

## Merger of OSA and SPIE Goes to the Polls

Members of the Optical Society of America and SPIE—The International Society for Optical Engineering are voting this summer on whether to merge the two societies. The results will be announced in October; if the merger gets the nod, it will go into effect on 1 January.

In the proposed merger, OSA and SPIE would come under a new umbrella organization and share a single budget. Proponents bill it as a “merger of operations and federation of cultures” that would institute closer ties between the two professional societies while preserving their distinct characters—OSA’s more academic bent and SPIE’s more applications-oriented focus. Scientists would join the parent organization, and membership in OSA and SPIE would cost an additional \$10 each.

This isn’t the first time that such a merger has been considered. In 1987, OSA, SPIE, and the optics arm of IEEE considered forming a federation, but the idea foundered.

The current proposal has also been controversial. One of the main arguments against the merger is that basic science would become “the tail on the dog,” as MIT physicist and OSA board member David Pritchard puts it. For example, Pritchard fears that without full editorial and financial control, the quality of OSA’s journals would drop. For their part, some SPIE members worry that it would slow decision making at their organization. Critics contend that the advantages of closer cooperation can be had without actually merging the two societies. In the process of examining a merger, “a lot of trust has been built up,” says Pritchard. Therefore, if the merger is defeated, “and if we don’t throw too many tomatoes in the debate, there will be enough cooperative spirit to get things done together.”

Despite such concerns, the OSA and SPIE boards voted in May to put the current proposal to their members (the OSA board vote was 13 for, 6 against, with one abstention; SPIE’s was 14 to 1 in favor). Those in favor argue that a unified organization would be more influential politically, more compelling for young scientists, better able to collaborate with international scientific societies, and have lower publishing expenses.

OSA’s Paul Forman, cochair of the joint task force that recommended the merger (see *PHYSICS TODAY*, June 1998, page 60), says a single cashbox “will attenuate competition.” Adds M. J. Soileau, Forman’s SPIE counterpart, “The rank-and-file members are say-

ing, It’s about time, don’t screw it up, and don’t raise my dues.”

For further information, including the task force’s report and a membership survey, visit <http://www.spie.org/info/jtf/home.html> on the Web.

## IUPAP Elects New Officers

The International Union of Pure and Applied Physics (IUPAP) elected officers for the new millennium at its triennial assembly in Atlanta this spring. Beginning three-year terms on 1 September will be Burton Richter, who is stepping down from the directorship of the Stanford Linear Accelerator Center and will become president, succeeding Sweden’s Jan Nilsson; Yves Petroff, who heads the European Synchrotron Radiation Facility in Grenoble, France, and will become president designate; René Turlay, who is a scientific adviser to France’s Atomic Energy Commission and will serve a second term as secretary general; and Judy Franz, the American Physical Society’s executive officer, who will become the associate secretary general. Eight new vice presidents and new leaders for the organization’s working groups were also elected. IUPAP currently has 46 member and 18 observer countries. (Libya lost its membership this year, having not paid its dues.)

At the assembly, IUPAP’s council voted to form a working group on women in physics to “survey the present situation . . . and suggest means to improve the situation for women in physics.” Another item on IUPAP’s agenda, Richter says, will be to “do something about the fragmentation of physics” by getting IUPAP’s subgroups, or commissions, to work more closely together on big-science issues, including neutron sources and nonaccelerator-based particle physics facilities, such as an underwater neutrino detector and gravity wave detectors.

## Number of Physics Faculty Is Edging Up

The professorial ranks in physics have made slight but steady increases through the 1990s, according to the latest academic workforce survey conducted by the American Institute of Physics. The biannual survey found that as of the spring of 1998, there were 8350 “full-time equivalent” physicists employed by degree-granting departments in the US, a 2% increase since 1994 (this figure does not include postdocs, professors in departments that do not grant degrees, or researchers

in so-called soft-money appointments).

About 500 new faculty members were hired for the 1997–98 academic year; the survey found, with nearly half of them filling temporary or part-time positions. Among the new hires at PhD departments, about half had earned their PhDs in the US before 1994 and one-fourth had gotten their PhDs outside the US. Condensed matter continued to be the most common specialization among new hires, followed by astronomy/astrophysics and elementary particle physics.

Since 1994, the annual turnover among tenured and tenure-track physicists has remained steady, at about 3.6%, while the annual retirement rate has increased slightly, to 2.6%. For 1998–99, one-tenth of the departments reported having frozen positions—vacancies that temporarily could not be filled due to budgetary restraints, dropping enrollments, or other factors—and two-thirds said there was at least some possibility that they would lose a position if a faculty member left or retired. On the other hand, some departments intended to expand: Of the 373 tenured and tenure-track positions being filled for 1998–99, one-fifth were newly created.

The representation of women physicists in academia has been climbing. In 1998, 17% of assistant professors in physics were women, up from 12% in 1994. Women now account for 8% of all physics faculty slots, and nearly half of the departments have at least one woman faculty member.

The 1997–98 *Academic Workforce Report* is available free of charge from AIP, Education and Employment Statistics Division, One Physics Ellipse, College Park, MD 20740; e-mail [stats@aip.org](mailto:stats@aip.org); Web <http://www.aip.org/statistics>.

