

Professor Aleksander Guterch, a Leader in Geophysics

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Few geophysicists have been as productive and ground-breaking as Aleksander Guterch. Fascinated from an early age by the Earth in general and the lithosphere in particular, his field surveys and theoretical works have vastly expanded our knowledge of the structure and geodynamics of the Earth's crust and upper mantle in Europe and in the polar regions. Among other achievements, the research led to his (as the leading author) Petroleum Geological Atlas of the Southern Permian Basin Area. Professor Guterch has become a leading voice on the crucial importance of the understanding of the deep structures of Earth's crust. One of his main accomplishments, the CELEBRATION 2000 seismic experiment, carried out in Central and Eastern Europe over an area of approximately 500,000 km² using 1250 cutting-edge seismic stations has been recognized in the report of the European Science Foundation as the greatest research project of its kind in the history of world geophysics. The area of Central Europe, thanks to him, is the region with the currently best-explored deep structure of the Earth's crust and lithosphere to a depth of 100 km. To start all that work required vision and great courage.

A lot of his major accomplishments occurred at the time when I had the privilege to be the deputy and then the main director of the Institute of Geophysics of the Polish Academy of Sciences. It is easy to guess that with such individuals on board I felt safe and Prof. Guterch was certainly my great support in running the Institute.

I am not going to write about the scientific investigations of Prof. Guterch and his team. Others, the specialist in the field, will do it much more properly and they will describe wide-angle reflection and refraction projects during Antarctic expeditions and also deep reflection measurement programs, results of deep sounding investigations, all being a landmark of Prof. Guterch's work. I rather would like to recall my observations of Prof. Guterch's exceptional effectiveness and efficiency. The time was not favouring large-scale projects which were logistically difficult and extremely expensive. But I could see Prof. Guterch visiting both public authorities, ministries, environmental funds as well as commercial companies. And he never came back with nothing. He knew how to guarantee relevant funds for his co-workers and this is what I observed with great satisfaction. I have to stress that the high ranks of the Institute owe a lot to Prof. Guterch. He had a unique skill to achieve his ambitious goals and this is what made his achievements in geophysics so spectacular. He was also a leader in his field. A leader's credibility begins with personal success. It ends with helping others achieve personal success and this well describes Prof. Guterch. Some people say that the difference between a boss and

a leader is that a boss says “Go” and the leader says “Let’s go”. In this sense Prof. Guterch was definitely a leader, being an active part of all major experiments. And he was particularly fortunate to work with a series of highly competent younger researchers who would go on to prominent careers in their own right.

Professor Guterch was elected the corresponding member of the Polish Academy of Sciences in 1989, a year after I had started my work at the Institute. So one can imagine that he was already a legend when I started my research career. And although I worked in a completely different area, his research path was an example that I could follow. When I was elected the corresponding member of the Polish Academy of Sciences, Prof. Guterch was my guide through that complicated structure. I happened to see his personal file (Fig. 1) in the archives of the Academy and there are things that you read there with pride. The proposal to accept him as corresponding member was submitted by six top Polish researchers, namely Professors Jerzy Znosko, Zdzisław Kaczmarek, Czesław Druet, Władysław Pożaryski, Roman Teisseyre, and Jerzy Jankowski (Fig. 2).



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fotografię

KARTA OSOBOWA CZŁONKA AKADEMII

1. Imię i nazwisko Aleksander GUTERCH

2. Adres [REDACTED]
tel. służb. 36-19-01 w. 338, 336 tel. dom. 659-000-9

3. Data i miejsce urodzenia 16 lutego 1936 SĘKOWA

4. Studia ukończone na Uniwersytet Warszawski

5. Działalność naukowa rozpoczęta w roku 1961

6. Stopień doktorski nadany przez Rada Naukowa
Zakładu Geofizyki PAN (dr nauk fizycznych)
w roku 1969 /zgodnie z brzmieniem dyplomu uzyskanego
na podstawie przewodu doktorskiego/ doktor nauk
fizycznych

7. Przeprowadzona habilitacja w zakresie geofizyki

w /uczelnia, placówce naukowej/ Akademia Górniczo-
Hutnicza, Kraków w roku 1978

8. Powołanie na stanowisko /przyznanie tytułu naukowego/:

a. docenta 1972

b. prof. nadzw. 1981

c. prof. zwyczaj. o toku

Fig. 1. The first page of personal file of the member of the Academy.

