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The 16th Deformation Mechanisms, Rheology and Tectonics Conference

The 16th Deformation mechanisms, rheology and tectonics conference in Milan presented a wonderful opportunity to inform the wider structural geology community about our project, the EuroMinSci CRP "Mineral substructure dynamics". A number of members of the group were present at the conference including Paul Bons, Jens Becker, Dan Tatham, Dave Prior, Albert Griera, Janos Urai, Daniel Kohn and Martin Drury. Together we were able to disseminate information about the project to scientists from a wide range of structural fields and departments. To other delegates we emphasised the importance of understanding substructure dynamics in deciphering the tectonic history, both in interpreting the deformation processes undergone and estimating the conditions under which those processes occurred. It also provided an opportunity for us to meet and discuss how our various parts of the project are progressing and compare results.

My poster "Experimental observations of substructure dynamics: Deviations from current models?" was well-received, and generated a lot of interest and discussion with geologists from various areas during the poster sessions. The insight of people from differing fields has been very helpful in providing me with new directions I can pursue in my experimental work and numerical modelling, as well as suggesting ways in which I can overcome current problems with experimentation. Conversations with others using similar analysis techniques, has proved invaluable in this respect as I am now approaching solutions to some of these problems. It is also significant to highlight the importance of all the contacts made during the conference. I am now acquainted with scientists with varying areas of expertise, which will be useful should we need them in the future of my PhD project and the overall CRP.

The sessions were interesting and relevant, in particular the "Quantitative microstructure" session, which helped to emphasise how my project fitted in with microstructural geology on a wider scale. Observing how other scientists have gone about solving their problems has given me fresh ideas on how to combat the difficulties in mine. I also found it helpful to see how other scientists have approached modelling their problems and the different techniques they have used. As numerical modelling of my experiments is a large part of my project, and of the entire CRP I think it is very useful to be aware of the different types of modelling techniques available to us. Seeing how the same sorts of techniques as we are using in developing our model have been applied to solving a variety of geological problems has also been thought-provoking.

Overall, I think attending this conference has been very significant in generating heightened interest in the "Mineral Substructure Dynamics" project as a whole, in the structural geology scientific community, as well as benefiting me on the level of my section of the project. I am greatly appreciative to the European Science Foundation for offering me the opportunity to attend such an inspiring conference.