Publications of the Institute of Geophysics, Polish Academy of Sciences
Geophysical Data Bases, Processing and Instrumentation
vol. 450 (M-38), 2024, pp. 39–43
DOI: 10.25171/InstGeoph_PAS_Publs-2024-007

To the Memory of Prof. Aleksander Guterch

Vitaly I. STAROSTENKO

S.I. Subbotin Institute of Geophysics of the National Academy of Sciences of Ukraine, Kyiv, Ukraine

✉ vstar@igph.kiev.ua

Professor Tomasz Janik sent out a letter that on December 28, 2023, Prof. Aleksander Guterch passed away. It was very sad news for all geophysicists and geologists who had known him personally; it was sad, too, for those who had not but had read his outstanding classical works. Aleksander Guterch was a world-class specialist and a wise, well-rounded, interesting and kind man.

It is my great pleasure to say that Professor Guterch had long-established, creative, and lasting scientific connections with our S.I. Subbotin Institute of Geophysics of the National Academy of Sciences (NAS) of Ukraine.

Let us recall how it all came to be.

The Deep Seismic Sounding (DSS) works were established at the turn of the 1950s and 1960s at the Institute of Geophysics of the Polish Academy of Sciences. Initially, it was headed by Eng. Jan Uchman, who had some experience in seismic field measurements carried out in Lviv before World War II. Aleksander Guterch became interested in the technique; he wanted to learn it faster. So, in 1963, Aleksander Guterch started working in this laboratory, and in 1964, a paper with the first results of GSS measurements in Poland was published with his co-authorship (Wojtczak et al. 1964).

Professor V.B. Sollogub, a world-famous specialist of our Institute and a corresponding member of the Academy of Sciences of the Ukrainian SSR (Kharitonov 1982), was successfully studying the structure of the Earth's crust and upper mantle with the method of DSS (Subbotin et al. 1967). V.B. Sollogub initiated a large-scale program of DSS observations in Ukraine and in Eastern Europe in general (Kharitonov 1982). It was interesting for Aleksander Guterch and he started coming to Kyiv, to our Institute, to make the acquaintance of V.B. Sollogub and work with him on this program. V.B. Sollogub was glad to have this cooperation. This began the successful cooperation of the Institute of Geophysics of the AS of the Ukrainian SSR and the Institute of Geophysics of the Polish Academy of Sciences using the DSS to study the layout of deep geological structures.

The intense coworking yielded findings that were used to prepare outstanding publications.

The first paper, co-authored by Aleksander Guterch with V.B. Sollogub, A.V. Chekunov and others, came out in 1974 (Guterch et al. 1974). In 1975, at the XIV General Assembly of

the European Seismological Commission, which took place in Berlin, another work summarizing the primary results for the VIII International Profile (Kielce, Poland – Tarnopol, Ukraine) was presented (Sollogub et al. 1975). The study's final results were published in a well-known Polish research journal *Acta Geophysica Polonica* (Sollogub et al. 1976).

The results of their assiduous research became the foundation for monographs (Guterch et al. 1977; Sollogub et al. 1978a, 1980a). Aleksander Guterch also took part in editorial work; for instance, he was an editor of Sollogub et al. (1978b, 1980b). These articles and monographs attest to his profound professionality and outstanding capacity for work.

Aleksander Guterch kept actively working with us; the studies were published in the most prestigious international thematic journals and monograph series (Bogdanova et al. 2006; Starostenko et al. 2012, 2013a,b, 2015). These are the results worthy of an international professional group of geophysicists and geologists engaged in active and deep investigations, and one of the central specialists it included was Aleksander Guterch.

His last visit to Kyiv was in 2012. He and I met with an exceptional man and scientist, the President of NAS of Ukraine, Acad. B.Ye. Paton, who praised our work highly. Together with his younger Polish colleagues, he visited me and my wife in our summer cottage on the outskirts of Kyiv (Fig. 1).

