

# Cross-Border Understanding

"Science & Art in Europe" brings Polish and German scientists and artists together for the third time



Delighted about the award from the Foundation for Polish Science: Klaus Hahlbrock (right), with Maciej Żylicz, President of the Foundation (left) and Andrzej Członkowsky, Chairman of the Foundation Council.

How can we improve our relationship with our Polish neighbors, which has been seriously impaired over the past 200 years? In the view of Klaus Hahlbrock, former Vice President of the MPS and co-initiator of the "Science & Art in Europe," science and art offer fertile ground for understanding one another.

Polish and German scientists and artists met for the first time in November 2002 at the "Science & Art in Europe" event. In the course of numerous scientific symposia, an art exhibition, concert and receptions held in Warsaw, Krakow and Poznan, participants were able to meet and exchange ideas.

The success of this event inspired the organizers in 2005 to attempt a second round, this time in Berlin, Dresden and Jena.

This year "Science & Art in Europe" returned to Warsaw. The lion's share of the organization was undertaken by the Foundation for Polish Science, supported by two partners in Poland, the Polish Academy of Science and the Academy of Arts and Sciences, and three in Germany, the European Academy of Otzenhausen, the MPS and the Volkswagen Foundation. The main focus was on ecology, energy and climate, with public lectures delivered by Max Planck scientists Peter Berthold and Günther Hasinger along with Stefan Rahmsdorf of the Potsdam Institute for Climate Impact Research and Polish colleagues working in these specialist fields. A symposium entitled "Trade-offs as a response to energetic bottlenecks" prompted an exchange of ideas between scientists from institutions including the Max Planck Institute for Ornithology, the Mammal Research Institute of the Polish Academy of Science and the Leibniz Institute of Freshwater Ecology and Inland Fisheries.

The meeting also brought together artists from both countries. Poland's Meccorre String Quartet and German students from the Musikhochschule Freiburg gave a joint performance of Mendelssohn's octet for strings. And there was a surprise in store for Klaus Hahlbrock, who ever since his days as Vice President of the Max Planck Society has been committed to good relations and fruitful exchanges with our Eastern European neighbors, especially Poland. The Foundation for Polish Science awarded him an Honorary Distinction for his outstanding services in support of cooperation between Poland and Germany in the field of science.

Photo: FNP (above), Amac Garbe (below)



## "And the Axolotl goes to..."

Dresden MPI presents first internal award for public relations

The MPI for Molecular Cell Biology and Genetics is always at the forefront when it comes to successful public relations. Now the institute even has its own internal award for employees with the brightest ideas: the Golden Axolotl.

"I certainly can't complain – at my institute, public relations is viewed less as a necessary evil than as something to be supported with energy and imagination," says Florian Frisch, who has headed the PR department at the Max Planck Institute for Molecular Cell Biology and Genetics in Dresden since 2003. The staff at

the institute have put their heart and soul into a variety of events, and "it was time to really say a thank-you for their wonderful support." Frisch knew at once that something special was called for. The idea quickly developed of an internal PR award, and in next to no time it came to fruition: "One morning while showering, in my mind's eye I saw the Golden Axolotl," the press spokesperson recalls.

After years of media publicity, the Mexican salamander has become something of a mascot for the institute and therefore makes an ideal trophy – Caro-

lyn the salamander is one of the most popular attractions for the approximately 3,000 people who visit the institute every year. "It's all the more appropriate because the axolotl is such a cuddly-looking creature," Florian adds. The award is, after all, intended to emphasize the lighter side of things. The Directors liked the idea "that the whole thing is meant to be serious, but not too serious, and that such an award not only emphasizes what we do, but also acts as an incentive for others to join in."

Florian Frisch invited the entire workforce to submit nominations and assembled a jury: besides himself, it comprises Stephan Schön, the science editor of the Sächsische Zeitung, and Susann Pfeiffer, who coordinates "Network Dresden – the

# Advances in 3-D

Inter-institute workshop on applications in science

A reasonably powerful computer is all it takes to view objects of scientific study in lifelike reality in the comfort of one's own home – however, the 3-D software involved often has limitations. A workshop hosted jointly in Jena by the MPI for the History of Science, the Kunsthistorisches Institut in Florenz and the Hilprecht Collection of Middle Eastern Antiquities at the Friedrich Schiller University aimed to jointly overcome these limits.

