

PHYSICS COMMUNITY

Germany Assembles Nanotechnology Networks

Six nanotechnology centers are starting up in Germany this fall, as part of a DM 150 million (\$90 million) push to keep the country internationally competitive in this burgeoning field.

The main R&D areas of the centers, which were chosen from among 14 bids, are ultrathin functional layers (based in Dresden); applications of nanostructures in optoelectronics (Berlin); development of lateral nanostructures (Aachen); chemical functionalization of nanostructures (Tübingen); ultraprecise surface measurements (Braunschweig); and nanostructure analysis methods (Münster).

Each center is organized as a network, with 25–100 participating groups from universities, research institutes and industry from around the country. This decentralized setup is meant to “create highly attractive jobs in new industrial areas and to bridge the well-known gap between fundamental research and industrial applications,” says Heinrich Kurz, the spokesman for the Aachen center. Adds physicist Harald Fuchs, the spokesman for the nanostructure analysis methods center, “Industry will know where to come with questions about product development, and students, in particular, will benefit by getting ideas early for specific research tasks needed by industry.”

The centers are also expected to advise the German government on research and technology matters, says Bernd Hunger, a spokesman for the Federal Ministry of Education, Science, Research and Technology (BMBF), which is funding the centers.

Each center will receive about DM 500 000 a year for three years in start-up money, and the BMBF plans to spend an additional DM 30 million a year on nanotechnology over the next five years. This money is to be available competitively to all researchers, though members of the centers will be given priority, Hunger says.

Distributed networks for fostering interdisciplinary research and technology transfer are springing up worldwide in various scientific fields. These six nanotechnology centers are modeled on biotechnology centers set up in Germany two years ago, and other such enterprises exist or are planned in

Switzerland, the UK, the US and elsewhere. The German nanotechnology centers are expected to seek additional, nongovernment funding and to produce spin-off companies. The hope is that they'll become self-sustaining after five years.

TONI FEDER

Cambridge to Get New Library, Hawking Archive

Thanks to a \$12.5 million gift from Intel Corp cofounder Gordon Moore and his wife, Betty Moore, the University of Cambridge will have a physical sciences and technology library that

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GORDON MOORE (right) with Stephen Hawking.

will bring under one roof resources now scattered throughout the institution.

The new library will provide both print and electronic media storage and, librarian Peter Fox says, “will be equipped to take advantage of new, as-yet-undreamt-of forms of information technology.” Planned as a circular building, the library will go up next to the university’s new mathematics center. Construction is scheduled to begin next fall, with the library to open about a year later.

Cambridge physicist Stephen Hawking is donating his papers to the university, and they will be housed in the library, along with the papers of Isaac Newton, Charles Darwin and other scientists. The Hawking archive will include handwritten papers from before 1973, an early draft of his book *A Brief History of Time* and more recent as well as future works in electronic form.

Hawking, who has long been physically immobilized by a motor neuron disease, uses a laptop that was outfitted by Intel with communication aids

such as wireless access to the Internet and software to accelerate text-to-voice synthesis.

TONI FEDER

Hogstrom Is AAPM’s President-Elect for 1999

Next month, the American Association of Physicists in Medicine will get a new president-elect: Kenneth R. Hogstrom, of the University of Texas, Houston. Hogstrom will succeed Geoffrey Ibbott, who will begin his one-year term as president of AAPM.

Hogstrom is a professor and the chairman of the radiation physics department at the University of Texas M. D. Anderson Cancer Center in Houston. The recipient of BS and MS degrees from the University of Houston and a PhD in physics from Rice University, Hogstrom has done research on the application of electron transport to beam design, dose measurement, dose calculation and treatment modifiers, and the development of stereotactic and conformal therapy techniques.

Also taking office next month will be James M. Galvin (Thomas Jefferson University), as secretary of AAPM, and four new board members at large: Thomas Rockwell Mackie (University of Wisconsin—Madison); Mary K. Martel (University of Michigan Medical School); Cynthia H. McCollough (Mayo Clinic); and David W. O. Rogers (National Research Council of Canada).



K. HOGSTROM

APS Elects Trilling Vice President

George H. Trilling has been elected vice president of the American Physical Society for 1999. On 1 January, he will succeed James Langer, and will become president-elect of APS in 2000 and president in 2001.

Trilling is a professor emeritus of physics at the University of California, Berkeley and a senior faculty physicist at Lawrence Berkeley National Labora-