

## **Annex 1.**

### **Aleksander Guterch's Curriculum Vitae**

*This Annex contains CV prepared by Aleksander Guterch himself in 2018, translated into English and slightly updated. The next Annex provides his full bibliography.*

**Born** – February 16, 1936, Sękowa near Gorlice, Podkarpacie.

**Employment** – Institute of Geophysics, Polish Academy of Sciences (IG PAS),  
Ks. Janusza 64, 01-452 Warsaw.

#### **Scientific field, education, and positions**

Geophysics: seismology, structure and physics of the Earth's interior, geodynamics

1961 – master's degree – University of Warsaw, Faculty of Physics, Mathematics and  
Chemistry with a specialization in geophysics; employed as a research assistant;

1963 – 2023 – employed at IG PAS;

1969 – PhD in physical sciences, assistant professor, Department of Geophysics, PAS,  
Warsaw;

1972 – appointment as an independent researcher, IG PAS;

1974 – habilitation, AGH University of Science and Technology, Cracow, Poland;

1981 – appointment as associate professor, IG PAS;

1990 – appointment as full professor, IG PAS;

1969–2012 – Head of the Independent Deep Structures Unit and then the Department of Seis-  
mic Research of the Lithosphere at the IG PAS;

2013–2023 – Professor at the IG PAS.

#### **Foreign scientific fellowships**

1967/68 – Institute of Mathematics of the Academy of Sciences of the USSR in Leningrad,  
studies on the theory of seismic wave propagation;

1971/72 – Department of Earth Sciences, University of Texas, Dallas, USA, research on the  
structure and physics of the lithosphere;

1972–2016 – numerous short-term visits abroad.

**Elective membership in scientific societies**

- 1987 – Warsaw Scientific Society, corresponding member;
- 1994 – Warsaw Scientific Society, full member;
- 1989 – Polish Academy of Sciences, corresponding member;
- 1998 – Polish Academy of Sciences, full member;
- 1999 – Polish Academy of Arts and Sciences, corresponding member;
- 1992 – European Academy – ACADEMIA EUROPAEA, London;
- 2002 – Hungarian Society of Geophysicists, honorary member.

**Prizes and awards**

- 1970 – Award of Division III of the Polish Academy of Sciences;
- 1974 – Team award of the Polish Academy of Sciences (team leader);
- 1976 – State Award of the first degree in science, team (team leader);
- 1980 – Badge of Merit for Oil and Gas Mining, awarded by the Association of Oil and Gas Mining;
- 1980, 1983, 1986 – Awards of the Polish Academy of Sciences, team (team leader);
- 1997 – Award of the Minister of Environmental Protection, Natural Resources and Forestry;
- 2003 – The Prime Minister's Award for outstanding scientific achievements;
- 2006 – Award of the President of PAS granted for scientific and organizational activity while managing the works of the Polar Research Committee;
- 2009 – Certificate of Appreciation awarded by The World Meteorological Organization and the International Council for Science “to Aleksander Guterch – Chairman of the Polish Committee for the 4th International Polar Year 2007–2008, with thanks for his activity and enthusiasm in the activities and implementation of the objectives of the 4th International Polar Year 2007–2008”;
- 2013 – Medal of the 60th anniversary of the IG PAS awarded for scientific and organizational activities;
- 2016 – Medal of the Tadeusz Kościuszko Foundation in Kraków – In Memoriam – for upholding the Kościuszko tradition and the history of the Polish Army;
- 2016 – Memorial badge of the Polish Army Museum for services to the Museum;
- 2018 – Professor Adam Dziewoński Medal awarded for outstanding achievements by the Order Jury at IG PAS, under the honorary patronage of the Minister of Education and Science.

**State awards**

- 1973 – Knight's Cross of the Order of Polonia Restituta;
- 1998 – Officer's Cross of the Order of Polonia Restituta;
- 2015 – BENE MERITO Badge of Honor awarded by the Minister of Foreign Affairs of the Republic of Poland “in recognition of his merits in promoting and strengthening the position of the Republic of Poland in the international arena”.

