

GOLDSCHMIDT 2012 – MONTRÉAL

The Goldschmidt 2012 Conference, held June 24–29 in Montréal, Canada, is now a thing of the past. But that is not quite true, as the conference leaves a legacy of abstracts, blogs, webcasts of the forum plenary sessions (available at <http://www.vmgoldschmidt.org/2012/index.htm>), and untold collaborations and friendships originating at the conference, and no doubt special thematic issues will be published in leading journals in the near future.

After months of feverish preparation, the organizers can breathe a huge sigh of relief: I think the 2968 participants would all agree that the conference was a success on all counts: attendance, science, and fun. Organizing such an event represents a Herculean effort over several years. It starts with submitting a bid to the Geochemical Society and the European Association of Geochemistry about 4 years prior to the event and builds up to a crescendo during the last months prior to the event: in fact Alfonso Mucci, chair of the Science Committee, mentioned to me that he spent most of his sabbatical year working on “Goldschmidt stuff.” So special thanks are in order for the Local Organizing Committee, led by Ross Stevenson (general chair), Alfonso Mucci (chair of the Science Committee), and Yves Gélinas (chair of the Promotion Committee), and for Geotop and the Université du Québec à Montréal, the local hosts of the conference.



Huge thanks to all members of the Local Organizing Committee! Back row (left to right): Véronique Kerjean (JPdL), Daniele Pinti (UQAM), Don Baker (McGill University), Peg Coniglio (GSA); Front row (left to right): Ross Stevenson (UQAM), Alfonso Mucci (McGill University), Yves Gélinas (Concordia University), Geneviève Leclerc (JPdL)

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Montréal was an outstanding venue for the conference. As Montréal is a hub for many airlines, numerous attendees were able to fly in directly from their home city. The Palais des Congrès is located at the junction of the Chinese quarter—where inexpensive meals could be had—and the old city, and just a few blocks away from the main sites of the jazz festival. Because of the compact design of the Palais des Congrès, it was easy to navigate between sessions, and posters and exhibitors coexisted happily in a large room one floor down from the session floor.

The Goldschmidt Conference attracts lots of young people, and this year about 30% of attendees were students. The Goldschmidt travel grant program has probably been instrumental in developing this popularity with the young crowd. This year, 274 grant applications were made and 73 received some funding. A new initiative at this conference was the creation of a student committee charged with organizing social and scientific events especially for students. This committee was very creative and active: on the science front, there were field trips to Mont Royal, one of the famed Monteregian Hills; a job fair; short courses; a workshop about writing a first paper. On the social side, pub crawls, food tasting, and a BBQ gave students and students at heart the opportunity to meet in informal settings.



Student volunteers (back row) and members of the student committee (front row, left to right) Stéphanie Desrochers (UQAM) and Audrey Limoges (UQAM)

The icebreaker, sponsored by Nu Instruments, offered an opportunity to sample some “classic” Québec dishes, such as poutine and smoked-meat sandwiches. A highlight of the social program was the gala dinner at Windsor Station. Participants were entertained by Cirque du Soleil performers and enjoyed dancing until the wee hours of the morning.



Gala participants watching Cirque du Soleil performers

The Goldschmidt Conference ran for five full days, from 8:30 to 19:00 every day. New this year was the holding of the plenary talks right after lunch. Poster sessions ran every afternoon, and there was a dedicated poster session without conflicting talks from 16:30 to 19:00 or 19:30 from Monday to Thursday. Spending 10 hours a day at talks, poster sessions, and exhibit booths requires a lot of stamina! I kind of missed the midconference breaks that used to be part of the conference.



Bernard Bourdon, President of EAG, gave the EAG presidential address as part of the opening ceremony.



Poster sessions lead to intense discussions.

More than 150 sessions ran under 21 themes. I would argue that the Goldschmidt Conference is now an umbrella for many smaller, specialized meetings. Organizers obviously made a great effort to distribute key sessions over each day to encourage attendees to stay right to the end. With 20 concurrent sessions at any one time, there were hard decisions to make. People interested in zircon had especially tough choices, as there were two sessions dealing with zircon at the same time. Fortunately, the meeting rooms were close to each other, making it easy to switch from one session to another.

The attendance in sessions seems very hard to forecast, as year after year we witness packed rooms with standing room only and large theater halls that seem empty. As a general rule, any session in which an award presentation is made should be held in a large hall. And surely, a star scientist like Wally Broecker can expect to draw a large crowd: the room was full 20 minutes before his invited talk.

Goldschmidt 2012 was very technologically savvy. For one thing, wireless Internet was available for free throughout the Palais des Congrès. A conference mobile app was developed specially for this conference for those using smart phones: the app allowed users to search and browse sessions, access the abstracts, view PowerPoint presentations, and create their own schedule, among other things. Every morning at 7 am, participants received a daily newsletter via the website and an e-mail presenting the highlights of the day and the previous day. Authors of posters were invited to submit an electronic version of their poster, and many of the 779 poster presentations of the conference will be up for one year. They can be viewed at <http://goldschmidt.apprisor.org/login.cfm>. Another innovation was the Twitter wall. Organizers also worked hard to implement best practices in sustainable event management.

Many awards were presented during the conference. Except for the Gast Lecture by Rosalind Rickaby (Oxford University), which was one of the plenary talks, medal presentations by the Geochemical Society, the European Association of Geochemistry, and the Mineralogical Society of America (Dana Medal) were integrated into sessions, often organized to honor the awardee.

I was especially pleased that two of the plenary sessions offered talks related to current societal issues. The shale gas forum on Wednesday offered two different perspectives. Prof. Robert Howarth of Cornell University outlined reasons to be concerned that accelerated shale gas production will lead to increased greenhouse gas emissions, and he raised issues related to surface water and groundwater pollution, habitat fragmentation, and local air quality. The combination of directional drilling and high-volume hydraulic fracturing is so new that, as he said, “all the shale gas that has ever been produced on the planet has been produced in the last three years,” so the science on the consequences of the technology is new and changing rapidly. In the second talk, Dr. Terry Engelder of Pennsylvania State University explained that fracturing is both an anthropogenic process, in which humans leak thermogenic methane to the atmosphere at an increasing rate, and a natural process, by which the Earth continually emits methane to



Rosalind Rickaby, Oxford University, gave the Gast Lecture, “Tight coupling of life and metals throughout evolution.”

the atmosphere. In the Friday plenary lectures, Dr. Lawrence Cathles of Cornell University argued that mining the oceans will provide the resources to supply Earth’s projected peak population with a European standard of living for the next 100+ centuries. Dr. Patrice Christmann of France’s Bureau de recherches géologiques et minières stated that the future rests on the sustainable use of natural resources. But even if “we do recycle, reduce, and reuse, we will still need a lot of new resources.” He said that investing in technology “to locate and mine deep-seated, concealed deposits” will help free Europe of its heavy dependence on imports of “a long list of economically critical mineral raw materials.”

The 2013 Goldschmidt Conference (<http://goldschmidt.info/2013>) will be held in Florence, Italy, on August 25–30. See you there!

Pierrette Tremblay, Managing Editor, *Elements*