

History of the Max Planck Society

Summary

The Max-Planck-Gesellschaft zur Förderung der Wissenschaften – the Max Planck Society for the Advancement of Science – was founded in Göttingen in 1948 at the instigation of the British Allies. It was built upon the ruins of the Kaiser Wilhelm Society (KWS), from which it inherited a dedication to research through the operation of institutes of its own. The KWS had been founded in 1911, and quickly acquired great renown. However, due to its collaboration with the Nazi regime, after World War II the Allies urged that it should be dissolved. The Max Planck Society was established to safeguard the scientific capital of the KWS and translate this into a democratic structure. Through to 1960, the MPG successively absorbed the institutes and assets of the KWS. Thereafter, it experienced a period of growth and developed into a leading research institution which consistently adapted its activities in line with socio-political changes and challenges.

The founding of the Max Planck Society 1945 – 1948

The Max Planck Society (MPG) was founded in Göttingen in 1948 as the successor to the Kaiser Wilhelm Society (KWS). The latter had been in existence since 1911 and ranked as the most important organization for basic research of its time. However, after the years of National Socialist domination, the victorious powers harboured doubts regarding the moral integrity of the KWS. Many KWS institutes had been commandeered for important war research, and individual scientists had breached the fundamental ethical rules of science; indeed, they had been ideological supporters of National Socialism. Upon the arrival of American troops, the last President, Albrecht Vögler, had committed suicide. The organization as a whole had suffered so extensively from the loss of its independence and the surrender of its ideals that a new beginning appeared urgently necessary.

What's more, as a result of the war, the situation of many Kaiser Wilhelm Institutes was chaotic and unclear: most of the institutes had been relocated or damaged and been bled dry of personnel. In common with public life in general in Germany, science too faced a new beginning. For the employees of the KWS, this occurred through the foundation of the Max Planck Society. This was made possible thanks in part to the willingness of the Allies, first among them the British, to safeguard the legacy of the KWS for the future, but also to the moral integrity of individual scientists.

Max Planck, who had previously served in that capacity from 1930 to 1937, despite his advanced age of 87, declared himself willing once again to accept the office of President of the KWS and oversee the foundation of a new Society. Planck also agreed that the new Society should be named after him. The internationally-known name of the Nobel laureate who had revolutionized physics research with his quantum theory in 1900 stood for German cutting edge research without Nazi taint. Agreement was reached at an early stage that the chemist Otto Hahn should become President of the new Max Planck Society.

The first incarnation of the Max Planck Society with Hahn as President was established in September 1946; however, its validity extended only to the British Zone. The new Society had yet to achieve broad acceptance among all of the Western victors. This was achieved in the course of the following year, leading to the foundation of today's Max Planck Society on 26 February 1948 in Göttingen. Even this Society initially encompassed only the institutes in the British and American occupation zones, which still existed at this time. It was not until the German Federal Republic was founded in 1949 that the former KWS Institutes located in the French occupation zone joined the Max Planck Society in October and November of the same year. And it was to be a further four years before, in 1953, the former Berlin institutes could at last be merged with the MPG.

Formation 1948 – 1960

The laborious establishment of the new Society upon the ruins of the old was followed by years of development. In a mirror image of the development of the federal structure of the young German Federal Republic, the MPG too developed from the ground up, driven by the initiatives of the individual institutes and the scientists who headed them. The MPG – in contrast to the former KWS – was from the very beginning dependent entirely on public funds to finance its institutes. In line with the Federal structure foreseen for the new (West) German Republic, the obligation to provide the Max Planck Society with financial resources initially fell solely within cultural remit of the Federal States. As, however, the MPG acted collectively on behalf of its various institutes, the Federal States were compelled to coordinate their financing efforts with one another.

So it was that on 24 March 1949, two months before the Federal Republic of Germany was founded, a remarkable agreement was reached which has, to this day, left its mark on German research policy. In their "Königstein Agreement", the Ministers of Culture and Finance of the (then) 11 Federal States plus West Berlin settled on a financial regime that prescribed the joint and exclusive responsibility of the States to support research, and which moreover recognized the need for permanent institutional support for research entities such as the Max Planck Society as a state duty.

From the beginning, the need to safeguard its autonomy was a matter of central concern to the Max Planck Society. Far more active attention was paid to the autonomy of basic research in this phase of foundation and development under the presidency of Otto Hahn than had ever been the case in the days of the Kaiser Wilhelm Society. It was not only that the era of National Socialist dictatorship had highlighted the political threat to the freedom of research, which was at once vulnerable and yet so valuable. The Statute of Occupation, too, perceived at first as restrictive in nature, encouraged and facilitated focus on research oriented primarily towards the revelation of knowledge.