Imagine you are an art historian standing in a monastery in southern Italy. Above you, in the semi-darkness, the capitals of the columns are inscribed with fantastic figures. Wouldn't it be nice to view them on your monitor at home with virtual lamps illuminating every detail?

Or perhaps you're in a museum, staring at a 4,000-year-old clay tablet on which a schoolchild once wrote out tiny sums. How useful it would be to enlarge and rotate them on-screen in three-dimensional form.

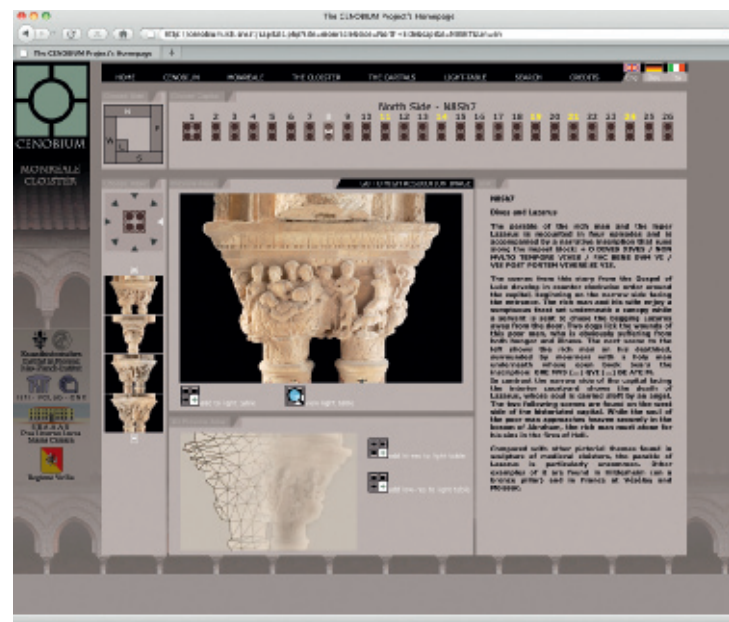
Or perhaps as a biologist you need to measure the skulls of small rodents without piercing the objects with your measuring instruments. Wouldn't it be help-

ful to call up images of the skulls on-screen and measure every aspect with a virtual ruler?

In fact, you can do all of these things! Scientists representing a wide range of disciplines attended a workshop at the end of last year to explore the possibilities. They contributed their experiences with computer-generated 3-D models and techniques and considered whether and where there are advantages in jointly developing new technologies and software.

Three methods are currently in use in scientific applications. Firstly, there are the models and virtual worlds created using "classic" computer-aided design (CAD) techniques; secondly, there are models calculated on the basis of tomographic sections, and thirdly, there are scanners that record stereographic images from which virtual grids can be created by triangulating the measuring points. These provide models of surface areas to which textures can be added as required.

Matteo Dellepiane (of the Istituto di Scienza e Tecnologie dell'Informazione "A. Faedo" in Pisa) introduced 3D-COFORM, a working environment in which to document and display 3-D models as tools for scientific study. Anja Schunke (MPI for Evolutionary Biology, Plön) reported on her work on rodent skulls. Distinctive areas of the skulls are examined for evidence of whether the rodents' eating habits contributed to the evolu-



The Cenobium website includes images of the capitals of the cloister columns at Italian monasteries.

tion of their skulls. The sometimes physical exertions required of a scientist were highlighted in the presentation by Christiane Bathow, who described an expedition to Inner Mongolia.

The team of scientists who look after the Hilprecht Collection and their colleagues from the MPI for the History of Science demonstrated the scanners currently being used to record mathematical cuneiform tablets. Ute Dercks of the Kunsthistorisches Institut in Florenz introduced the Cenobium project that aims to create a multimedia record of Romanesque cloister capitals in the Mediterranean area. The scientists at the MPI for Evolutionary Anthropology are also well equipped with 3-D technology, as research coordinator Jörg Noack described in a presentation entitled "Bits, Bytes and Neanderthals." The Department of Human Evolution has an ultra-modern virtual reality laboratory used to reconstruct fossil fragments and fossils that have become deformed, as well as to conduct virtual explorations of archaeological sites.

