

German Academy of Sciences Leopoldina

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Mission statement

The Leopoldina is the world's oldest continuously existing academy for medicine and natural sciences with a tradition of 357 years and more than 1,300 members all over the world. Since 2008 it has been Germany's National Academy of Sciences.

The Leopoldina maintains a network with scientific institutions of other European and non-European countries, organises a large number of national and international meetings and symposia, and issues statements and recommendations. The support and promotion of young scientists also belong to the most important tasks of the Leopoldina.

As the National Academy, the Leopoldina represents the German scientists in international academy commissions. Moreover, the Leopoldina advises the government, the parliament, and the public about socially relevant scientific issues.

History

City physician Johann Laurentius Bausch (1605–1665) and three of his colleagues founded the *Academia Naturae Curiosorum* in the Free Imperial City of Schweinfurt in 1652. The objective of the new institution in Schweinfurt was to gain a deeper understanding of natural science results and improve communication among the physicians in those days.

In 1677, the Academy was officially recognised by Emperor Leopold I, and in 1687, it was vested with the privileges of an Imperial Academy. These privileges enabled the institution, which later has also been called Leopoldina, to award academic degrees and publish research results without censorship.

For more than 200 years, the seat of the Leopoldina shifted to Free Imperial Cities and university locations in accordance with where the respective President happened to be based. Since 1878, the Academy has been permanently located in the German industrial and university city of Halle (Saale). Here, the Academy purchased a plot of land and set up a library building in 1904.

The NS dictatorship era also left its traces in the Academy, particularly in terms of the way Jewish Academy members were treated. Thanks to the courage and astuteness of its Presidents Kurt Mothes (1900–1983) and Heinz Bethge (1919–2001), the Leopoldina succeeded in maintaining its independence as a scholars' society during the GDR years. It elected its members without any state influence, and particularly from the Federal Republic of Germany and Western countries.

After reunification, President Benno Parthier reorganised the Academy's administrative structure and its mode of operation to make it responsive to the scientific demands of its new responsibilities that now had to fit with the all-German scientific system. In 2003 Volker ter Meulen from Würzburg became the XXV. President. The official appointment of the Leopoldina as Germany's National Academy of Sciences was celebrated on July 14, 2008.

Structure

In the **Members' General Assembly**, the Presidium disseminates information among members and the members deliberate the objectives and the development of the Academy. The Members' General Assembly meets as provided for in the Statutes and in exceptional circumstances. Usually, members meet every two years. The Members' General Meeting decides on revisions of the Statutes, as prepared and proposed by the Senate.

Members are grouped into subject **Sections**. Each of Leopoldina's 28 sections is headed by an elected senator.

The sections are grouped into 4 **Classes** that provide a basis for interdisciplinary discussions.

The **Senate** of the Leopoldina, which represents the opinion of the members to the Presidium, is comprised of 40 members at present. They include the 28 elected senators as well as two elected representatives from Austria and Switzerland, respectively. In addition to the Leopoldina Senators representing the Sections and Regions, the Senate can have up to ten further distinguished persons who need not be members of the Leopoldina. Of these ten persons, five are elected *ad personam*. They represent research organisations or other scientific institutions in a managerial capacity. Five others are the presidents of important German Research institutions. The Senate usually meets once a year.

The affairs of the Academy are managed by an honorary and non-salaried **Presidium**. All aspects of the management of the Academy's affairs are handled in accordance with the Statutes, the rules of procedure of the Presidium and an election charter. The members of the Presidium are elected by the Senate. The Presidium has twelve members and is led by a President. The Presidium usually meets once every month and prepares and discusses all important decisions of the Academy.

Under the supervision of the **Secretary General** the **Leopoldina office** carries out the current affairs of the Presidium.

The Academy has no research institutes of its own. However, with a small staff **history of science projects** are carried out. The research topics above all relate to the Academy's own history and other history of science areas.

The Leopoldina also maintains a **library** and an **archive**.

Publications of the Academy

In the year 1670, the world's first medical and natural-scientific journal (*Miscellanea curiosa medico-physica Academia Naturae Curiosorum, dedicated to Emperor Leopold I*) was published (in Latin) and this publication continues to this day under the title **Nova Acta Leopoldina, Neue Folge**. Despite several changes of the title and interruptions of publication, the tradition remains unbroken to this day. Today the *Nova Acta Leopoldina, Neue Folge* (NAL) publishes the President's speeches and lectures given at the Biennial Assemblies, the documentation of Leopoldina symposia and meetings and monographs written by Leopoldina members and their students.

