

Memories and Thanks to Aleksander Guterch

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My memories of Aleksander Guterch are closely linked to his great personality, but also to his formative influence on the exploration of the lithosphere in Central Europe and the wider Eastern Alpine and Pannonian region using seismic methods. Firstly, I will try to summarize the latter in a brief overview from the perspective of the Austrian participants in the relevant projects and place these research activities in the context of overall development.

In 1975, the Alpine Longitudinal Profile ALP'75, which spanned the entire Alpine arc, provided a model of the Eastern Alpine lithosphere that went beyond the basic findings of Mohorovičić and Conrad. The Institute of Meteorology and Geophysics at the University of Vienna was intensively involved in both the data acquisition and the evaluation of the Eastern Alpine part of ALP'75. One striking result was the almost step-like decrease in Moho depth east of the Tauern window. Based on this finding and the study of seismicity along conjugate fault systems, Kayhan Aric and Rudolf Gutdeutsch († 2021) developed a tectonic block model (1987), which I personally consider to be a forerunner of the “lateral extrusion” model according to Lothar Ratschbacher (Ratschbacher et al. 1991).

In 1998, data acquisition began along the TRANSALP profile crossing the Eastern Alps from Munich to Venice. The most important members of the Transalp Working Group were the University of Munich, the University of Leoben, and the University of Trieste. Originally, as Head of Geophysics at the then Institute of Geodesy and Geophysics at the Vienna University of Technology (TUW), I was keen to participate in TRANSALP. Volker Höck (University of Salzburg) and Franz Kohlbeck († 2016) from my working group drew my attention to the CELEBRATION 2000 experiment that was in preparation and had already established contact with Aleksander Guterch. It quickly became clear that participation as a full partner in CELEBRATION 2000 was preferable to a marginal contribution to TRANSALP. In addition to the TUW team, members of the geophysical and geological institutes at the universities of Vienna, Leoben, and Salzburg were also willing to participate in the field campaign. The prerequisite for successful participation in CELEBRATION 2000 was the rapid inclusion of the Austrian team in the CELEBRATION 2000 working group by Aleksander Guterch, but also the willing transfer of know-how regarding organization and data acquisition on a large geographical scale by the Polish working group, in particular Marek Grad († 2020).

reserve and politeness. Soon the profound preparation of the respective agenda was evident at the meetings. Finally, behind Aleksander Guterch's seemingly modest demeanour, the persistent will and ability to consistently realize large scientific projects and pursue very ambitious scientific goals came to light. In the first decade of the 21st century, geophysics in Austria has benefited greatly from the collaboration with Aleksander Guterch. It would only be appropriate if the name Aleksander Guterch remains visible in the history of geophysics in Austria.

References

Ratschbacher, L., W. Frisch, H.-G. Linzer, and O. Merle (1991), Lateral extrusion in the eastern Alps, Part 2: Structural analysis, *Tectonics* **10**, 2, 257–271, DOI: 10.1029/90TC02623.

Received 24 July 2024
Accepted 24 September 2024