## IN BRIEF

Radio astronomers in Europe will enjoy quiet in the 1610–1613.8 MHz hydroxyl band about half the time until 2006, the European Science Foundation announced in late May. That agreement, between ESF and telecommunications giant Iridium LLC, covers the period remaining until a stricter pact kicks in (see *PHYSICS TODAY*, October 1998, page 75). For the interim, signal spillover from Iridium’s flotilla of mobile satellites, which operate in a neighboring frequency band, may not top –238 dB W/m<sup>2</sup> Hz for seven contiguous hours each weeknight and throughout weekends. The good news, says Jim Cohen, who chairs the ESF’s Committee on Radio Astronomy Frequencies, “is that we will be able to continue observations at the level we’ve

been doing them." The telecommunications industry's growing reliance on satellite technology, however, has radio astronomers worried about future safeguarding of radio observations in many frequency bands.

**T**urn that dissertation into cash: The Merrill Lynch Forum, a think tank operated by the investment banking firm, is looking for PhD research with commercial appeal. Through its Innovation Grants Competition, now in its second year, the forum aims "to harness the vast, unrealized potential of academic research and discovery" and to encourage "entrepreneurial literacy" among academic researchers, according to Merrill Lynch CEO David H. Komansky. The top prize of \$50 000 will go to the doctoral recipient who can best explain, in 3000 words or less, the market potential of his or her dissertation topic; two second prizes of \$20 000 and two third prizes of \$10 000 will also be awarded. The winners will get to discuss their ideas with entrepreneurs and venture capitalists. First among last year's 200 competitors was J. Mark Noworolski, a postdoc at the University of California, Berkeley, whose work on microresonant power conversion devices could lead to a single-chip power converter for laptops, cellular phones, and other portable electronics. The competition is open to people who successfully defended their

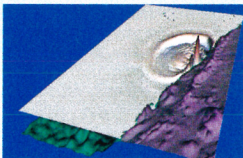
dissertations between 1 January 1997 and 15 September of this year. The deadline for entries is 15 September. How to contact the Merrill Lynch Forum: phone 888-333-6786, e-mail [InnovationGrants@ml.com](mailto:InnovationGrants@ml.com), Web <http://www.ml.com/woml/forum/>.

**O**n 3 June, Switzerland's supreme court ruled in favor of the American Institute of Physics and the American Physical Society in a suit brought by the Gordon & Breach Publishing Group (see PHYSICS TODAY, October 1997, page 93). G&B had claimed that AIP and APS had engaged in unfair competition by publishing articles in this magazine and in the *Bulletin of the American Physical Society* that reported on the comparative costs to US libraries of various physics journals. The articles, written by the late Henry Barschall and published in 1988, found G&B's journals to be among the most expensive. The Swiss court required G&B to pay AIP and APS about \$13 000. But the real significance of the judgment, says the organizations' lawyer Richard Meserve, a partner with Covington & Burling in Washington, DC, "is that it allows the publication of scholarly information even if it is alleged to have a commercial component." AIP and APS earlier prevailed in similar cases in the US and Germany; the Swiss ruling leaves only one case pending, in France. ■

## Web Watch

<http://walrus.wr.usgs.gov/tsunami/PNG.html>

Last year, the most devastating and deadly tsunami of the past two decades hit Papua New Guinea's northern coast. As part of its effort to understand the phenomenon, the US Geological Survey has created a Descriptive Model of the July 17, 1998 Papua New Guinea Tsunami, and the Web site includes an animation of the evolution of the event.

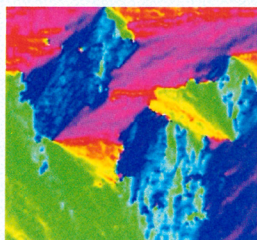


<http://www.towson.edu/~sweeting/wg/candywww.htm>

Scientific Experiments at Home: Wintergreen Candy and Other Triboluminescent Materials is an educational Web site devised by Towson University's Linda Sweeting. Triboluminescence happens when certain crystals are crushed, causing the charged, separated surfaces to emit photons. Sweeting explains how to observe the phenomenon, and discusses its properties and origin.

<http://milou.msc.cornell.edu/pattern.html>

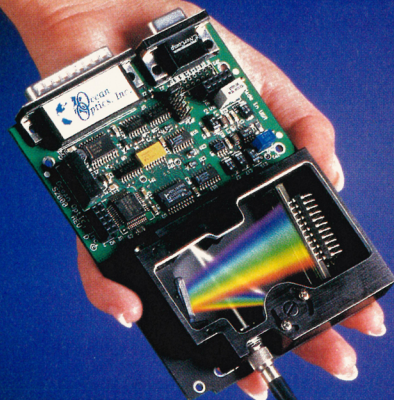
The dynamics of giant spirals in Rayleigh-Bénard convection is the featured subject of **Pattern Formation**, an animated Web page put together by the nonlinear dynamics and fluid dynamics group at Cornell University's Laboratory of Atomic and Solid State Physics.



To suggest topics or sites for Web Watch, please contact [ptwww@aip.org](mailto:ptwww@aip.org) by e-mail.

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