Since 1990, all activities of the Academy that have taken place in the course of a calendar year, announcements by the President, changes in membership, laudations for the members and reports on events have appeared in the Academy's **yearbooks (Jahrbücher)**. The yearbooks form the continuation of the reports on the activities of the Academy, which have been in existence under various titles since 1858.

In 1962, the then *Director Ephemeridum* Rudolph Zaunick founded the journal **Acta Historica Leopoldina (AHL)** which addresses the History of Science and, in particular, the history of the Academy. It publishes the seminars on the History of Science and other contributions.

A gem in the publications of the Leopoldina is the Leopoldina edition (LA) **Goethe: Die Schriften zur Naturwissenschaft**, edited today by Dorothea Kuhn, Wolf von Engelhardt (deceased), and Irmgard Müller.

The Leopoldina issues an updated list of members biennially (**Struktur und Mitgliederbestand**). Since 2003, the Leopoldina has published a separate booklet introducing new members (**Neugewählte Mitglieder**).

Until 2007 a booklet (**Informationen**) with current information on organisational and staff changes in the Leopoldina, the Academy's activities, and the status of its projects was published biannually. In June 2007 it was replaced by the newsletter "[Leopoldina aktuell](#)" which is sent to all academy members as well as to political, scientific, and educational institutions and to all universities in Germany.

Scientific achievements and impact of the academy's national science policy activities

The Academy comprises approx. 1,300 elected members who have distinguished themselves by demonstrating academic excellence. They represent all natural science and medicine disciplines as well as some borderline areas of the empirical behavioural and social sciences as well as the humanities. The number of members below the age of 75 is limited to 1,000. Among them are several Nobel Prize winners many of whom were elected well before they were awarded the prize.

Discussions that take place during Leopoldina events provide, whenever possible, a basis for science-based recommendations and statements which are addressed to political institutions and the interested general public. To achieve this goal, the Presidium follows up selected events by appointing ad-hoc commissions or expert groups whose deliberations are subjected to an independent review process and then published as Leopoldina statements and recommendations.

National recommendations

- Schutzimpfungen - Chancen und Herausforderungen. Stellungnahme des Präsidiums der Deutschen Akademie der Naturforscher Leopoldina (*Opportunities and Challenges of Vaccination. Recommendations of the Presidium of the German Academy of Sciences Leopoldina*) (2008)
- Stellungnahme des Präsidiums der Deutschen Akademie der Naturforscher Leopoldina zur Stammzellforschung in Deutschland (*Statement on Stem Cell Research in Germany by the Presidium of the German Academy of Sciences Leopoldina*) (2007)
- Empfehlungen zur Bekämpfung von Infektionskrankheiten (*Recommendations on Combating Infectious Diseases*) (2005)
- Empfehlungen zur Arzneimitteltherapie im Kindesalter (*Recommendations on Drug Therapy in Childhood*) (2005)
- Stellungnahme des Präsidiums der Deutschen Akademie der Naturforscher Leopoldina zum Entwurf des novellierten Gentechnikgesetzes (Gesetz zur Neuordnung des Gentechnikrechts) (*Comments by the Presidium of the German Academy of Sciences Leopoldina concerning the draft amendment of the genetic engineering act [Act on the Restructuring of Genetic Engineering Laws]*) (2004)
- Empfehlungen für die Energieversorgung in Deutschland (*Recommendations on the Future Energy Supply in Germany*) (2003)

Joint Academy Initiative on Aging in Germany

In autumn 2004 the Leopoldina installed the Joint Academy Initiative on Aging in Germany. This is a joint project of the Leopoldina and the German Academy of Science and Engineering acatech. The initiative is supported by the Jacobs Foundation but remains entirely autonomous. The starting point for the initiative was the demographic changes taking place in Germany, and the consequences and issues that ensue. Within three years (2006-2008), the initiative had the intention to develop and present the best scientific evidence and alternatives for comprehensive options for social reform. The final report with recommendations is presented to the public in spring 2009.

Joint Academy Initiative on Fertility and Social Development

Demographic change is probably the chief internal challenge for contemporary developed societies. Demographic ageing is the result of a strongly increasing life expectancy and a rapidly declining fertility. While the risks and opportunities of ageing and longevity have already been extensively discussed, last and in particular by the Joint Academy Initiative on Aging in Germany, a corresponding, impact-oriented synthesis for the development of fertility is still missing.

In contrast to prevailing disciplinary limitations, the working group is committed to full interdisciplinarity. Apart from conjoining demography, sociology, psychology, economics and history, the group innovates above all by reaching out to bio-medical research.

Starting in spring 2009, the estimated time to completion of the work is two years. Interim findings gained during this time are to be enriched and condensed in a process of public debate in the course of a third year.

