

Polish Academy of Sciences

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History

The Polish Academy of Sciences - the biggest scientific institution in Poland - was founded in 1952. Its roots date back to 1800, when the Warsaw Learned Society was established on the initiative of Stanisław Staszic – an outstanding personage in Polish scientific life.

After his studies at the College de France and returning to Warsaw, Stanisław Staszic - a priest and adept of natural sciences - undertook scientific activity not only in the field of geology and botany, but also in the sphere of science organization which resulted in the foundation of the above mentioned *Warsaw Learned Society*. This was the first Society of this kind on Polish territories, being at that time under occupation of three conquerors – Austria, Prussia and Russia. In 1815 similar societies were established in other Polish cities such as: Kraków, Poznań, Lviv, Toruń and Vilnius. In 1872 the Academy of Knowledge was founded in Kraków presently bearing the name the *Polish Academy of Arts and Sciences*.

After the World War I and regaining independence by Poland, the Academy of Knowledge, was called the *Polish Academy of Sciences and Letters* and transformed into a private institution of higher public utility with four divisions: philology, history and philosophy, exact sciences and medical sciences.

The idea of establishing a state scientific institution, being a country-wide representation of the whole Polish scientific community, emerged as early as in 1920s. It was acknowledged that under new living conditions in Europe it would be easier to conduct research significant for the country's economy, which would be subsidized from the state budget. Its natural consequence became the necessity of better coordination of research related to the needs of newly established state, such as economy, education, country defences and agriculture.

The situation after the World War II determined not only deep changes in Poland's political system, but also in all fields of social life, including science and culture. Polish science suffered great losses during the war, with regard to both its representatives and scientific background. Therefore, during the war, in years 1940-44, the members and employees of the Polish Academy of Arts and Sciences and universities during the clandestine meetings and discussions drew up the principles of post-war organization of science in Poland, its goals and mode of its financing. Thus, the project of the organization of the Polish Academy of Sciences located in Warsaw and composed of the above mentioned learned societies and the Polish Academy of Arts and Sciences was worked out.

In 1949 the Polish government decided to convene the Congress of Polish Science. In its organization took part numerous scientists from the whole country. The respective document entitled the "Project of the organization of the Polish Academy of Sciences" was elaborated in 1951 and it was adopted by the Congress. On 30 October 1951 the Parliament passed the Act on establishing the *Polish Academy of Sciences*. In the following year, the government issued a decree discontinuing the activity of the Polish Academy of Arts and Sciences, which was generally perceived as a senseless political act.

In the Statutes of the Polish Academy of Sciences it was written that it was a state institution, whose tasks include organizing and conducting research in all fields of science with particular emphasis on the problems that are momentous for scientific progress itself and for the state economy and culture in Poland. The Academy organizes and runs a network of research centres also outside Poland. Their goals comprised the development of research, advancement of knowledge, training of research staff

and establishing a wide international cooperation. In 1952 in the Academy four divisions were set up: of humanities and social sciences, biological sciences, mathematical-physical-chemical and geological sciences, and technical sciences.

Establishing a network of research centres in the organizational structure of the Polish Academy of Sciences was not easy. In 1952 the Academy formally did not have a defined plan of research and its members in the number of 300 mainly continued their own research programmes at the university units. Therefore a lot of effort was put into creating strong and organised in a modern way research centres capable of undertaking research especially in the domains that came into being in other countries during the war and developing rapidly after the war, for instance: nuclear physics, biochemistry, radiation chemistry and geology.

The act on the Polish Academy of Science of 1951 was considerably extended in 1960 with the emphasis on the autonomy of actions, independence of corporation and on strong connection between the corporation and the Academy scientific centres developing research at the highest possible level. The system of scientific advice and evaluation for the purposes of state institutions was developed at that time, the Academy divisions were expanded, branches and committees were formed. Due to this, the whole scientific community of the country was drawn into the process of organizing scientific workshops, education and dissemination of science.

Mission and structure

In its present form, the activities of the Polish Academy of Sciences (PAN) are regulated by the Parliamentary Act of 25 April, 1997. The act specifies that it is a nationwide, independent scientific institution that aims "to develop, promote, integrate and disseminate science, as well as to contribute to the development of education and the enrichment of national culture".

From the very beginning, the Academy has functioned as a learned society acting through an elected corporation of top scholars and research organizations, via its numerous scientific establishments. It has also become a major scientific advisory body through its scientific committees.

The main activities of the Academy include: research activities (institutes of the Polish Academy of Sciences), presentation of opinions and programmes concerning science and the practical application of its results, international cooperation effected through membership in international scientific organisations and collaboration with foreign scientific establishments, education on various levels, cooperation with other scientific and higher education units as well as science societies, issuing opinions on bills concerning science, its application and education.

