

Mineralogical Society Student Bursary Awards 2007
European Geosciences Union General Assembly 2007
Vienna, Austria, 15-20 April 2007



“Seafloor hydrothermal fluid evolution:
a study of fluid inclusions from ODP/IODP Hole 1256D”
Sally Morgan
School of Earth & Environment, University of Leeds

The European Geosciences Union (EGU) General Assembly is a week long, annual meeting held in Vienna, Austria. The Assembly covers all aspects of earth, planetary and space science, with numerous oral and poster sessions as well as exhibits from related companies and organisations.

I was fortunate enough to be offered the chance to give a poster presentation in one of the interdisciplinary sessions, “Tracing hydrothermal circulation at mid-ocean ridges using geochemistry, geophysics and modelling”. My poster focused on my most recent research which centres round a new set of samples from the East Pacific. This work is part of my postgraduate research looking at seafloor hydrothermal fluid evolution in the East Pacific and Troodos ophiolite, Cyprus through the study of fluid inclusions. I am using a number of analytical methods including microthermometry, electron probe microanalyser (EPMA) and laser ablation – inductively coupled plasma – mass spectrometry (LAICPMS). LAICPMS offers a novel approach to studying seafloor hydrothermal fluids in that it allows *in situ* assessment of multiple generations of fluids within the same sample, giving information on the full range of fluids, rather than simply bulk compositional data. By studying samples in this way from all levels in seafloor hydrothermal systems it is hoped that a better model for fluid evolution in these systems will be possible.

My attendance at the EGU General Assembly allowed me to discuss my research with academics from a number of institutions across the world, providing me with new ideas on where to go next with my research. Owing to the range of subjects being presented at the Assembly, I was able to attend sessions in both related and unrelated fields. The representation of so many universities, companies and organisations at EGU gave me a unique opportunity to explore my future prospects and forge networks which will be important for my longer term career.

I would like to thank the Mineralogical Society for their generous award which made it possible for me to attend EGU this year.