

spend about half his time studying the material properties of plutonium. He will also serve as a senior adviser on lab-related issues to UC president Richard Atkinson, and he plans to continue working with Russian nuclear scientists to reduce the risks from Russian nuclear material. In fact, during the last days of his tenure as director, Hecker was in Siberia.

TONI FEDER

University of California Reviews Its Physics Programs

About 60 physicists from the University of California's eight physics and two astronomy departments, and from the three UC-run national labs, met this past spring in Berkeley to review the universities' physics programs at the behest of UC's vice chancellors.

One reason for these systemwide reviews—they've been conducted in history, anthropology, foreign languages and other fields, and more are planned—is to see how things are settling down after the faculty shrinkage that resulted from aggressive early retirement programs earlier this decade. Between 1991 and 1994, the total number of UC faculty "full-time equivalencies" shrank by 13%, according to Jim Litrownik, of UC's Office of the President. Physics lost 75 of 287 eligible professors, with UC Berkeley losing the most (about 21) and UC San Diego, UCLA and UC Riverside losing 10 to 12 each.

Among the topics discussed at the meeting were research equipment and facilities, computers and networking, the need for more start-up money for new faculty, undergraduate and graduate education and how to find the best balance between core physics subjects and subjects that cross boundaries into other fields—in short, a host of issues that concern physics departments across the country. The participants noted that UC could better exploit the intellectual and infrastructure resources at the three UC-run labs (Los Alamos, Lawrence Livermore and Lawrence Berkeley). And a decision was made to conduct a systemwide review of the graduate curriculum "to see what steps can be taken to make this curriculum more relevant to the needs of the students of today," according to UCLA's dean of physical sciences, Roberto Peccei, who organized the meeting.

An annual meeting of UC physics and astronomy chairs and their counterparts from the three labs was suggested as a forum to continue to discuss such issues and to seek ways to improve intercampus and campus-lab

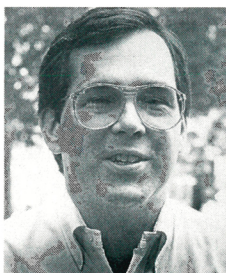
communication and collaboration. However, the meeting participants felt that improving the infrastructure, which had been the other major recommendation to come out of the spring meeting, went beyond physics, and so should be handled by the vice chancellors.

TONI FEDER

Rossnagel Is President-Elect of AVS for 1998

On 1 January, Stephen M. Rossnagel will take office as president-elect of the American Vacuum Society. He will assume the presidency in 1999, succeeding Jerry M. Woodall of Purdue University.

Currently a research staff member at IBM's Thomas J. Watson Research Center in Yorktown Heights, New York, Rossnagel earned his BS and MS degrees from Pennsylvania State University in 1975 and 1977, respectively. He then worked on plasma-surface interactions at Princeton University before



STEPHEN ROSSNAGEL

returning to graduate school at Colorado State University, where he received his PhD in physics in 1982. At IBM, his work centers on process technology for interconnect and pack-

aging applications, based mostly on magnetron sputtering. "Over the years, AVS has grown into a number of areas that diverge from the historical realm of vacuum technology," Rossnagel notes, such as biomaterials interfaces, nanostructures and flat-panel displays. "I think the challenge for AVS is to learn how to grow into these different but somehow connected areas while at the same time keeping the underlying core areas in mind," he says.

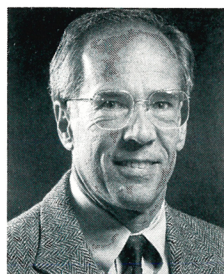
In other results of the AVS election, Joseph E. Greene of the University of Illinois at Urbana-Champaign and Sweden's Linköping University was reelected clerk, and N. Rey Whetten, AVS's technical director, was reelected treasurer. The new directors are Yip-Wah Chung of Northwestern University, Elizabeth A. Dobisz of the Naval Research Laboratory and Peter Sheldon of the National Renewable Energy Laboratory. James M. E. Harper of the T. J. Watson Research Center and

Anne L. Testoni of Digital Equipment Corp were elected trustees of AVS.

Ippen Will Lead OSA in 2000

Members of the Optical Society of America have elected Erich Ippen of MIT to be their vice president for 1998. The following year, he will become president-elect of OSA and in 2000, president. The society's president for 1998 is Gary Bjorklund.

Ippen, the Elihu Thomson Professor of Electrical Engineering and a professor of physics at MIT, is known for his work on developing ultrashort pulse optical sources and measurement



ERICH IPPEN

techniques, and applying them to studies of ultrafast processes in materials and devices. Before joining MIT in 1980, he was a member of the research staff at AT&T Bell Laboratories in Holmdel, New Jersey, for 12 years. He holds a 1968 PhD in electrical engineering from the University of California, Berkeley.

"As OSA adjusts, along with the rest of us, to changing economic conditions, new communication technologies and increasing globalization," Ippen says, "we need to make sure we preserve its friendly and unbureaucratic character and its high level of professionalism," so as to provide "the strongest foundation for meeting the challenges of the next century head on."

Newly elected to the OSA board of directors are Connie Chang-Hasnain of the University of California, Berkeley, Peter Moulton of Schwartz Electro-Optics and Eric Van Stryland of the University of Central Florida.

IBM Will Open Research Center in India

IBM plans to open a research center in New Delhi, India, next month. The Solutions Research Center will be the company's eighth research center worldwide and will focus on technology development in India and other Pacific Rim countries.

