

Sławomir Jerzy (George) Gibowicz (1933-2011)

OBITUARY

George Gibowicz, an illustrious seismologist, whose contribution to the world mining seismology was invaluable, died at his home in Warsaw on 11th October 2011.

He graduated as a M.Sc. in physics, with major in geophysics, at the Faculty of Mathematics, Physics and Chemistry of Warsaw University in 1955. In 1962, he obtained his doctorate in geophysics at AGH University of Science and Technology in Kraków, and in 1970, the Council of the Geology and Prospecting Faculty at AGH University of Science and Technology granted him a habilitation degree. He began his professional career in 1956, being first employed at the then Department, and currently the Institute of Geophysics, Polish Academy of Sciences. Through most of his professional life he was attached to the Institute. In the years 1966-1968, he worked at the International Seismological Centre in Edinburgh, where, shortly after the beginning of work, he was assigned the position of the Centre's deputy director. Shortly after his return to Warsaw, in 1970, he went abroad, assuming the position of a Senior Research Scientist in Geophysics Division of the Department of Scientific and Industrial Research, in Wellington, New Zealand. Despite the excellent professional opportunities and personal relations – George's wife, Jadwiga,



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had her medical diploma recognised in New Zealand and began an independent career, and their daughter went to a local school – for reasons that he later admitted to be purely patriotic, he decided to return to Poland in 1974. Before his return, George was aware that due to the fact that his stay in New Zealand was prolonged without consent of the communist authorities, he would face reprisals in Poland. And so it happened. Despite his outstanding, world-wide known scientific record, the granting of his professorial title was delayed for several years, he was not allowed to leave the country for a similar period and had great difficulties with publishing his works in Western countries.

Eventually, he obtained his professorial title in 1980, and in 1989 he had a full professorship at the Institute of Geophysics. Between 1979 and 2006 he was the head of the Institute's Seismology Department, with only short breaks. He retired in 2008, at the age of 75.

In the early 1970s, the estimation of source parameters from spectra was a new method. Already in New Zealand, George became acquainted with it, and actively participated in research works that applied this method. For a paper published in *Bull. Seismol. Soc. Am.*, concerning the correlation between spectral parameters of seismic sources and medium properties, in 1974, he was awarded the New Zealand Geophysics Prize of the Royal Society of New Zealand. Bringing this spectral approach to source parameters estimation to Poland had a tremendously positive impact on the works of the Seismology Department of the Institute of Geophysics. George could rise interest in this topic in virtually anyone. Very quickly, he gathered a group of young people fascinated with the possibility to calculate the size of a seismic source and the stress drop. At the same time, he began to pay more attention to issues associated with mining seismology. George highly valued works on tectonic seismicity. He thought, however, that the role of Polish seismologists is to work on seismic phenomena occurring in Poland, and since the majority of these is associated with mining exploitation, mining data should be used. Soon, pioneering works saw daylight, determining parameters of weak, yet numerous seismic sources in underground coal and copper ore mines, magnitude-frequency relations, and a number of other parameters concerning seismic processes induced by mining. George became an internationally known expert in mining seismology. His trips as a visiting professor to Ruhr University, Bochum, Germany (1988), Queen's University, Kingston, Canada (1989-1990) and as a Consultant to Integrated Seismic System International Ltd., Welkom, South Africa (1993), were concentrated on this particular area of seismology. A summary of his works on mining seismology were three review papers, published in *Advances in Geophysics* (1990, 2001, 2009), the organisation of the 4th Symposium on Rockbursts and Seismicity in Mines in Kraków (1997), and first of all a book, published

in 1994, under the title “An Introduction to Mining Seismology” (authors: S.J. Gibowicz and A. Kijko, Academic Press, San Diego). The book already became an international classic, used by young researchers and geophysical mining personnel to fathom their knowledge on mining seismology. George was also interested in seismicity induced by other, non-mining technological processes. After the M5.7, 14 November 1981 earthquake in Aswan, he paid numerous visits to Egypt with his colleagues, to analyse seismicity induced by Lake Nasser.

The journal *Acta Geophysica*, formerly *Acta Geophysica Polonica*, owes him a lot. He has been supporting it throughout his whole professional life, as an author, member of the Editorial Board, and the Editor-in-Chief in the years from 1982 to 1993. His personal role in maintaining the high scientific and editorial standard is unquestionable. He also played a key role in editing the Seismological Section of the Publications of the Institute of Geophysics.

Seismology was George’s passion, successfully competing with his non-professional hobby: English literature from the Victorian period. We remember his admiration when he saw a cross-section through a rupture plane in the museum of 1995 Kobe earthquake on Awaji island, admiration for the might of dynamics of the Earth’s interior. In his work, George combined brilliant intelligence with laboriousness and regularity. At the same time, he was a modest man, not seeking fame, appreciation, recognition or privileges. And – first of all – he was a good, friendly and magnanimous person. Being self-critical, he avoided excessive criticism towards others, often explaining and justifying their mistakes. He thought that a mild incentive will bear better fruit than pointing out at imperfections. With his demise, we lost a great scientist, friend and master, but first of all – a great man.

Stanisław Lasocki, Andrzej Kijko