City of Science." "This is also intended to make the point that the PR work done by scientists is appreciated in the outside world," Florian explains.

Faced with a list of six suggestions, the jury picked the lab team headed by Director Elisabeth Knust: "They have a very broad outlook with the right approach for every age group, they break subjects down wonderfully well for a lay audience and continuously adapt their ideas to suit the circumstances," proclaimed the jury. For example, the lab has devised a cooking demonstration that shows how to extract DNA from onions using ordinary kitchen utensils. Sven Klose, a doctoral student in Dr. Knust's laboratory, received the Golden Axolotl in front of 400 members of staff at the 2009 Christmas party. He was delighted: "When we take time out to explain our work to the public, we notice how much this reduces their skepticism toward modern science."

# The Philosophy of Academic Coexistence

International Centers (IBZs) and Guest Houses aim for brand recognition



Representatives of Guest Houses and meeting centers met for the fourth time.

Sometimes it's not so much the intellectual issues that pose problems for scientists. For many of them, especially when spending time abroad, the first priority is to find a suitable home for the family or a good kindergarten. Visiting scientists at German universities and Max Planck Institutes receive help in matters like these from the International Centers (IBZs) and Guest Houses. Representatives of these organizations met in Munich in December to exchange ideas.

This was their fourth meeting since 2002, and it prompted considerable interest. Some 28 IBZs and Guest Houses were represented, even though there has so far been little networking between them. So when the participants met for a Bavarian sausage breakfast, they were not short of things to talk about. Items on the agenda ranged from integrating different cultures to financing and administrative matters, through to "meet-and-greet lounges" and operating instructions for washing machines in Chinese.

The IBZs and Guest Houses can trace their history back to the 1960s when the first Guest Houses – already a common feature in the Anglo-Saxon countries – were established in Germany. The next stage saw the establishment of the IBZs, with the buildings initially financed by the Alexander von Humboldt Foundation. Over time,

a variety of different forms of financing have developed, and the system of organization is by no means standardized. The bandwidth ranges from autonomous associations to university endowments. At a local level, the IBZs have strong links with one another. The Munich association, for example, combines the universities and the Max Planck Society.

The IBZs and Guest Houses are united by an underlying sense of purpose that one representative from Berlin described as the "philosophy of academic coexistence." The goal is for scientists from abroad to feel at home in Germany. On the one hand, this means finding suitable accommodation without undue difficulty. On the other hand, many visitors feel the need for personal contacts in a foreign land. Therefore, the Centers offer scientific lectures, discussion groups, concert evenings and other leisure encounters. One is even affiliated with a kindergarten and a school.

Due to the different ways in which they are organized, however, the Centers often find themselves dealing with problems on their own. Audit offices, for instance, dispute whether operating a guest house should even be one of the tasks of a scientific institution. Some participants were concerned that as funds become scarcer in the coming years these problems will intensify. And yet, in an age of increasing

globalization, paralleled by a growing skepticism toward foreigners, the IBZs and Guest Houses are now more important than ever. In order to present a more united front in the future, the representatives attending the meeting agreed to reinforce their "brand" by forming an alliance.

The meeting was also an opportunity to exchange practical experiences. On a guided tour of the newly renovated Munich IBZ, the female participants – the IBZs are mostly operated by women – drew inspiration from the interior design features. With utility costs included in the rents charged by most Centers, it is often a challenge to persuade residents to be economical in their use of electricity and water.

Working at the IBZs and Guest Houses also requires extensive interpersonal skills to strengthen communal life. The atmosphere is also aided by the requirement written into the rental agreements for residents to give presentations of their own work. The participants from Munich in particular were concerned that intercultural exchanges at the IBZs might suffer from being too dependent on the work of volunteer program planners – one reason being that many of the female scientists who previously gave generously of their time now have professional commitments of their own.