignments formed the basis for his talk.

Andrew emphasized the need for a scientific approach to oil sands environmental monitoring, overseen by Environment Canada. The reason for this

suggested construction is that *"while Alberta owns the resource, the province doesn't have the scientific capacity necessary for environmental monitoring at this scale. The oil sands have big environmental problems, mostly with surface water and air pollution, a situation that is bad enough in itself but also doesn't help Canada's reputation abroad"*.

The Daily Oil Bulletin published a very informative summary of Andrew's talk.

Even better: there is a webcast of the lecture, a terrific service of CSPG to each and everyone: [www.cspg.org](http://www.cspg.org) (go to Technical → luncheons → webcast archive → 2011).

## CFES becomes an AGI International Associate

CFES is the Canadian equivalent to the American Geosciences Institute / AGI. AGI is a Federation of 50 geosciences societies advocating earth sciences, based in Washington, DC.

Formalizing relationships was only logical as the two organizations already jointly develop and produce CanGeoRef. As of January 1, CFES is an International Associate of AGI.

This status allows CFES to distribute news through GeoSpectrum, be featured on the AGI website and have a formal basis for exploring increased cooperation for the benefit of Canadian Geoscience. We will keep you posted of developments.



On November 25, 2011, Stonehammer Geopark was awarded the prestigious **Deloitte Innovator of the Year Award** at the Tourism Industry Association of Canada Gala.

CFES congratulates Stonehammer with this well deserved honour.



Get ready: the abstract deadline for the 34th IGC is February 17.

This IGC will not last the traditional two weeks, but "only" 1 week, bracketed by many professional development workshops, training sessions and fieldtrips. The themes of the congress cover every possi-

ble conceived specialization within the earth sciences and there is ample attention for the societal relevance of geosciences in the western and non-western world.

Choose a fieldtrip in Australia or as far as Malaysia or New Zealand!

## Council of Canadian Academies



The Canadian Consortium of Ocean Research Universities (CCORU) has asked the Council of Canadian Academies to undertake an expert assessment of ocean science, focusing on the environmental, economic and social opportunities and societal challenges, in relation to Canada's oceans.

[www.scienceadvice.ca/en/assessments/in-progress/ocean-science.aspx](http://www.scienceadvice.ca/en/assessments/in-progress/ocean-science.aspx)

## Geoheritage at GAC-MAC

by Godfrey Nowlan

The Geological Association of Canada (GAC®) and the Mineralogical Association of Canada (MAC) are returning to North America's oldest city, St. John's, Newfoundland and Labrador, in 2012 for their Joint Annual Meeting – Geoscience at the Edge from May 27 – 29, 2012.

The meeting will feature over forty symposia, special and general sessions, short courses and field trips. One of the sessions will be on **Preservation of geological heritage and its contribution to education and economic development**. Session organizers are Amanda McCallum, Pierre Verpaelt & Godfrey Nowlan. This session will highlight the diverse geological heri-

itage initiatives throughout Canada and around the world. It will explore how geological heritage can cultivate increased public awareness of the Earth and impact the local economy of a region.

The session will bring together members of the geological community at regional, national and international levels to share information and highlight experience in recognizing ways to promote, preserve and protect geological heritage sites. Emphasis will be placed on Geoparks and the role they play in meeting the global need to recognize internationally important geological sites.

This special session is complemented by a three day post-meeting Field Trip entitled **"Geotourism and the Coastal Geological Heritage of the Bonavista Peninsula: Current Challenges & Future Opportunities"**.



Along the Skerwink Trail, Bonavista Peninsula, Newfoundland. © [www.ideaphore.com](http://www.ideaphore.com)



The CFES Newsletter is published four times per year in January, April, July & October. It is written and compiled by Elisabeth Kosters, CFES executive manager, unless otherwise indicated.

We welcome feedback and contributions about earth science issues of national interest.

