

## 2009 AGU VGP FELLOWS

Congratulations to the 2009 Fellows of the American Geophysical Union (Volcanology, Geochemistry, and Petrology Division):

**JAY D. BASS**

For his pioneering work using Brillouin spectroscopy to study the elasticity of Earth materials and applying these data to understand the internal structure of Earth

**IAN H. CAMPBELL**

For his seminal insights into mantle plumes, the dynamics of layered igneous intrusions, the genesis of platinum and related ores, and the development of continental crust

**KATHARINE V. CASHMAN**

For developing tools to quantitatively characterize volcanic rock textures and for using textural measurements to elucidate the dynamics of magma transport and eruption

**DONALD B. DINGWELL**

For research leading to a thorough and deep appreciation of the physics and chemistry of magma rheology and volcanic eruptions, thereby replacing an empirical approach to these processes

**STEVEN L. GOLDSTEIN**

For seminal studies using radiogenic isotopes in sediments and igneous rocks to trace the evolution of the Earth's crust and mantle as well as paleo-ocean circulation

**KEY HIROSE**

For his groundbreaking contributions to our understanding of the Earth's lowermost mantle and for the discovery of the post-perovskite phase transition

**JONATHAN P. PATCHETT**

For his pioneering work in the application of Hf isotope geochemistry to the geosciences and for contributions to our understanding of the origin and growth of continental crust

**FREDERICK J. RYERSON**

For his contributions to our understanding of transport processes in minerals, magmas, and crustal rocks at all scales

**RICHARD J. WALKER**

For developing the Re–Os isotope system into a useful tool and applying it to achieve fundamental discoveries in a wide range of topics in the Earth and planetary sciences

**EMU RESEARCH EXCELLENCE MEDAL TO ANDERS MEIBOM**

The European Mineralogical Union Research Excellence Medal is awarded annually to young scientists who have made significant contributions to research and are active in strengthening European scientific links. The EMU medallist committee has awarded the 2008 silver medal to Anders Meibom. Born in 1969, he obtained a PhD in physics at the University of Odense in 1997 and then held a postdoctoral position at the Institute for Geophysics and Planetology at the University of Hawai'i. Since 2005, he has been a member of the team at the Laboratoire de Minéralogie et Cosmochimie at the Muséum National d'Histoire Naturelle in Paris.



EMU's President Roberta Oberti awarding the EMU Research Excellence Medal to Anders Meibom

Ander's main interest is cosmochemistry. He is involved in a number of international projects and networks aimed at investigating the anatomy of primitive solar system materials, including early isotopic fingerprints. Anders takes part in interdisciplinary research merging biology, geochemistry, and mineralogy to better understand biomineralization and past climate change. Expeditions to recover meteorites have taken him around the world, from Greenland to Antarctica. The remarkable results from his work are related to the understanding of extraterrestrial materials and the early Earth. He is also interested in modelling thermodynamic and kinetic processes. He has published more than 70 papers in international peer-review journals and more than 100 abstracts from national and international meetings and conferences.

Anders Meibom is an excellent lecturer and a very enthusiastic and generous collaborator. He is regularly invited to give talks at international meetings and universities worldwide. He is currently an associate editor of *Geochimica et Cosmochimica Acta* and serves on the committee of the Meteoritical Society. For the relevance and international dimension of his work, Anders Meibom is a highly deserving recipient of the EMU Research Excellence Medal for 2008. His talk "NanoSIMS on Carbonates: From the Solar Nebula to the Modern Coral Reef" was given during the 2009 EGU meeting.

**ASBESTOS SANS MINERALOGY? A VIEW FROM A DIFFERENT HILLTOP – Mickey Gunter's response**

Greg Meeker's response (page 269, this issue) to my article "Asbestos Sans Mineralogy" (*Elements* 5: 141) provides much needed insight into ongoing asbestos issues (i.e. the unintended consequences of changes in mineral nomenclature). My intention in writing the article was to point out what I think should shock any mineralogist: mainly, a "new legal definition of asbestos" that did not include the word mineral, and the misuse of mineralogical nomenclature.

I stated that the vermiculite ore at Libby contains "trace" amounts of amphibole; Greg states that the Libby deposit contains "major" amounts of "fibrous amphiboles." Greg has defined "trace" as less than 5% and "major" as greater than 25% (Meeker et al. 2003), and he showed that samples the USGS collected at the mine all contained amphiboles as a major component; but these samples were collected in amphibole-rich areas, not in vermiculite ore. From our work (Gunter et al. 2007), we showed that the amphibole content of products produced from the ore was less than 1%, and we also showed

that only a portion of the amphiboles is asbestiform. Our unpublished results indicate that tailings contain around 5% amphiboles. We know that many amphiboles in Libby soils did not originate from the vermiculite mine (Gunter and Sanchez 2009). This case points out the need for thorough, unbiased characterization of minerals by professional mineralogists.

I stated that the Ban Asbestos bills would define asbestos as having an aspect ratio of 3:1 or greater. As might be guessed, there is more to this story. If you read these bills (House bill: [www.govtrack.us/congress/billtext.xpd?bill=h110-6903](http://www.govtrack.us/congress/billtext.xpd?bill=h110-6903); Senate bill: [www.govtrack.us/congress/billtext.xpd?bill=s110-742](http://www.govtrack.us/congress/billtext.xpd?bill=s110-742)), you will see they refer to other documents to define asbestos, and if you track through all of them you end up with the definition being chrysotile, crocidolite, amosite, and the asbestiform habit of the minerals actinolite, anthophyllite, and tremolite. From Greg's point of view, the "door was opened" to

Cont'd on page 329