LOEWE Center Launched in Marburg

Under the LOEWE program, the government of the German federal state of Hesse will make a total of 410 million euros in science sponsorship available through 2013. The LOEWE Center, inaugurated in Marburg in November, is dedicated to the fledgling research field of synthetic microbiology and bundles the broad-based microbiological expertise developed at the Max Planck Institute for Terrestrial Microbiology and the Philipps-Universität Marburg. Over the next three years, the LOEWE Center will receive 21 million euros in funding. This is the second LOEWE Center in which the Max Planck Society is playing a part - the state of Hesse has also already earmarked 15 million euros for a LOEWE Center devoted to lung and respiratory diseases with the involvement of the Max Planck Institute for Heart and Lung Research in Bad Nauheim.



Volker Nienhaus, President of the Philipps-Universität Marburg, with Science Minister Eva Kühne-Hörmann, scientists Bruno Eckhardt and Lotte Søgaard-Andersen, and Peter Gruss, President of the Max Planck Society (left to right).

The Lessons of Nature

Natural materials are comprised of very few components, yet they still possess a wide variety of microstructures. Nature needs just a tiny number of ingredients to create such composites as mother-of-pearl and teeth, which exhibit outstanding material properties such as high breaking resistance. In the case of artificial materials, the opposite applies: generally, there are only a limited number of hierarchical levels, but a plethora of potential substances that can be combined.

A new program run by the German Research Foundation (DFG) is investigating the construction principles and manufacture of hierarchically structured materials based on the models of nature. In 13 different projects involving more than 10 universities and Max Planck Institutes, scientists are attempting to develop high-performance materials inspired by insect hairs, nutshells and plants.

It Doesn't Have to Be Oil

The German Research Foundation (DFG) has approved eight million euros in funding for a new Collaborative Research Center (CRC/Transregio). Scientists from the Max Planck Institute for the Dynamics of Complex Technical Systems are joining with colleagues from the Otto von Guericke University Magdeburg, the TU Berlin and the TU Dortmund to study "integrated chemical processes in fluid multi-phase systems." They are seeking to develop new production processes that, in the future, will allow important basic crude-oil-derived chemicals to be replaced by comparable substances based on renewable raw materials. The funding is earmarked for a total period of 12 years.

Successful Result in the Contest for EU Research Funding

Max Planck Institutes were the recipients of a total of eight Advanced Grants awarded by the European Research Council (ERC) in 2009. This put the Max Planck Society in fourth place among the top research institutions in Europe (the CNRS, ETH Zurich and Cambridge University each received ten grants).

In Germany, the MPS tops the list, followed by the Ludwig Maximilian University Munich with three grants and the Technical University Munich and the Helmholtz Association with two successful applications each. The Advanced Grants can be applied for by established scientists. Six Starting Grants were awarded to Max Planck Society junior scientists in September last year.