Under the presidency of Otto Hahn, normality increasingly returned to the Max Planck Society during the 1950s. New institutes were founded and from 1951 the MPG began to construct its first buildings. These were years in which German research activities were progressively reintegrated into the international scientific landscape, now dominated by the USA; years of increasing stability in both scientific and financial terms. The Max Planck Society successfully established a focus on new areas of research such as behavioural physiology, cellular chemistry, aeronomy and astrophysics, nuclear and plasma physics, as well as developing its existing work in pioneering fields such as the study of viruses and research into physical chemistry. Likewise, scientific cooperation with foreign institutions was developed step by step. The initial contacts forged in 1959 between MPG scientists and their counterparts at Israel's Weizmann Institute were a particular source of inspiration.

This development was reflected also in the budget and employment figures of the Max Planck Society. When first founded in 1948, the Society comprised 25 institutes and research facilities with a combined budget of some 7 million (approx. EUR 3.6 million). By the time Otto Hahn handed over the mantle of the presidency to Adolf Butenandt in June 1960, the Max Planck Society numbered 40 institutes and research facilities, employing a total of some 2,600 people including 750 scientists, with an annual budget approaching DM 80 million (around EUR 40.9 million).

Enlargement and establishment 1960 – 1989

The 1960s ushered in a phase of unprecedented advancement at MPG. Within a matter of six years, by 1966, the number of research facilities increased to 52 and the number of newly-founded institutes almost doubled. The MPG budget grew within a decade, by 1970, to more than DM 400 million (around EUR 204.5 million). Under these conditions, large new research centres of international calibre were set up in biochemistry, biophysical chemistry, molecular genetics, immunobiology, biological cybernetics and cell biology. New and costly directions of research were embarked on in physics and chemistry which adopted an interdisciplinary and international approach. In addition, institutes were founded to study radio astronomy, optical astronomy, space research and solid state research.

The humanities and social sciences, too, which had previously attracted little attention during this period, now became more strongly integrated into the research spectrum of the Max Planck Society. In the field of jurisprudence, institutes were established with a focus on European legal history, criminal law and patent, copyright and competition law, while the social sciences made an appearance in the MPG catalogue of research categories with the foundation of the Institutes for Human Development and for the study of living conditions in the scientific and technical world.

The Max Planck Society also applied itself with increasing vigour to its relationships with the universities and to the exchange of scientists at international level. The need to promote the next generation of scientists was becoming increasingly evident. And so in 1969 the MPG set up the Friedrich Miescher Laboratory in Tübingen as the first of its independent junior research groups. Within its internal structures, too, the Society attempted to take account of the ever growing and developing scale of research operations. An early reform of the Society's Statutes in 1964 introduced the principal of the collegiate management of institutes.

In 1972 the Max Planck Society chose a far greater reform of its Statutes as a means by which to respond in its own way to the reform movement sweeping through (West) German society and accentuated by the wave of student protests: With the establishment of a standing Senate committee on research policy and research planning, steps were taken to establish the principle of strategic development planning at the MPG. The Statutes now granted scientists below the level of management the right to participate in the development both of their respective institutes and of the Max Planck Society as a whole. Time limits were placed on the management positions occupied by institute Directors and with the introduction of Scientific Advisory Boards comprised mainly of international specialists, the essential elements of a procedure for the regular evaluation of Max Planck institutes by outsiders were put in place.

As the 1970s dawned, the MPG was forced to concede that growth ultimately had its limits, and in seeking further scope for expansion it had to rely less on disproportionately generous increases in its budget than on shrewd research strategies. The physicist Reimar Lüst had taken over the presidency from Adolf Butenandt in the summer of 1972 and was to hold this office until 1984. During this time, 20 institutes and (independent) institute departments were closed and around 550 staff posts diverted to other research activities. New institutes could now be set up only by rededicating existing facilities or in return for closures elsewhere. Greater consideration was given to restructuring and adjusting the research focus of entire institutes upon the retirement of their Directors, with a concomitant emphasis on adopting new and innovative research topics. The Institutes of Occupational Physiology and Virus Research were reoriented towards Systems Physiology and Developmental Biology respectively. Eleven new institutes were founded. New additions to the Biology and Medicine Section included the fields of endocrinology, neurology, psychology and psycholinguistics. The Chemistry, Physics and Technology Section expanded to include Institutes for Mathematics, Meteorology, Quantum Optics, Radiation Chemistry and Polymer Research, while the Human Sciences Section gained Institutes for Psychological Research, the Study of Societies and Social Law.