I had long ago established a good personal relationship with Aleksander, in addition to a purely professional one. If I came to Warsaw, he would invite me home. I made the acquaintance of his wife, Barbara, a most marvelous cook. Visiting him was very pleasant and also very

Fig. 1. At a dacha in Kyiv, 2012. Seated from the left: Aleksander Guterch, Wojciech Czuba (in the background), Svetlana Starostenko, driver, Vitaly Starostenko (photo by Tomasz Janik).

Fig. 2. A visit to the house of Aleksander Guterch, 2013. Standing from the left: Vitaly Starostenko, wife Svetlana, Aleksander Guterch. Collections of maps, engravings and sabers can be seen on the walls (photo by Tomasz Janik).

entertaining since Aleksander's home holds several invaluable collections (Fig. 2). I learned that he had been gathering various oddities having to do with geography, history, literature, and religion. These collections had grown over many years; Aleksander had to have been quite an interesting person since his youth.

He was brave, too. Only brave people go to Antarctica, and he is known to have been there.

Aleksander Guterch died, yet he remains with us forever. For this, we have our memories and his works.

References

Bogdanova, S., R. Gorbatshev, M. Grad, T. Janik, A. Guterch, E. Kozlovskaya, G. Motuza, G. Skridlaite, V.I. Starostenko, L. Taran, and EUROBRIDGE and POLONAISE Working Groups (2006), EUROBRIDGE: new insight into the geodynamic evolution of the East European Craton. **In:** D.G. Gee and R.A. Stephenson (eds.), *European Lithosphere Dynamics*, Geological Society, London, Memoirs, Vol. 32, 599–625, DOI: 10.1144/GSL.MEM.2006. 032.01. 36.

Guterch, A., V.B. Sollogub, A.V. Chekunov, J. Pajchel, V.S. Geyko, E. Perchuć, L.P. Livanova, L. Kovalevskii, and V.I. Klushin (1974), The structure of Earth's crust in the western part of the VIII

international DSS profile (the Rava Ruska region). **In:** *Abstracts of International Working Meeting for the Scientific Investigation of the Earth's Crust by Seismic Methods*, Naukova Dumka, Kyiv, 26–27 (in Russian).

Guterch, A., V.B. Sollogub, R. Materzok, A.V. Chekunov, J. Pajchel, V.S. Geyko, E. Perchuć, L.P. Livanova, L. Kovalevskii, and V.I. Klushin (1977), The structure of the Earth's crust between Khmelnytskyi (USSR) – Kielce (PRL): (VIII international DSS profile). **In:** *The Structure of the Earth's Crust and Upper Mantle According to Seismic Data*, Naukova Dumka, Kyiv, 158–171, English abstract (in Russian).

Kharitonov, O.M. (1982), V.B. Sollogub's life and creative journey. **In:** *Vsevolod Borisovich Sollogub. Bibibliography of the Scientists of the Ukrainian SSR*, Naukova Dumka. Kyiv, 68 pp. (in Russian).

Sollogub, V.B., A. Guterch, A.V. Chekunov, R. Materzok, V.S. Geyko, J. Pajchel, L.P. Livanova, E. Perchuć, and T. Kowalski (1975), Deep structure of the Earth's crust along the western part of international profile VIII (Kielce, Poland – Tarnopol, USSR): Preliminary results. **In:** *XIV General Assembly of the European Seismological Commission, Berlin*, 317–326.

Sollogub, V.B., A. Guterch, A.V. Chekunov, R. Materzok, V.S. Geyko, J. Pajchel, L.P. Livanova, E. Perchuć, V.I. Klushin, and T. Kowalski (1976), Structure of the Earth's crust along the international DSS profile VIII from Tarnopol (USSR) to Kielce (Poland), *Acta Geophys. Pol*. **24**, 2, 123–137.

Sollogub, V.B., D.P. Prosen, and A. Guterch (1978a), Introduction. **In:** *Structure of the Earth's Crust and the Upper Mantle in Central and Eastern Europe*, Naukova Dumka, Kyiv, 5–10 (in Russian).

Sollogub, V.B., A. Guterch, and D. Prosen (eds.) (1978b), *Structure of the Earth's Crust and Upper Mantle in Central and Eastern Europe*, Naukova Dumka, Kyiv, 217 pp. (in Russian).