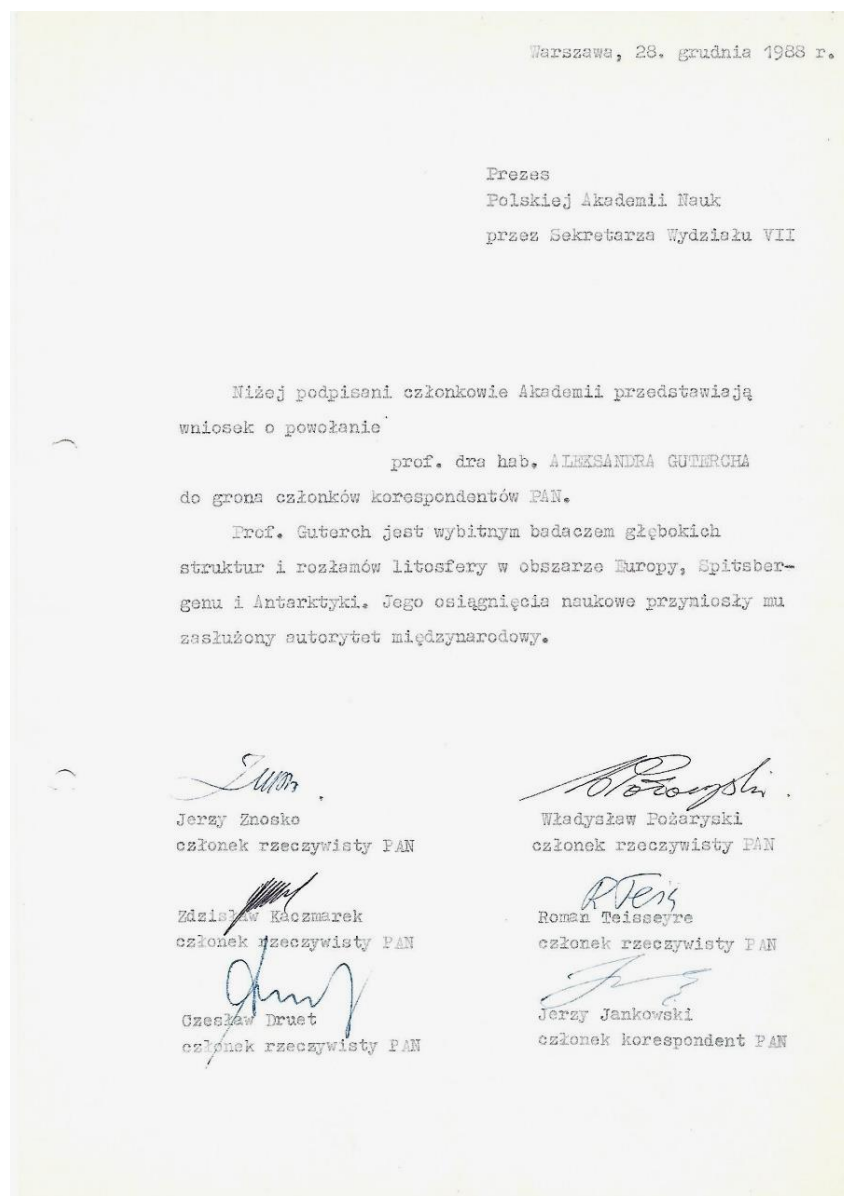


Fig. 2. Application to nominate Prof. Guterch the Corresponding Member of the Polish Academy of Sciences.

The procedure was complicated and had to start with the opinion of the Committee of Geophysics of the Polish Academy of Sciences and all (out of 25) votes were for him. I like to read the resume as prepared by the candidate – you can learn from such a document what was important for a candidate himself. On top of the detailed descriptions of the scientific achievements one may find that Prof. Guterch particularly appreciated his internship at the Institute of Mathematics of the Academy of Sciences of USSR in Leningrad on one side and his fellowship at the University of Dallas in 1971/72. He was also strongly involved in cooperation with the Finnish Academy of Sciences and Letters and the University of Helsinki. So the international collaboration was something that built his scientific ground. From his cv, you may also learn that he highly appreciated the financial support of many organizations that helped him to do what was his main research aim and what was extremely expensive. And yet one more fact that shows his personality was his involvement in the Association of Lovers of Old Arms and Uniforms – his second great passion.

Professor Guterch fitted very well into the Institute of Geophysics's tradition of geophysical experimentation. He considered the mixture of professional and consulting activities to be both enjoyable and crucial for his performance as a mentor for geophysical community.

Professor Aleksander Guterch achieved real professional success, and was internationally respected and recognized for his activities. He loved his work with a passion and immersed himself totally in it, dedicating his life to scientific endeavors as the core of life's meaning. And as such he will be remembered at the Institute of Geophysics, PAS. For me, he was a remarkably perspective and intuitive thinker. His contributions became major milestones in geophysics and his name is forever connected to the Institute of Geophysics, PAS, and the Polish Academy of Sciences itself.

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