**Participation in Scientific Committees, Associations and Specialized Panels – national and international**

- 1968–2023 – Committee on Geophysics, PAS, 1968–80 – Scientific Secretary;

- 1977–2023 – National Committee for Cooperation with the International Union of Geodesy and Geophysics, 1983–1989 Chairman;
- 1976–1988 – Vice-President of the Sub-Commission for the Explosive Seismology, European Seismological Commission;
- 1980–2023 – Committee for Polar Research at the Presidium of the PAS; 1991–1999 Vice-Chairman, 1999–2007 Chairman of the Committee, member of the Presidium;
- 1991–2001 – member of the top management of the European Geodynamic Research Project EUROPROBE, covering the entire European continent from the Atlantic in the west to the Urals in the east, with the participation of teams from 30 European countries, Canada and the USA. Member of the EUROPROBE Scientific Steering Committee and Member of the EUROPROBE Management Committee, ESF, Strasbourg;
- 1993–2005 – Chairman of the Geological Council at the Ministry of Environmental Protection, Natural Resources and Forestry;
- 1995–1998 – Member of the Earth Sciences Panel for TRR Networks, European Commission, Brussels;
- 1995–2010 – Founder and President of the Association for Deep Geological Investigations of Poland (ADGIP). Non-profit organization, founded with the participation of the PAS, the Polish Geological Institute, and PGNiG S.A.;
- 2000–2007 – National Committee at the Presidium of the PAS on Scientific Committee on Antarctic Research and International Arctic Scientific Committee, Chairman;
- 2001–2016 – Representative of PAS to the European Polar Board, European Science Foundation, Strasbourg, European Union, Brussels (European Polar Council), 2004–2007 – Vice President;
- 2003–2012 – National Committee for Cooperation with the European Science Foundation (ESF) at the Presidium of the PAS, 2007–2012 – Vice-chairman;
- 2006 – National Committee for Polar Treaties at the Presidium of the PAS (Arctic Council, Antarctic Treaty), Chairman;
- 2006–2011 – Polish National Committee for Fourth International Polar Year 2007–2009 at the Presidium of the PAS, Vice-chairman;
- 2006–2010 – Steering Committee of the international program “Plate Tectonics and Polar Gateways in Earth History”, 4th International Polar Year, Cluster 77, Heads of the Arctic and Antarctic IPY, member;
- 2011 – The POLAR TASK FORCE working group, Legal and Treaty Department of the Ministry of Foreign Affairs of the Republic of Poland (integration of activities of economic ministries, the Ministry of Science and Higher Education and PAS in the polar regions of the Earth), member;
- 2015 – The Audit Committee of the PAS, member;
- 1978 – Member of the Association of Old Arms and Colours at the National Museum in Kraków (Scientific Association), 2000–2016 – President of the Association, currently an Honorary Member;
- 2014 – Member of the Józef Piłsudski Institute in Warsaw.

### **Participation in Scientific Councils**

- 1972–2023 – Member of the Scientific Council at the IG PAS;
- 1981–2007 – Member of the Scientific Council at the Polish Geological Institute, 1995–2007 Vice Chairman of the Council;

2000–2008 – Member of the Scientific Council at the Institute of Geophysics, UW;

1994–2023 – Member of the Editorial Committee of the Polish Polar Research.

### **Didactic activity**

- Promotion of five PhDs at the IG PAS;
- Popular science lectures in high schools and in the framework of the Common Knowledge Society School “Wszechnica Polska” as well as at the Warsaw Scientific Society meetings;
- Lectures at the University of Silesia and several lectures at the Doctoral School of the IG PAS.

### **Polish and international scientific programs and projects (selected examples)**

1982–1991 – Coordinator of the PAS Interdepartmental Nodal Problem – “Polar Research”, and then of the “Central Polar Research Program” No. 03.03 of the PAS – Research of Living Resources, Lithosphere and Environment of Polar Regions;

1976–2008 – Organizer and/or leader of five geophysical expeditions to the Arctic (1976, 1978, 1985, 1999, and 2008) and five geodynamic expeditions (geophysics, geology, paleontology) to West Antarctica (1979/80, 1984/85, 1987/88, 1990/91, 2007), including four international expeditions, with the participation of scientific teams from Norway, Germany, and Japan;

1975–2010 – Chairman of the Organizing Committees and Coordinator of Polish and international seismic experiments. International experiments: VII, VIII, LT-7, TTZ, POLONAISE’97, CELEBRATION 2000, SUDETES 2003, GRUNDY 2003, co-organizer of ALP2002;

The seismic experiments POLONAISE’97, CELEBRATION 2000, ALP2002, and SUDETES 2003 carried out in the area of Central Europe with the participation of 35 institutions from 13 European countries, the USA, and Canada, using a record number of the newest seismic instruments (mainly from scientific centers in the USA and Canada), are among the largest research projects of this type in the history of world geophysics. The leading role in these scientific projects was kept by the Polish side. The costs of the Polish participation in the aforementioned research projects were covered to a significant extent (more than 70%) from off-budget and foreign funds;

Active participation in other international experiments in Europe, such as SVEKA’91, EUROBRIDGE’95 and 96, TOR (1996–97), DOBRE’99, VRANCEA2001, PASSEQ 2006, PANCAKE (DOBRE-3) 2008, and other projects;

