



<http://simp.dst.unipi.it>

Italian Society of Mineralogy and Petrology

2007 SIMP PRIZES FOR PhD STUDENTS

Every year SIMP awards prizes for the best PhD dissertations by young researchers who have completed their doctorate. The winners for 2007 were Nadia Malaspina (University of Milano) and Federica Schiavi (University of Pavia).



NADIA MALASPINA

Ultrahigh Pressure Metamorphism and Metasomatism in Mafic-Ultramafic Rocks from Eastern China: Implications for Fluid Release and Volatile Transfer at Subduction Zones. This PhD thesis focused on crust-to-mantle element transfer in subduction zones. Garnet orthopyroxenes from Maowu (China) were derived from a LILE-enriched hydrous melt that reacted with garnet peridotite at ultrahigh pressures. New orthopyroxene and garnet accommodate some LREE, while H₂O and LILE partition into a residual fluid phase trapped in the garnet, forming polyphase inclusions. The experimental homogenization and geochemical analyses of these inclusions indicate that this aqueous fluid may transfer its LILE-enriched signature to the mantle wedge.



FEDERICA SCHIAVI

Geochemical Study of Melt Inclusions and Ashes from the Recent Activity of Stromboli and Etna Volcanoes: Inferences for Magma Origin and Evolution. For her PhD thesis, Federica Schiavi characterized, by means of geochemical and isotopic (Li, B, Pb) microanalytical investigations, volcanic ashes and melt inclusions hosted in olivine and clinopyroxene phenocrysts recovered from tephra and lava samples erupted from Stromboli and Etna. A melt-inclusion study provided constraints on the nature of the mantle sources and, in particular, on the subduction-related metasomatic processes affecting the mantle wedge beneath Stromboli. The investigation of ashes provided information on the degassing-induced crystallization processes and magma dynamics occurring within the shallow plumbing systems.

HP-HT MINERAL PHYSICS: IMPLICATION FOR GEOSCIENCES – BRESSANONE, 11–15 FEBRUARY 2008

On February 11–15, 2008, at Bressanone-Brixen (Italy), the Italian Mineralogical Group (GNM) held an International Mineralogical School entitled “HP-HT Mineral Physics: Implication for Geosciences.” About sixty participants from countries all over the world attended the school. Theoretical and practical lectures covered the principal aspects of mineral physics under high-pressure and high-temperature conditions. The school was sponsored by institutions, academies and corporations from several countries, which provided ten grants for young scientists.

The school focused on mineral physics and its role in understanding and interpreting geological and geophysical observations. Modern experimental techniques now allow the determination of physical-chemical parameters that were previously extremely difficult to obtain. Their evolution as a function of pressure and temperature can now be defined with great detail, allowing the construction of an accurate model of the Earth's system. Moreover, computational calculations now represent a valid counterpart to the experimental approach, and not only help to go beyond the limits of experimental techniques but provide a theoretical validation of the experimental results. At the school, a number of modern techniques for collecting physical parameters on geological materials over a large pressure and temperature range using both experimental and computational methods were presented. It was also shown how the data obtained by means of such methods are used to understand phase equilibria and to predict phase relationships under different P–T gradients and, in turn, to formulate geodynamical models at large scales (e.g. subduction and exhumation processes).

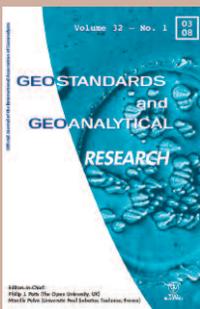


In addition to several theoretical lessons, three afternoons were dedicated to practical sessions. The lecturers were among the major international experts in their fields and were always available at the school, where they spent many enjoyable moments with the students.

Thanks to the success of the school, we proposed that a “Special Issue of the School” containing papers presented by the students and teachers be published. Our proposal was enthusiastically accepted by the management of the *European Journal of Mineralogy*. We, as guest editors (together with Ross J. Angel), are collecting manuscripts until the end of September with the expectation to publish the issue at the beginning of 2009.

Paola Comodi (University of Perugia, Italy)
Fabrizio Nestola (University of Padova, Italy)

IAG (cont'd from page 266)



Geostandards and Geoanalytical Research is the official journal of the International Association of Geoanalysts. Since January 2007, *GGR* has been published by Wiley-Blackwell Publishers in collaboration with the IAG. Here are some key achievements from the first 12 months of this new collaboration:

Legacy files available for the period 1977–2007: 697
Research articles published in 2007: 37
Member of Wiley-Blackwell Earth Pages,
total visits in 2007: >55,000
Impact factor in 2007: 2.049

