

President's Report

Many outstanding researchers were under 30 years of age when they embarked on their pioneering studies, for example Isaac Newton, Albert Einstein and Marie Curie. In view of demographic change – tens of thousands of qualified STEM employees are already lacking in Germany – and the global competition for talented scientists, this means for us: Organizations that carry out basic research at the highest international level must be attractive enough to succeed in recruiting top junior scientists.

For this reason, supporting junior scientists is of enormous importance for the Max Planck Society. Moreover, it begins long before candidates embark on their third-level studies. Since the 1970s, we have been sponsoring the German “Jugend forscht” youth science competition. In 2012, we extended our involvement in the competition and now sponsor all prizes in the physics section, from the regional competitions to the national final. We have also made significant progress with the Federal and State authorities in relation to the support of junior scientists at our institutes, including, for example, the option of being able to pay a recruitment bonus to outstanding doctoral candidates and the introduction of the child allowance of 400 euros. More importantly, the Max Planck Society's 2000-plus doctoral grant recipients have had more money in their wallets since summer 2012. They now receive the maximum authorised rate of 1,365 euros per month; this is supplemented by a contribution towards their health insurance costs of up to 100 euros. Thus, with our doctoral grants and funding contracts, we can now offer attractive and internationally competitive conditions.

This is important. In the years to come, the pool of scientific talent will increase rapidly - not here in Germany, but in the emerging, newly-industrialised Asian countries of China and India. In its report “Education Indicators in Focus”, the OECD predicts that 40 percent of all university graduates in 2020 alone will originate from these countries. Therefore, our support for junior scientists must be international in its orientation. The fact that we are on the right track is demonstrated by the enormous interest in the more than 60 International Max Planck Research Schools which we operate jointly with the universities. This form of structured doctoral education is set to become the important location factor in the context of international competition. At present, there are around 25 times more applicants than places, and more than half of the doctoral students already originate from abroad. This influx of young scientific talent not only strengthens our research activity, the majority of the foreign doctoral students can envisage remaining in Germany for the early years of their careers.

Consequently, as a research organization, we must ensure that our foreign graduates, in particular, are prepared for both a career in science or another professional field and thus also for the German labour market. This is also a topic being dealt with by the Presidential Committee which I established for the further development of the support for junior scientists in the Max Planck Society. It is chaired by Reinhard Jahn, Director at the Max Planck Institute for Biophysical Chemistry, and representatives of all career levels participate in the consultations. The Committee is due to present its initial findings over the course of 2013.

The Max Planck Society bolstered its international presence again in 2012 – not only with regard to the recruitment of young research talents. Our institutes are now involved in around 5,000 international projects with over 6,000 cooperation partners throughout the world. Over half of all Max Planck publications are based on international cooperation. In 2012 we established additional Max Planck Centers as platforms for institutionalised cooperation. These include the Max-Planck-Princeton Center for Plasma Physics, which was established in cooperation with the renowned Princeton University to carry out further research on fusion power as an energy source for the future. New centres were also established in Vancouver, Lausanne and Paris, and two were opened in Israel. This brings the number of Max Planck Centers in the meantime to twelve. Like all cooperative ventures, they are operated on a bottom-up basis by the researchers. Through the Centers, the latter profit from the synergies between excellent partners and promote the international visibility of German science – as well as junior scientists. After all, exchange programmes between the participating institutes for doctoral students and postdoctoral researchers are the norm.

The fact that the Max Planck Society is an effective brand ambassador for German science abroad is also demonstrated by the establishment of the country's first law institute on foreign soil in the Grand Duchy of Luxembourg. Located at the seat of the European Court of Human Rights, the Max Planck Institute Luxembourg for International, European and Regulatory Procedural Law studies modern conflict resolution mechanisms at the European and international levels. In addition, it focuses on issues relating to the regulation of financial markets and the insolvency and restructuring of companies – all highly relevant topics in view of the interrelationships between currency systems and the consequences for their stability. The new Institute is entirely funded by Luxembourg. We also officially opened the first overseas Max Planck institute with the inauguration of the building for the Society's new institute



Prof. Peter Gruss, President of the Max Planck Society

in Florida. New momentum was also generated at home in 2012 – be it through the establishment of new institutes like the Max Planck Institute for Empirical Aesthetics in Frankfurt am Main and the Max Planck Institute for the Structure and Dynamics of Matter in Hamburg, or through the re-orientation of existing institutes. A recent example of the latter is the Max Planck Institute for Chemical Energy Conversion in Mülheim an der Ruhr where the Institute's proven strengths will be exploited more intensively with a view to finding innovative ways of storing regenerative energy chemically.

This capacity for renewal also makes us an attractive partner within the German science system. This was more than confirmed in 2012 by the third round of the German universities' Excellence Initiative: institutes of the Max Planck Society are involved in every second graduate school funded by the

Initiative and in two-thirds of all excellence clusters - the networks between non-university and university research. This trend is also being continued at European level, as evidenced by our performance in the competition for the European Research Council's Synergy Grants – a new funding line, through which top research groups working on an interdisciplinary basis receive up to 15 million euros for a period of up to six years: three of the eleven teams selected from a total of 700 applications are headed by Max Planck scientists as principal investigators who bring together the work of the research alliances which cooperate across institutional boundaries.

We also support the "Teaming for Excellence" initiative, which aims to eliminate disparities in the attraction of EU funding. If Europe would like to make better use of its potential, it must develop into an innovation union. Research in Eastern and South-eastern Europe, in particular, needs greater support. Therefore, the core of this initiative is to bring about cooperation between leading research institutes and partners from these regions. Together with eight leading research institutes, we summarised, in a white paper, the prerequisites and best-practice models, which show how such centres for excellent research can be established. The initiative has attracted major interest on the part of politicians at EU level and representatives of Eastern European countries. If the initiative is taken into consideration in the Horizon 2020 European Framework Programme for Research and Innovation, it could contribute to the achievement of success stories like the development of scientific centres of excellence in the new German States.

A handwritten signature in black ink that reads "P. Gruss".

PETER GRUSS,
PRESIDENT OF THE MAX PLANCK SOCIETY