The center's initial projects, according to Paul Horn, IBM's senior vice president for research, will include cyclone and hurricane forecasting—an

area in which IBM began collaborating with researchers at the Indian Institute of Technology in New Delhi (IIT) about two years ago; software development for mining local data; mobile communications systems; and networking, including electronic security, data transmission and electronic distance learning.

IBM plans to invest about \$25 million over five years in the center, which will be housed at IIT. Collaborations with universities, industry and the government will be essential for all projects, says Alok Aggarwal, the center's director, and the company has earmarked an additional \$10 million for university research grants.



ALOK AGGARWAL

The center will start out with about 20 scientists and engineers, and the plan is to grow to about 100 by the year 2000.

"The [Indian and Pacific Rim] markets are growing rapidly and they have unique problems," says Aggarwal, who has been at IBM for 13 years. "We want to find ways to provide solutions to these problems."

IN BRIEF

The Nicholas Metropolis Award for Outstanding Doctoral Thesis Work in Computational Physics has been established by the American Physical Society. The award honors Metropolis, a senior fellow emeritus in the theoretical division at Los Alamos National Laboratory, for his pioneering work in mathematical physics and applications to computer simulations in physics. The Metropolis algorithm, for Monte Carlo solutions of problems in statistical physics, "is so widely used in computational materials science," says Jerry Brackbill, editor of the *Journal of Computational Physics*, "that it is hard to imagine how the field would have developed in its absence." Endowed by that journal, the \$1500 award will be given annually, starting in 1999, for "outstanding quality and achievement in computational physics and to encourage effective written and oral presentation of research results."

In September, Catherine Bréchnignac, director of France's National Center for Scientific Research (CNRS), proposed new heads for three of the center's seven departments and proposed

retaining the heads of the other four; her proposals were given the go-ahead by French science minister Claude Allègre on 1 October. Jean-Paul Pouget, a solid-state physicist who has been at CNRS since 1982, is now in charge of the physical and mathematical sciences department, which Bréchnignac ran for two years before becoming CNRS's director in July (see *PHYSICS TODAY*, September, page 61). Bréchnignac also named Jacques Samarut to head up life sciences and Marie-Claude Maurel to head up social sciences. The four department heads staying on are Jean-Claude Bernier (chemical sciences), Claude Detraz (nuclear and particle physics), Jean-Jacques Gagnepain (engineering sciences) and Jean-François Minster (Earth and space sciences).

Awards totaling \$10 million for programs that will train graduate students and postdocs in the physical,

chemical and computational sciences to work in the biological sciences are being offered by the Burroughs Wellcome Fund. With these grants, as with a first round awarded two years ago, the Burroughs Wellcome Fund, a private foundation (with no ties to pharmaceutical giant Glaxo Wellcome) says it aims to "break down traditional barriers at academic institutions" and to bring "different approaches and new ideas into the biological arena." Grants worth \$350 000 to \$500 000 annually for five years will be given to four to six universities or consortia of universities and research institutes in the US and Canada. For more information, visit the Web site at <http://www.bwfund.org>; write to Burroughs Wellcome Fund, Interfaces Program, 4709 Creekstone Drive, Suite 100, Durham, NC 27703; send e-mail to info@bwfund.org; or call 919-991-5100. The deadline for submitting pre-proposals is 2 February 1998. ■

Web Watch

► <http://www.nsf.gov/od/osti/>

The Office of Science and Technology Infrastructure of the National Science Foundation has recently posted solicitations on its Web page for the Major Research Instrumentation Program and the Science Technologies Centers: Integrative Partnerships Program. The MRI Program has a 30 January 1998 deadline and is open to a variety of US institutions, including universities, nonprofit research institutes and research museums. The STC program is open to US academic institutions. Notice of intent to submit a preproposal to STC must be e-mailed by 6 January 1998 to stc@nsf.gov, which is also the address for general inquiries about STC. MRI inquiries should go to mri@nsf.gov. For both programs, proposals must be submitted by way of the NSF's FastLane home page at <http://www.fastlane.nsf.gov/>.

► <http://www.nas.edu/rise/>

RISE (Resources for Involving Scientists in Education) has recently launched a Web site to further its goal of helping scientists, engineers and other technical professionals to play an effective role in improving science education from kindergarten to high school. Newcomers to such activities can start by clicking on "roles" to find out which role would suit them best: Working directly with students? With teachers? Developing instructional materials? "Examples" provides descriptions of a diverse array of programs, including BEAMS (Becoming Enthusiastic About Math and Science) at Thomas Jefferson National Accelerator Facility and OPPS (Operation Primary Physical Science). "Background" includes information resources and essays on topics such as "Understanding the Culture of K-12 Schools" and "What Is Systemic Reform?" RISE is a project of the National Research Council's Center for Science, Mathematics and Engineering Education.

► <http://vizier.u-strasbg.fr/starpages.html>

StarPages is a large collection of searchable resources related to astronomy and space. It consists primarily of three databases: StarWorlds, a directory of about 6000 organizations, companies and so on connected with astronomy and space sciences; StarBits, a multilingual database of abbreviations, acronyms and symbols, with expansions or meanings for more than 110 000 entries; and StarHeads, with links to the personal Web pages of about 4000 astronomers and space scientists. StarPages is coordinated by André Heck of the Strasbourg Astronomical Observatory.

► All links mentioned in Web Watch are included on *PHYSICS TODAY*'s home page, <http://www.aip.org/pt/>. Please e-mail your suggestions for topics or sites to be covered in Web Watch to ptwww@aip.acp.org.

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