Structure

In accordance with the present Act of April 25, 1997 the supreme governing body of the Academy is its General Assembly, consisting of all national members. The General Assembly sets forth the direction of the Academy's activities and supervises their execution. Between the sessions of the Assembly (taking place twice a year), the Presidium of the Academy takes responsibility for all strategic issues. The Presidium is composed of president, three vice-presidents, seven chairmen of the divisions, presidents of the territorial branches, plus 14 additional members elected by the General Assembly from among the members of the Academy. The Presidium supervises the research units and other establishments of the Academy.

The president, who also chairs the General Assembly and the Presidium, is responsible for PAN activities on an everyday basis. The election of the president for a four-year term requires at least a 2/3 majority of votes of the General Assembly members.

The Academy is composed of national members (including both full and corresponding members) and foreign members. Membership in the Academy is held for life. The number of national members is set at no more than 350. All members (national and foreign) are elected by the General Assembly from among candidates with the highest scientific achievements and of recognized authority. The names of potential national members are submitted by current national members, councils of university faculties, and scientific councils of research establishments in Poland (including the Academy institutes). Foreign members are proposed and elected by the national members. Each member of the Academy is a member of one of the seven divisions, according to her or his scientific discipline. Members are responsible for their own scientific activities as well as the statutory tasks of the Academy.

The organizational structure of the Academy is comprised of divisions, territorial branches and scientific and task force committees. There are seven divisions of the Academy:

Division I Social Sciences,
Division II Biological Sciences,
Division III Mathematical, Physical, and Chemical Sciences,
Division IV Technical Sciences,
Division V Agricultural, Forestry, and Veterinary Sciences,
Division VI Medical Sciences,
Division VII Earth and Mining Sciences.

Each division, chaired by its elected chairperson, formulates opinions on issues concerning its scientific disciplines and provides advice to the Academy authorities on research priorities and policy in a given field. It is also its task to supervise and coordinate the activities of the division's scientific committees, as well as to generally supervise all Academy research establishments in a given field.

There are seven territorial branches of the Academy located in: Gdańsk, Katowice, Kraków, Lublin, Łódź, Poznań and Wrocław. Their role is to integrate the local scientific communities and act as representatives of the Academy to the local authorities and organizations. The territorial branches consist of national Academy members, according to their place of residence.

The committees are a very special part of the Academy. They fall into two groups: the scientific committees affiliated with the divisions, and the task force committees affiliated with the Presidium. The Academy's network of 107 committees constitutes a major representation of all researchers in Poland and of the Academy's advisory bodies. Their membership amounts to about 4.000 elected members. Each scientific committee constitutes a self-governing representation of a scientific discipline for the purpose of integrating Polish scholars. The tasks of the scientific committees are: to deal with the problems of a particular discipline, to contribute to the dissemination of the research results, and to initiate cooperation with foreign scientific centres. Furthermore, a task force committee at the Presidium of the Academy or at the division level has interdisciplinary competence, being involved in research concerning science studies, teaching, and social and economy issues.

PAN as a research centre is currently comprised of 76 research establishments (institutes and research centres, research stations, botanical gardens and other research units) and auxiliary scientific units (archives, libraries, museums, and PAN centres abroad). The research activity of the Academy is financed mainly from the State budget via the Ministry of Science and Higher Education.

Main achievements and prospects

Members of the Polish Academy of Sciences are laureates of numerous prestigious national and international awards, are invited to cooperate in international research projects, perform important duties in international scientific organizations.

The Polish Academy of Sciences participates in national scientific policy elaboration and implementation, plays an important role in scientific trends outlines and is one of the key institutions in national research programmes.

Prospects

It is worth mentioning that in December 2008, after several months of consultations conducted within academic and scientific milieu, the Government of the Republic of Poland adopted a package of acts transforming Polish science system. The reform of the Polish Academy of Sciences, constituting a very important element of science and education sector, is a significant part of proposed changes. As a result of reforms to be introduced the Academy will become a forerunner of quality changes in science sector in Poland.

Strategic reforms, planned in the Polish Academy of Sciences, in particular in the research aspect of the Academy (inter alia establishing strong, interdisciplinary research centres) are aimed at substantial modernization of science sector in Poland.

Proposed changes are expected to result in:

- increase of receptiveness of the PAN research centres to the whole Polish and European R&D community, in compliance with the Lisbon Strategy;
- modernization of management system of PAN research centres and consistent enforcement of international quality standards of conducted research;
- thematic focus on the most significant issues of contemporary science.

