FORTHCOMING WORKSHOPS AND MEETINGS

ECORD Summer School
“Geodynamics of Mid-Ocean Ridges”

This summer school will be held August 31–September 11, 2009, at the Center for Marine Environmental Sciences (MARUM), University of Bremen (Germany). It is sponsored by the European Consortium for Ocean Research Drilling (ECORD), the Bremen International Graduate School for Marine Sciences (GLOMAR), MARUM and InterRidge. Organizers Ulla Röhl, Dierk Hebbeln, Benoit Ildefonse, and Wolfgang Bach, and instructors Donna Blackman, Mathilde Cannat, Colin Devey, Carlos Garrido, Jürgen Köpke, Catherine Mével, Sven Petersen, Damon Teagle, and many others are SFMC members.

The focus of the school is slow-spreading mid-ocean ridges, which feature a remarkable diversity in lithology and structure. Some segments produce robust basaltic volcanic centers, in which magmatic accretion occurs through complex axial magma plumbing systems. Other portions include modes of crustal accretion that are dominantly tectonic. Oceanic core complexes form episodically, near the ends of segments. The domed cores of these features are interpreted as exposures of lower crust and/or upper mantle rocks exhumed along low-angle detachment faults. Ocean drilling offers a unique opportunity to access lithologies that were initially emplaced at the base of the lithosphere. Drilling close to hydrothermal vents has provided a wealth of new insights into fluid–rock interactions and the formation of seafloor massive sulfide deposits. Slow-spreading crust is also a rich and diverse habitat for microbial communities.

Lecture topics will range from mantle melting and tectonic exhumation of mantle to hydrothermal–microbial interactions. Participants will be introduced to a full range of topics related to the International Ocean Drilling Project (IODP), from a general introduction to the program to writing IODP proposals. In the Virtual Ship, Ocean Drilling cores from the Mid-Atlantic Ridge stored at the IODP Bremen Core Repository will be used to teach “shipboard” methods applied on the drilling vessels (core curation, visual core description, physical properties measurements, petrographic observations). A field trip is planned to a Devonian submarine volcanic province.

An application form will be available in spring 2009 at www.glomar.unibremen.de/ECORD_Summer_School_2009.html.

SFMC Plenary Lecture at MAPT Conference

“Reading Nanostructures by TEM in Geo- and Bio-Minerals”, by Alain Baronnet (University of Marseille), MAPT Conference at Edinburgh (UK), August 31–September 2, 2009

International Symposium on Mineralogy, Environment, and Health

A forum on research and development advances in environmental mineralogy, toxicology and medical geology, consisting of several sessions (Nanoparticles, Environment and Health, Environmental Toxicology, Mineral Dusts, Soil–Plant Transfer, etc.), will be held 17–18 September 2009 at Champs/Marine Marne-la-Vallée (France).

Contact: Stephanie.Rossano@univ-mlv.fr
www.univ-mlv.fr/master_geoenv/symposium2009.html

TRANSMISSION ELECTRON MICROSCOPY IN MINERALOGY WORKSHOP: A CLOSE LOOK AT NEAR AND FAR

On January 15, 2009, at the University of Sciences and Technology of Lille in Villeneuve d’Ascq (France), more than fifty researchers and research engineers attended a full-day SFMC workshop dedicated to transmission electron microscopy (TEM). Eleven oral presentations covered a wide range of fascinating topics at the junction of Earth, materials and biological sciences, such as the crystallographic processes taking place on planets and during biomineralization, the enigmatic structures of biomaterials, and the cometary materials returned by the NASA STARDUST mission. The workshop ended with a roundtable focused on the most recent developments in the TEM technique, which is becoming an essential tool for the investigation of the “nanoworld” of mineralogy. Access for Earth scientists to current and future state-of-the-art French TEM facilities was also debated. Attendees made the workshop a fruitful event, which was efficiently organized by Damien Jacob, Hugues Leroux and Paul Raterron (http://metinsu.univ-lille1.fr/SFMC09prog.pdf).

Describing cores ©IODP

Coesite twin from LASCED ©Jacob-USTL. LASCED = Large Angle Convergent Beam Electron Diffraction

View of the CERLA auditorium during the “TEM in Mineralogy” meeting in Lille

For all SFMC and FFG joint activities visit the website http://e.geologie.free.fr.