2000–2010 – Management of several grants of the Committee for Scientific Research at the Ministry of Science, including Targeted Ordered Project KBN-PCZ-006-21 (2000–2003) established at the request of the Ministry of Environment;

Management of the interdisciplinary Ordered Research Project PBZ-108-KBN-MNiI/2004, in the field of polar research (geodynamics, natural environment, biology) established by the Ministry of Science and Information Technology;

2010 – Organizer and manager of the POLCRUST01 deep seismic reflection research project carried out by the Scientific and Industrial Consortium with the participation of the Institute of Geophysics PAS (leader of the Consortium), PGNiG S.A., the Ministry of the Environment (NFOŚiGW), GEOFIZYKA Toruń. The project (very expensive) was carried out exclusively with non-budget funds.

### Participation in major symposia, conferences, and congresses

The research achievements were presented at numerous scientific meetings at home and abroad, including prestigious symposia in Europe, the USA, and Japan. Some examples:

- Presentation of “The Results of Seismic Surveys of Deep Structures of the Earth’s Lithosphere in the Area of Central Europe” (seismic experiments POLONAISE’97 and CELEBRATION 2000), at the World Exhibition EXPO 2000, Hannover, Germany. The oral and poster presentation was one of the four scientific presentations invited from Poland;
- Symposium on “Challenges for Earth Sciences in the 21st Century”, Karlsruhe, Germany, 2002 (invited lecture);
- Crafoord Symposium “Earth and Planetary Dynamics”, Royal Swedish Academy of Sciences, Stockholm, 2003 (invited lecture, symposium organized on the occasion of granting the Crafoord Prize by the Swedish Academy of Sciences and the King of Sweden);
- “4-D Framework of the Continental Crust – Integrating Crustal Processes Through Time”, International Basement Tectonic Conference, Oak Ridge, Tennessee, USA, 2004 (invited lecture);
- International Symposium on “Deep Seismic Profiling of the Continents and Their Margins” – SEISMIX 2008, Saariselkä, Finland. Invited lecture: “European Crust and Moho Discontinuity: One Hundred Years Since the Discovery of the Crust-Mantle Boundary”.

### Publications

Author or co-author of about 250 publications<sup>1</sup> (<https://publikacje-zsbl.igf.edu.pl/>) mostly in international journals, including *Tectonophysics*, *Journal of Geophysical Research*, *Tectonics*, *Physics of the Earth and Planetary Interiors*, *Geophysical Journal International*, *Annales Geophysicae*, *Journal of Geodynamics*, *Geophysical Prospecting*, and in international monographs, including:

- *Geological Evolution of Antarctica*, Cambridge University Press, 1991;
- *Palaeozoic Amalgamation of Central Europe*, Geological Society, London, Special Publication No. 201, 2002;
- *Antarctica – Contributions to Global Earth Sciences*, Springer-Verlag, Berlin, New York, 2006;
- *Treatise on Geophysics. Vol. 1. Seismology and Structure of the Earth*, Elsevier, Amsterdam, Boston, London, New York, Oxford, Paris, San Francisco, Sydney, Tokyo (1st ed. 2007 – A. Guterch, M. Grad, G.R. Keller; 2nd ed. 2015 – A. Guterch, M. Grad, G.R. Keller, E. Brückl). Volume editors: B. Romanowicz and A. Dziewoński (The monograph presents a summary of the most important results of research achieved in the field of geophysics from the end of the 19th century to the present);
- *Petroleum Geological Atlas of North-Western and Central Europe. Millennium Atlas No. 2*, EU, 2010 (Chapter 2 – A. Guterch, S. Wybraniec, M. Grad, A. Chadwick, Ch. Krawczyk, P. Ziegler, H. Thybo, W. De Vos), which provides a synthesis of all geophysical research done up to now in North-Western and Central Europe.

**Citations (SCOPUS):** >5000

**Hirsch Index:** 49 (according to SCOPUS)

<sup>1</sup> Such a number was given by the author in 2018. As you may see in the next, Annex 2, <https://pub.igf.edu.pl/files/Pdf/Arts/709.pdf?t=1732722512>, after our careful search and updating, this number exceeded 380.

**Organization of scientific meetings**

1968–2000 – convening tens of workshops, national and international conferences and symposia. To give an example, it was only in the years 1991–2000 that seven international meetings were organized in Poland (Jabłonna, Warsaw, Kielce, Książ near Wałbrzych, Kraków–Zakopane, Suwałki, Zakopane) in the framework of the European EUROPROBE Project, ESF.

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