Sollogub, V.B., Khr. Dachev, Iv. Petkov, K. Pozhgay, Kh. Militser, R. Oisberg, A. Guterch, E. Perchuć, I. Kornia, P. Konstantinescu, M.A. Borodulin, G.V. Krasnopevtseva, I.V. Litvinenko, Yu.P. Nieprochnov, I.V. Pomerantseva, M.I. Razinkova, A.V. Chekunov, I.I. Khalevin, B. Bieraniek, D. Prosen, T. Dragashevich, and B. Andrich (1980a), The Mohorovičić discontinuity. **In:** *Structure of the Earth's Crust in Central and Eastern Europe according to Geophysical Data*, Naukova Dumka, Kyiv, 123–126 (in Russian).

Sollogub, V.B., A. Guterch, and D. Prosen (eds.) (1980b), *Structure of the Earth's Crust in Central and Eastern Europe according to Geophysical Data*, Naukova Dumka, Kyiv, 206 pp. (in Russian).

Starostenko, V., T. Janik, K. Kolomiyets, W. Czuba, P. Środa, M. Grad, I. Kovacs, R. Stephenson, D. Lysynchuk, H. Thybo, I.M. Artemieva, V. Omelchenko, O. Gintov, R. Kutas, D. Gryn, A. Guterch, E. Hegedüs, K. Komminaho, O. Legostaeva, T. Tiira, and A. Tolkunov (2013a), Seismic velocity model of the crust and upper mantle along profile PANCAKE across the Carpathians between the Pannonian Basin and the East European Craton, *Tectonophysics* **608**, 1049–1072, DOI: 10.1016/j.tecto.2013.07.008.

Starostenko, V., T. Janik, D. Lysynchuk, P. Środa, W. Czuba, K. Kolomiyets, P. Aleksandrowski, O. Gintov, V. Omelchenko, K. Komminaho, A. Guterch, T. Tiira, D. Gryn, O. Legostaeva, H. Thybo, and A. Tolkunov (2013b), Mesozoic(?) lithosphere-scale buckling of the East European Craton in southern Ukraine: DOBRE-4 deep seismic profile, *Geophys. J. Int*. **195**, 2, 740–766, DOI: 10.1093/gji/ggt292.

Starostenko, V., T. Janik, T. Yegorova, L. Farfuliak, W. Czuba, P. Środa, H. Thybo, I. Artemieva, M. Sosson, Yu. Volfman, K. Kolomiyets, D. Lysynchuk, V. Omelchenko, D. Gryn, A. Guterch, K. Komminaho, O. Legostaeva, T. Tiira, and A. Tolkunov (2015), Seismic model of the crust and upper mantle in the Scythian Platform: the DOBRE-5 profile across the north western Black Sea and the Crimean Peninsula, *Geophys. J. Int.* **201**, 1, 406–428, DOI: 10.1093/gji/ggv018.

Starostenko, V., W. Czuba, M. Grad, O. Gintov, D. Gryn, A. Guterch, E. Hegedüs, T. Janik, K. Kolomiyets, K. Komminaho, R. Kutas, O. Legostaeva, D. Lysynchuk, V. Omelchenko, P. Środa, R. Stephenson, H. Thybo, T. Tiira, and A. Tolkunov (2012), Velocity model of the crust and upper

mantle along the profile PANCAKE from Pannonian basin across Carpathians towards the cratonic Europe, *Geophys. Res. Abstr.* **14**, EGU 2012-2912, EGU General Assembly 2012.

Subbotin, S.I., V.B. Sollogub, A.V. Chekunov, and L.P. Livanova (1967), Crustal investigations of the East Carpathians and adjoning regions by means of deep seismic sounding. **In:** *Pap. 9th Assembly Europ. Seismol. Commis., Kobenhavn*, 17–27.

Wojtczak, B., A. Guterch, and J. Uchman (1964), Preliminary results of deep seismic sounding in Poland, *Bull. Acad. Pol. Sci. Ser. Geol. Geogr*. **12**, 4, 205–211.

Received 11 March 2024
Accepted 5 July 2024