

Scientific Report AGU Fall Meeting 13 – 17 December 2010

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The AGU (American Geophysical Union) Fall Meeting 2010 in San Francisco from 13 to 17 December was an important global meeting for geoscientists. This extensive meeting provided the possibility for researchers and students to present and share their latest work. During my attendance at the AGU Fall Meeting, I got the opportunity to present geochemical data on hydrothermal vent fluids I'm working on as part of my PhD studies (CRP H2DEEP). In the poster session OS21A "Deep-Sea Hydrothermal Systems: New Knowledge From Discoveries and New Technology", I presented data on "Loki's Castle: A sediment-influenced hydrothermal vent field at the ultra-slow spreading Arctic Mid-Ocean Ridge". Our data focused on documenting the chemical composition of the main constituents as well as stable and radiogenic isotope signatures of the Loki's Castle vent fluids. Additionally, we geochemically described the background sediments in the area. Not only in this session, but also during the whole conference I had compelling and stimulating discussions about my work with a number of scientists at different stages in their scientific careers. I was particularly able to discuss with other members of our EuroMARC project. My main interests were in sessions about hydrothermal vent systems, submarine volcanoes and formation of the oceanic crust. The most important sessions about these themes were:

- OS11 Ocean Exploration
- T11 Recent Submarine Volcano-Tectonic Events Along Western Pacific Island Arcs, Back Arcs, and Subduction Zones
- V12 Building the Volcanic Oceanic Crust
- OS13 Integrated Studies at Oceanic Spreading Centers: Linking Spreading Center Processes Across Disciplinary Boundaries
- OS21 Deep-Sea Hydrothermal Systems: New Knowledge From New Discoveries and New Technology
- V52 The Constraints of Magma and Gas Transport by Geophysical and Geochemical Data

In addition, I had the possibility to follow presentations in widespread topics, due to the enormous size of the meeting and the variety of the contributions. In this sense, I attended the Daly Lecture on "Geochemical Insights Into Mantle Geodynamics and Plume Structure" by D.A. Weis and several volcanology sessions. These contributions gave me the option to put my work into a wider scientific context.

The AGU Fall Meeting 2010 provided an optimal frame to present my research. For me, it was a highly successful meeting and a great experience.

Best regards,
Tamara Baumberger