Publications

The publishing activity of the Polish Academy of Sciences comprises research establishments' publications, corporation publications and general publications of the Academy.

Research establishments' publications are: journals, book series and occasional publications. Information can be found at research units' home web pages (list is to be found at www.english.pan.pl).

Information concerning corporation publications (divisions and committees) can be found at www.english.pan.pl in respective sections.

General Academy publications are among others:

- "Annual Report" (general information on Academy's activities, published annually in English);
- "Directory" (general information on the Academy, in English, every 4 years);
- "Sprawozdanie PAN" (activity and financial report, annually);
- "Nauka" (book series, quarterly);
- "Academia" (journal, quarterly, published in Polish and English);
- „Katalogi osiągnięć naukowych” (catalogues of scientific achievements);
- „Album PAN. The Past and the Present” (occasional publication);
- "Nauka dla Polski" (materials from the session held in the Parliament).

Information on the above publications and links to their on-line editions are available at: www.english.pan.pl .

Major bilateral and multilateral relations

Since its inception, the Polish Academy of Sciences has considered international scientific cooperation as an indispensable tool for fostering steady progress of research in Poland. Hence its efforts have always aimed at establishing an extensive network of contacts with foreign partners which would be independent of political influences.

While developing international academic cooperation based on the principle of partnership and benefit to all participants, the Polish Academy of Sciences consolidates both traditional bilateral contacts, and, as it is happening currently, multilateral relations through the membership of over 100 international scientific organisations as well as by participating in an increasing number of research projects conducted by all-European organizations. Simultaneously, taking into account the growing importance of international research, the Polish Academy of Sciences is developing its centres abroad, as well as its international research units in Poland. It is looking to create better conditions for such cooperation for the country's entire academic community. Its aim is to ensure general recognition of the independence of academic institutions, also with regard to the form and subject of conducted research.

Bilateral cooperation with national academies of sciences and their equivalent units is based mainly on agreements with 77 institutions (more than 20 of which exist over 20 years) from 41 countries. Such collaboration involves conducting joint research projects, organizing study visits, establishing joint commissions, teams or expert groups, as well as providing scholarship and training programs for junior researchers.

The Academy's units have signed ca. 740 agreements with foreign research centres. Basing on these agreements, the Academy's research centres and foreign scientific institutes are able to develop and implement joint research projects.

Furthermore, the Academy acts as a coordinator of academic international cooperation of all its centres, a number of institutions of higher education and affiliated institutes. Collaboration between centres and individual scholars, in turn, develops steadily and independently of formal agreements.

As for multilateral cooperation, the Polish Academy of Sciences is a member of the European Science Foundation (ESF), the European Federation of National Academies of Sciences and Humanities (ALLEA), the European Academies Scientific Advisory Council (EASAC), the InterAcademy Panel on International Issues (IAP); it develops collaboration with the NATO Scientific Directorate. The Academy coordinates activities resulting from Poland's collaboration with the International Centre for Mechanical Sciences (CISM) in Udine, the International Institute for Applied Systems Analysis (IIASA) in Laxenburg, Austria, and the International Centre for Genetic Engineering and Biotechnology (ICGEB) in Trieste and New Delhi.

The Academy's centres and their scholars participate in the research programs implemented by UNESCO, WHO, UNIDO and other UN-based organizations, as well as projects coordinated by the International Agency for Atomic Energy (IAEA), the European Centre for Nuclear Studies (CERN) and the International Centre for Nuclear Research in Dubna. More and more frequently the Academy's research teams together with their colleagues from EU countries carry out joint research undertakings co-financed under the Framework Programs or participate in EUREKA projects.

The Polish Academy of Sciences coordinates the cooperation of the Polish scientific community with international scientific organizations such as the International Council for Science (ICSU), all its scientific unions and the majority of affiliated organizations and committees.

The collaboration with these organizations is carried out by National Committees established by the Presidium of the Polish Academy of Sciences, or the Academy's Scientific Committees.

The Academy established its centres in Paris, Rome, Vienna, Berlin, Moscow and Brussels. Their purpose is to promote the achievements of Polish science, help establish contacts with foreign partners and facilitate academic cooperation. A number of research programs are conducted, inter alia, by the Academy's polar stations on Spitsbergen and King George Island (the Antarctic).

The Academy has initiated the establishment of international research institutions in Poland, for instance, the Stefan Banach International Mathematical Centre, the International Centre of Biocybernetics, the International Laboratory of High Magnetic Fields and Low Temperatures, the French-Polish Centre of Plant Biotechnology, the European Regional Centre for Ecohydrology, and the UNESCO-sponsored International Institute of Cell and Molecular Biology involved in improving the qualifications of both Polish and foreign scholars and researchers.