In addition, new approaches to research funding were introduced including the establishment of fixed-term research groups, especially in the field of clinical research, as well as project groups. Participation was also stepped up in major research projects such as BESSY, EISCAT and IRAM.

During the 1970s the Max Planck Society also continued to develop its international activities. In 1974 the first exchange of scientists was agreed with the Chinese Academy of Sciences – a verbal arrangement at first. The written accord, which followed in 1978, forms to this day one of the essential bases of scientific relations between Germany and China. The institutes were also granted additional funds with which to extend their own direct contacts worldwide.

However, it was not until the end of the 1980s that a breakthrough was made in the matter of finance. In December 1989 the heads of government at national and regional level held what was described as an "education summit" at which they gave a clear signal that preference would be given to promoting scientific excellence and that the two leading basic research organizations could in future look forward to financial planning security. For the next five years, the budgets of the Deutsche Forschungsgemeinschaft (DFG) and the Max Planck Society were to rise by five percent per annum. This increase in funds was primarily destined to enable MPG to develop three new institutes in the fields of information technology and marine and terrestrial microbiology. Even though no new staff posts were created, the Society was nevertheless, for the first time, able to be represented with at least one Max Planck institute in every Federal State.

The modern MPG. Development following the reunification of Germany 1990-2011

President Heinz Staab handed over the mantle of office to legal expert Hans F. Zacher in the summer of 1990, just as the reunification of the two Germanys was looming large. The event which had been so inconceivable in years past and for which politics, business, science and society were so ill-prepared transpired nevertheless, and within months the need for action changed almost beyond recognition. In parallel with German unification, the accelerated progress of European unity also necessitated a refocus of national research contexts. For the Max Planck Society, reunification was at once a challenge and an opportunity. This applied in particular to the establishment of new institutes. The MPG was keen to have one-third – measured by overall volume – of its undertakings located in the new Federal States.

In addition to this long-term programme for the foundation of new institutes, however, the MPG also took immediate steps to support research in the East. The Society initially conceived and financed 27 working groups to be set up for a period of five years and supported their integration into the university landscape through additional project sponsorships. Two limited-lifetime "branches" of existing Max Planck institutes were also set up and, again for a limited period, MPG took seven areas of arts and humanities research under its wing. By 1998, some 18 institutes, one sub-institute and one research unit had been established.

The headlong growth in the eastern Federal States was, however, accompanied by an imperative need to make savings in Germany's western regions. Even during President Zacher's term of office, entire departments were closed and a stop placed on new appointments in the West. Through their "Federal Consolidation Programme", the national and regional governments obliged the Society within a matter of years to make savings of some 11 percent in its establishment, equal to 740 jobs. The growth in the Max Planck Society's financial budget was absorbed almost entirely by the newly-established institutes.

President Hubert Markl, who had taken office in the summer of 1996, was therefore constrained to pursue the consolidation course adopted by his predecessors under intensified conditions. In 1997, the Society took the decision to close four of its institutes, namely the Gmelin Institute and the Institutes for Cell Biology, Behavioural Physiology and Biology, and to partially close the Institute of Aeronomy.

History will record Hubert Markl's presidency as a period in which opportunities for the Society to renew itself were paralleled by an equally notable squeeze on resources. The continuing implementation of the East German Institute development programme corresponded with a growing need for renewal at institutes in the West as a result of the rising number of reappointments. Programmes were conceived and introduced with the aim of revitalizing cooperation with universities and between Max Planck institutes and reinvigorating selected fields of research. The inter-institutional research initiatives, tandem projects combining patient-oriented clinical research and basic research at Max Planck institutes and university-based Max Planck Research Groups which followed helped to widen the Society's support spectrum. These activities broadly fell within two functional areas of emphasis: On the

one hand the support provided for junior scientists, for example through the introduction of the International Max Planck Research Schools doctoral training programme, and on the other, the consolidation of international contacts through the reciprocal establishment of junior and partner groups.

The changes in institutional funding during these years were accompanied by an increasingly dynamic personnel recruitment drive. During President Markl's six years in office, new candidates were appointed to some two-thirds of all Max Planck institute directorship posts, including 44 at institutes in the former East Germany. 54 out of a total of 66 planned directorships at eastern German institutes were in fact filled during this period. With the hand-over of the last new institute building in 2006, the development programme in the East may be regarded as complete.

Between 1991 and 2002 in the former East Germany alone the Max Planck Society invested some 530 million euros in building and equipping new institute premises. By 2002, with an annual budget totalling some 200 million euros, the new institutes were employing more than 3,400 staff, including around 1,730 establishment posts. Around 58 percent of the Directors appointed to these institutes by 2002 come from abroad.