



# Association of Applied Geochemists

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

## FROM THE PRESIDENT



Paul Morris

The AAG's biennial symposium was held this past August in Rovaniemi, Finland. From the comments of the more than 350 registrants (drawn from almost 50 countries), the meeting was a great success in all regards. The technical sessions covered a wide variety of topics, ranging from mine-site rehabilitation to continent-scale geochemical mapping. The latter was particularly relevant for this meeting. Indeed, 2011 is the 125<sup>th</sup> anniversary of the Geological Survey of Finland, which

has a long history in the use of geochemistry for mineral exploration, including a series of national geochemical atlases. The oral and poster program held at the University of Lapland was complemented by five pre- and post-conference field trips, two mid-conference trips, six workshops, and a diverse social programme highlighting the culture of northern Finland. A major attraction of AAG symposia is that they are not only held in different countries, but in most cases, they are located in regional centres. Hotels are close together, and it's not uncommon to encounter other delegates around town, leading to impromptu drinks and meals. Rovaniemi is such a place, with the added advantage of Lappish culture, and only a few kilometres from the Arctic Circle and Santa Claus's home.

The success of AAG symposia relies on the commitment of volunteer members to organise these meetings, which is also the case for the overall running of the Association. At the end of 2011, my two-year term as president of AAG will end, and Bob Eppinger of the USGS will take over. Rather than summarise the events of the last two years, I suggest that interested readers look at AAG's website ([www.appliedgeochemists.org](http://www.appliedgeochemists.org)) and read through back copies of the Association's *EXPLORE* magazine, which can be downloaded from the site free of charge; information about events held by the organisation plus a range of applied geochemistry articles are contained in this quarterly publication.

There are, however, a few items I would like to mention. Particularly satisfying in the last two years has been the recruitment to AAG Council of a number of younger members, who I hope will continue their association with AAG in other roles. Towards the end of 2011, an initiative to broker in-kind support to students in applied geochemistry should be finalised and ready for implementation in 2012. We now have a program of subsidised membership for potential members from developing countries, and I am hopeful that both this and the student-support initiative will ensure that applied geochemistry and the Association grow in the coming years.

Like many non-profit organisations, AAG is aware that its capital is vulnerable to fluctuations in world markets, and we have been fortunate over the past years to have one of our members looking after our investment portfolio. As shown in regular financial updates provided over the years, Eion Cameron's efforts have seen AAG prosper financially, even during the recent financial crisis, when purportedly wiser financial heads failed to deliver. Eion has been a member of AAG since its inception (as AEG) 41 years ago, but he is probably better known for his contribution to applied geochemistry, for which he was awarded the Association's Gold Medal at the Rovaniemi meeting.

**Paul Morris** ([paul.morris@dmp.wa.gov.au](mailto:paul.morris@dmp.wa.gov.au))  
Geological Survey of Western Australia, AAG President

## AAG'S GOLD MEDAL TO EION CAMERON



The Association of Applied Geochemists honours with its Gold Medal Eion M. Cameron in recognition of his exceptional contributions to exploration geochemistry and to the promotion of interdisciplinary collaboration to understand complex geochemical phenomena. His diverse research activities led to the establishment of lake sediment geochemistry as an effective exploration tool, major advances in the technique of "deep penetrating geochemistry" to locate buried deposits, new concepts in the formation of various deposit types, and improved understanding of the sulfur cycle and its impact on the evolution of the oceans and atmosphere, amongst others.

Eion's leadership and encouragement of the Applied Geochemistry Group at the Geological Survey of Canada spawned further research into such areas as environmental geochemistry, analytical method development and multivariate statistics. Numerous postgraduate students at the University of Ottawa have benefited from his tutelage.

Eion was a founding member of the Association. In 1972, he established the *Journal of Geochemical Exploration* and served as editor-in-chief for 25 years. More recently he has protected and grown the coffers of the Association by acting as its wise and strategic investment manager.

**Gwendy Hall** ([gHall@nrcan.gc.ca](mailto:gHall@nrcan.gc.ca)), Geological Survey of Canada

## NEWS FROM AAG REGIONAL COUNCILLORS

### Exploration Challenges in Chile



Chile, a traditional mining country, with the world's largest copper resource and production, faces mature stages of exploration. As such, evident outcropping ore deposits are no longer available. World-class copper porphyry deposits exist, mostly in clusters, in northern and central Chile. Questions remain as to the potential for additional ore deposit clusters hidden beneath

large expanses of transported overburden and/or volcanic rocks. Northern Chile, in particular, is largely covered by Miocene (Atacama) to recent gravels. Seeking ore deposits beneath cover has been tackled through research programs such as FONDEF 1083, AMIRA P778, and one-on-one research projects with Codelco, Newcrest, Xstrata, Vale, and others. These projects, carried out at the University of Chile in collaboration with other national or international institutions (such as CSIRO), have advanced our knowledge of processes occurring beneath cover and within ore deposits, and of mechanisms of geochemical dispersion through transported overburden to the surface. Despite better knowledge, additional exploration tools are necessary. The combination and integration of tools – regional and local geophysics (e.g. seismic tomography, aeromagnetics), detailed geological and structural mapping, conceptual ore deposit models, regolith and landscape evolution studies, together with geochemistry – will provide the best exploration targets. Our present challenge requires smarter, integrated and transversal techniques and highly competent professionals to provide robust interpretations that can be used with confidence.

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