

Preface

An international conference on the theme "Structures and Tectonics at Different Lithospheric Levels" was held at the Karl Franzens Universität Graz, from 6th to 8th September 1993. The purpose of this meeting was to discuss structures, kinematics, rheology, petrology and related topics on a broad base. Oral presentations were given on the following subjects: structural associations at different lithospheric levels, deformation paths, microfabrics and deformation mechanisms, modelling of lithospheric processes (experimental and theoretical studies), strain partitioning, quantification of deformation processes, influence of fluid activity on deformation and metamorphism.

Key-note presentations were given (in order of their presentation) by S. Mueller (Structure and dynamics of a lithospheric collision zone: Mountain building in the Alps), R.L.M. Vissers (Orogenic processes seen from the mantle), J.L. Bouchez (Deformation in magmas: microstructures, fabrics and kinematics), C.J. Talbot (Counterflow boundary shears in power law fluids), R. Weijermars (Forward and backward modelling of rock deformation), and B. den Brok (Can natural quartz deform by dislocation creep? A critical review of experimental work). Altogether 59 oral presentations were given, followed by 66 posters presentations. Two-hundred and fifteen people from 21 different countries attended the conference. Forty-five scientists from eastern European countries were our guests.

The conference was framed by a four day preconference field trip to the Eastern Alps (guided by H. Fritz, R. Handler and P. Peindl) and two post-conference field trips, one to the Tauern Window and its eastern frame (guided by F. Neubauer, J. Genser and W. Kurz) and the other to the Bohemian Massif (guided by H. Fritz, E. Wallbrecher and M. Brandmayr). Sixtyone interested geologists took part in these excursions.

The first day of the conference ended with an icebreaker party. At the end of the second day's program there was a reception by the mayor of Graz, Alfred Stingl, which was greatly appreciated. At the end of the last day of the conference, almost all participants joined us in a farewell party, organized by the staff and students of the Institut für Geologie und Paläontologie of the University of Graz.

The Conference was made possible with support of the International Science Foundation, the Austrian Ministry of Science and Research, the Styrian Science and Research Fund, the municipality of Graz, and various Austrian companies. We are very thankful for this help.

This special issue Structures and Tectonics at Different Lithospheric Levels contains seven papers presented at the meeting. We thank the reviewers for their quick and careful work. They helped us considerably to publish this volume almost exactly one year after the meeting.

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