Leading experts with an excellent command of their field and the ability to participate in interdisciplinary dialogue are to be won for the group.

The Young Academy (Die Junge Akademie)

In 2000, the Berlin-Brandenburg Academy of Sciences and Humanities (Berlin-Brandenburgische Akademie der Wissenschaften) and the Leopoldina founded the Young Academy (Die Junge Akademie) as a joint project. This is the first project in Germany for the institutional support of junior scientists with a record of academic excellence. The future of science and research inside and outside universities is highly relevant for the members of the Young Academy and affects them directly. Accordingly, members of the Young Academy have in recent years addressed topics relating to universities and colleges, such as the situation of women in German research or the different career pathways of scientists in European countries. After interviews with newly appointed junior professors, the Young Academy also produced a statement concerning "junior professorship". The legal reform of the higher education framework still is a major issue for the Young Academy. It publishes a magazine with reports on its activities twice a year.

International activities

The Leopoldina is a member of several international boards and participates in international networks regularly issuing recommendations and statements for political institutions and the general public.

Academies of the G8 countries

Since the G8 summit in 2005 in Scotland recommendations have been written by the academies of the G8-countries (England, France, Germany, Italy, Japan, Canada, Russia, and the USA) concerning important topics of modern society. These papers were also issued prior to the G8 summits in St. Petersburg in 2006, in Heiligendamm in 2007, and in Hokkaido in 2008. The Leopoldina represents the German academies on these occasions.

The [statements](#) concerned the following topics:

- Global response to climate change (2005)
- Science and technology for African development (2005)
- Energy sustainability and security (2006)
- Avian Influenza and infectious diseases (2006)
- Sustainability, energy efficiency and climate protection (2007)

- The promotion and protection of innovation (2007)
- Climate change adaptation and the transition to a low carbon society (2008)
- Global health (2008)

European Academies Science Advisory Council

The Leopoldina represents the German academies in the European Academies Science Advisory Council (EASAC), an association of national academies from EU member states. EASAC views itself as a body in which evidence-based statements on topics from politics and science policy are drafted and adopted. The Leopoldina was involved in authoring several recommendations issued since 2003. In June 2007, the Leopoldina President Volker ter Meulen was elected chairman of EASAC.

The [recommendations](#) issued since 2003 in which the Leopoldina was involved, were entitled:

- A user's guide to biodiversity indicators (2005)
- Infectious diseases – importance of co-ordinated activity in Europe (2005, with Leopoldina President Volker ter Meulen in overall charge)
- Vaccines: innovation and human health (2006, with Leopoldina President Volker ter Meulen in overall charge)
- Tackling antibacterial resistance in Europe (2007, with Leopoldina President Volker ter Meulen in overall charge)
- Impact of migration on infectious diseases in Europe (2007, also as summary, with Leopoldina President Volker ter Meulen in overall charge)
- Combating the threat of zoonotic infections (2008, with Leopoldina President Volker ter Meulen in overall charge)

Federation of the European Academies of Medicine

For several years, the Leopoldina has been a member of the Federation of the European Academies of Medicine (FEAM), an association of medical academies from 14 European countries. Following the meetings which take place at regular intervals, statements on medical topics of social relevance are published. Since 2008, Presidium member Hubert Blum has been Vice-President of FEAM.

All European Academies

ALLEA is the European Federation of National Academies of Sciences and Humanities, with 53 member academies from 40 European countries. As a platform of its members, the aim of ALLEA is to support the exchange of information and experience among the academies and to offer European science and society the counsel of its members. The Leopoldina joined ALLEA as a member in March 2004.

InterAcademy Medical Panel

The InterAcademy Medical Panel (IAMP) is a global network of academies of medicine, natural and engineering sciences. As an independent international forum, IAMP tries to advance health topics throughout the world, notably in the developing countries. To this end, IAMP advances cooperation among its members, publishes statements, and makes scientific findings accessible to politics. The Leopoldina has been a member of IAMP since the general assembly in Beijing in April 2006.

InterAcademy Panel

IAP (InterAcademy Panel) is a global network of the world's science academies, launched in 1993. Its primary goal is to help member academies work together and to advise citizens and public officials on the scientific aspects of critical global issues. The Leopoldina was nominated member of IAP in January 2008.

Human Rights Committee of the Leopoldina

In 2001, following a decision by the Presidium at the suggestion of several members, a human rights working group was established, which is generally referred to as Human Rights Committee (HRC). At present, the Committee consists of one member from Germany, Austria, and Switzerland, respectively. In July 2003, the HRC was admitted to the „International Human Rights Network of Academies and Scholarly Societies“ (IHRN) of 65 academies from all parts of the world.