Send submissions to  
ekosters\_cfes@magma.ca

All Newsletters are posted on  
[www.geoscience.ca/news](http://www.geoscience.ca/news)

## Web

Always wondered how Anomalocaris moved around? Visit the **Virtual Burgess shale** website at <http://burgess-shale.rom.on.ca/>

A mouth watering panoramic 3D virtual tour of the **National Museum of Natural History** is at <http://www.mnh.si.edu/panoramas/htmlVersion/index.html>

Are you under 35 years old and want to connect with Canadian earth scientists in your age group? Join **Yes Canada** (it's free!). Check them out at <http://yesnetworkcanada.blogspot.com/>

The **Enbridge Northern Gateway Review Panel** official website is at <http://gatewaypanel.review-examen.gc.ca/clf-nsi/hm-eng.html>

**Canada's Action on Climate Change** website is at <http://www.climatechange.gc.ca/default.asp?lang=En&n=E18C8F2D-1>

Follow us on Twitter! CFES\_ECKosters, @ECKosters

## CALENDAR

Canadian Earth Science events: [www.gac.ca/activities/calendar.php](http://www.gac.ca/activities/calendar.php)

International Earth Science calendars: [www.aqiweb.org/calendar/index.php](http://www.aqiweb.org/calendar/index.php) and <http://iugs.org/index.php?page=calendar>

## CANADIAN CONFERENCES

See also [www.geoscience.ca/calendars](http://www.geoscience.ca/calendars)

## 2012

**Atlantic Geoscience Society Annual Colloquium**, February 4-6, Moncton, NB. <http://ags.earthsciences.dal.ca/ags.php>

**Prospectors and Developers Association of Canada**, Annual Convention, March 4-7, Toronto, [www.pdac.ca](http://www.pdac.ca)

**International Polar Year Convention**, Montreal, QC, April 22-27, [www.ipy2012montreal.ca](http://www.ipy2012montreal.ca)

**Canadian Institute for Mining, Metallurgy and Petroleum National Convention**, May 3-9, Edmonton, [www.cim.org/edmontonr2012](http://www.cim.org/edmontonr2012)

**Geological Association of Canada - Mineralogical Association of Canada Joint Annual Convention**, May 27-29, St John's, NL, <http://stjohns2012.ca>

**Canadian Meteorological and Oceanographic Society**, May 29-June 1, Montreal, QC, <http://www.cmos.ca/congress2012/index.htm>

**11th International and 2nd North American Symposium on landslides**, Banff, AB, [www.isl-nasl2012.ca](http://www.isl-nasl2012.ca)

**IAH International Congress, Niagara Falls, ON**, Sept 16-23, [www.iah2012.org](http://www.iah2012.org)

**Canadian Geotechnical Society, GeoManitoba 2012**, Sept 30 - Oct 3, Winnipeg, MB, [www.cgs2012.ca](http://www.cgs2012.ca)

## Member Society Portrait:

## Canadian Society of Exploration Geophysicists



The CSEG Bylaws are registered with the Registrar of Companies and run by a suite of volunteers from all aspects of the discipline and a small group of administrative staff. The elected Executive Committee meets once monthly to manage societal affairs and to guide the many subcommittees of volunteers who drive the wheels of the organization.

Once each month the society hosts a technical luncheon featuring current and relevant experts in related fields to speak to the membership.

The membership in the Society of just less than 2000 consists of Honorary Members, Active Members, Student Members and Corporate Members. Approximately 15% to 20% of our membership volunteer in some capacity in the various subcommittees and social events operated throughout the year.

Each May, the CSEG joins forces with the Canadian Society of Petroleum Geologists and the Canadian Well Logging Society to host the annual joint-society GeoConvention in Calgary. More than 2500 participants and exhibitors meet for 3 days to hear technical talks and view state-of-the-art technology and services exhibits.

The CSEG operates a number of annual social events for the membership, including the Doodlespiel (our annual out-of-town curling event), the Ski Spree (a family skiing event in the nearby Rocky Mountains), two annual golf tournaments and a road race.

In addition, the CSEG publishes a monthly magazine, the Recorder, and the on-line peer-reviewed Canadian Journal of Geophysics. Each year the society hosts the Doodle-Train – a series of sponsored training programs and courses designed to provide continuing education to geophysicists.

The CSEG recently created the CSEG Foundation, registered as a Canadian Charity, providing student and public outreach efforts while establishing programs supporting the development of geophysical knowledge, education and public awareness in geophysics and the earth sciences. The Foundation operates on Endowment funds and supports scientific, educational and charitable activities that benefit geophysicists.

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