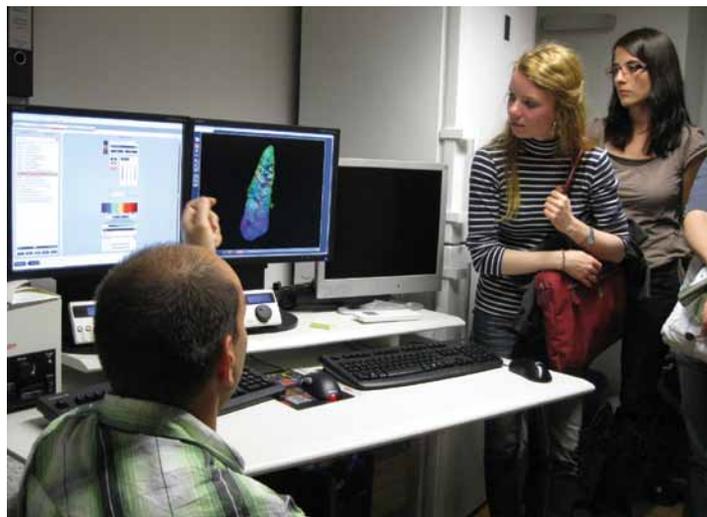


## EAG SHORT COURSE SERIES – ADVANCED TOOLS IN ENVIRONMENTAL BIOGEOCHEMISTRY

A four-day short course entitled Advanced Tools in Environmental Biogeochemistry was held one week before the Goldschmidt 2011 Conference in Prague. It was generously funded by the European Association of Geochemistry (EAG), the Functionality of Iron Minerals in Environmental Processes Network (FIMIN) and the National Science Foundation (NSF). The short course was given by international experts in the field of biogeochemistry and was complemented by a one-day tour of the nearby synchrotron facility “Anka.” “All participants will be able to learn most from an interactive workshop. This is why we have reserved plenty of time for coffee breaks and social activities, and we will provide the participants with the opportunity to analyze their own samples at the synchrotron,” said Andreas Kappler, professor of geomicrobiology at the University of Tübingen and one of the co-organizers, prior to the start of the course. “But I also expect to learn something about the techniques I am less familiar with myself,” he added. Ruben Kretzschmar, professor of soil chemistry at ETH Zürich, and Thomas Borch, associate professor of environmental soil chemistry at Colorado State University, were the other co-organizers.

The 20 participants, all graduate students in chemistry, geology, environmental microbiology or related fields, came from five different countries. During the course, scientists from the University of Tübingen, the CNRS in Paris, Colorado State University and ETH Zürich described their techniques of expertise and also provided some practical demonstrations with the instruments. The topics covered a broad range, including the function and application of microelectrodes in biogeochemical studies, Mössbauer spectroscopy, secondary-ion mass spectrometry, and various microscopy techniques, such as confocal Raman, transmission electron (TEM), focused ion beam/scanning electron transmission (FIB/SEM) and scanning transmission X-ray (STXM) microscopy. After two days of presentations and discussions of possible applications of the individual techniques, the visit to the synchrotron beamlines at Anka in Karlsruhe was a highlight of the course.



Martin Obst demonstrates features of a confocal laser scanning microscope.

The success of the course would not have been possible without the generous funding by EAG, FIMIN and the NSF, which enabled not only the invitation of speakers and participants from all over the world but also hiring student helpers who were involved in copying the course material, preparing coffee breaks, and ensuring that everything worked smoothly. The organizers and participants would like to thank all funding parties.

Further details and additional pictures can be found on the EAG website at [www.eag.eu.com/education/shortcourse/](http://www.eag.eu.com/education/shortcourse/).

**Maren Emmerich**  
University of Tübingen, Germany

## CALENDAR *Cont'd from page 429*

**July 11** International Congress of Applied Mineralogy, China. Details forthcoming

**July 11** European Congress for Stereology and Image Analysis, Kaiserslautern, Germany. Details: Prof. K Schladitz (katja.schladitz@itwm.fraunhofer.de)

**July 1–5** 1<sup>st</sup> International Conference on Tomography of Materials and Structures, Ghent, Belgium. E-mail: [ictms2013@ugent.be](mailto:ictms2013@ugent.be); website: [www.ictms.ugent.be](http://www.ictms.ugent.be)

**July 7–12** 17<sup>th</sup> International Zeolite Conference, Moscow, Russia. Website: [www.izc17.com](http://www.izc17.com)

**July 29–August 2** Annual Meeting of the Meteoritical Society, Edmonton, Alberta, Canada. Web page: [www.meteoriticalsociety.org](http://www.meteoriticalsociety.org)

**August** ECM-28 – XXVIII European Crystallographic Meeting, Warwick, UK. Details forthcoming

**August 4–8** Microscopy & Microanalysis 2013, Indianapolis, IN, USA. Web page: [www.microprobe.org/events](http://www.microprobe.org/events)

**August 25–30** Goldschmidt Conference, Florence, Italy. Web page: [www.goldschmidt2013.org](http://www.goldschmidt2013.org)

**September 8–12** 246<sup>th</sup> American Chemical Society National Meeting & Exposition, Indianapolis, IN, USA. Web page: [www.acs.org](http://www.acs.org)

**October** CMM Autumn School: Moisture Measurement in Porous Mineral Materials, Karlsruhe Institute of Technology (KIT), Germany. Web page: [www.cmm.kit.edu/english/index.php](http://www.cmm.kit.edu/english/index.php)

**October 27–30** Geological Society of America Annual Meeting, Denver, CO, USA. E-mail: [meetings@geosociety.org](mailto:meetings@geosociety.org); web page: [www.geosociety.org/meetings](http://www.geosociety.org/meetings)

**October 27–31** MS&T'13: Materials Science & Technology Conference and Exhibition, Montreal, Quebec, Canada.

Web page: [www.matscitech.org/about/future-meetings](http://www.matscitech.org/about/future-meetings)

### 2014

**June 9–13** Goldschmidt Conference, Sacramento, CA, USA. Details forthcoming

**September 1–5** 21<sup>st</sup> General Meeting of the International Mineralogical Association (IMA2014), Johannesburg, South Africa. E-mail: [info@ima2014.co.za](mailto:info@ima2014.co.za); web page: [www.ima2014.co.za](http://www.ima2014.co.za)

**October 12–16** MS&T'14: Materials Science & Technology Conference and Exhibition, Pittsburgh, PA, USA. Web page: [www.matscitech.org/about/future-meetings](http://www.matscitech.org/about/future-meetings)

**October 19–22** Geological Society of America Annual Meeting, Vancouver, BC, Canada. E-mail: [meetings@geosociety.org](mailto:meetings@geosociety.org); web page: [www.geosociety.org/meetings](http://www.geosociety.org/meetings)

The meetings convened by the societies participating in *Elements* are highlighted in yellow. This meetings calendar was compiled by Andrea Koziol (more meetings are listed on the calendar she maintains at <http://homepages.uyd Dayton.edu/~akoziol1/meetings.html>). To get meeting information listed, please contact her at [Andrea.Koziol@notes.uyd Dayton.edu](mailto:Andrea.Koziol@notes.uyd Dayton.edu).