Publications of the Institute of Geophysics, Polish Academy of Sciences
Geophysical Data Bases, Processing and Instrumentation
vol. 450 (M-38), 2024, pp. 63–63
DOI: 10.25171/InstGeoph_PAS_Publs-2024-013

Large-scale Central Europe Refraction Experiments: Professor Aleksander Guterch in Memoriam

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I first encountered Professor Aleksander Guterch in the spring of 2000 when I became involved with an international research group focusing on refraction experiments in central Europe. At that time, Professor Guterch led the group from the Department of Lithospheric Research at the Institute of Geophysics, Polish Academy of Sciences, in collaboration with Marek Grad from the University of Warsaw. However, the initiative for refraction experiments began earlier, in early 1997, when Professor Guterch initiated the POLONAISE'97 experiment in Poland. Its success led to further experiments spanning central Europe, extending from the Baltic to the Adriatic seas. This endeavor resulted in an unprecedented network of seismic refraction experiments, including POLONAISE'97, CELEBRATION 2000, ALP 2002, and SUDETES 2003, involving a vast network of seismic profiles.

Professor Guterch played a pivotal role in spearheading this extensive international collaboration, which encompassed over 30 institutions from 16 countries across Europe and North America. These countries deployed seismic recording instruments provided by various institutions, including the IRIS/PASCAL Instrument Center, the University of Texas at El Paso, the Geological Survey of Canada, and others. Notably, the CELEBRATION 2000 experiment alone comprised over 1230 stations and 147 shot points along seismic lines totalling approximately 9 000 km, with the total length of seismic profiles in all experiments reaching about 20 000 km. The abundance of seismic sources and stations facilitated both 2-D and 3-D data interpretation approaches.

The overarching goal of this initiative was to investigate the structure and evolution of the intricate collage of major tectonic features in the Trans-European Suture Zone (TESZ) region, as well as the southwestern portion of the East European Craton, including the Carpathian Mountains, the Pannonian Basin, the Alps, and the Bohemian Massif.

Professor Guterch, a distinguished individual with grey hair and a warm personality, consistently displayed noble behavior and style, often wearing a smile. For me, his leadership provided an invaluable opportunity to delve into the investigation of lithospheric structure with unprecedented data acquisition. I am deeply grateful to him for welcoming me into this international group, where I was able to learn and contribute to advancing our understanding of geophysics. This period will always hold a special place in my professional journey.

Received 17 May 2024
Accepted 5 July 2024