

Plan to merge optical societies under fire

[SAN DIEGO] A bid by the leaders of two major US optical science societies to merge their organizations has spawned a vociferous backlash. Dissident scientists are concerned that they could be steamrolled by engineers in the proposed new organization.

Leaders of the Optical Society of America (OSA), which is made up largely of scientists, and of the International Society for Optical Engineers (SPIE), a principally engineering group, are planning to ask the members of their organizations to vote later this year on the proposed merger.

Their goal is to form an international organization that is "intended to be the primary professional society for optical scientists and engineers so as to unify the field", says OSA president Anthony Siegman, an electrical engineer professor emeritus at Stanford University.

SPIE president Paul Schenker, an electrical engineer at California Institute of Technology, says the idea of unification is "grounded soundly" and argues that it "would provide better service to the optics discipline".

But the speed and manner in which the organizations' boards have moved ahead with the proposal over the past year has prompted a number of scientists to mount a challenge in order to either slow down the process or halt it completely.

A petition drive has been started, seeking a special meeting of OSA members at a conference next month in Baltimore, where OSA critics of the merger hope to muster votes to prevent it taking place immediately.

"It is being done too hastily [and] without sufficient safeguards," says Daniel James, a quantum computer scientist at the Los Alamos National Laboratory. "There may be a need for a change in the relationship of the two societies, but it should be evolutionary rather than revolutionary."

Objections to the unification plan appear to be rooted in a cultural clash between scientists and engineers. If the merger goes ahead as proposed, the critics fear that the purely scientific endeavours of OSA members will be dominated by the applied interests of engineers.

They are also worried that the amount of bureaucracy would increase, and that an end to the traditional competition between the two groups — which they argue has stimulated innovative thinking — will reduce the number of new scientific discoveries.

Some long-standing OSA members, such as Emil Wolf, Wilson professor of optical physics at the University of Rochester in New York, also feel that the leadership has undertaken an expensive merger process without sufficient support from the membership.

"It's like a business merger — a hostile merger done in an highly undemocratic

Quantitative comparisons of SPIE and OSA

	SPIE	OSA
No. of members	14,000	12,500
No. of corporate members	320	110
Dues	\$95 US, \$105 non-US	\$80
Typical member characteristics	Interested in engineering and applications	Middle-age white male, PhD in physics and interested in applied research

manner," says Wolf, one of OSA's elite honorary members. Other critics say the OSA board voted precipitously to spend up to \$400,000 on due diligence for the merger proposal, money that may be wasted if the effort is defeated.

But Schenker argues that the effort is "eminently democratic", pointing out that an opinion poll revealed that most members of both societies supported the merger. He also estimates that SPIE has so far spent only "a couple hundred thousand dollars" on unification efforts.

OSA, which is based in Washington DC, has about 12,500 members and an annual operating budget of about \$18 million, with \$14.5 million in annual revenues coming from the publication of journals and confer-

ence sponsorship. Officials say it also has about \$29 million in assets.

SPIE, based in Bellingham, WA, has about 14,000 members and about \$15 million in assets. According to Schenker, SPIE's annual operating budget is about \$16 million.

The first test of strength between those promoting the merger and their critics will take place at the Conference on Lasers & Electro-Optics/Quantum Electronics & Laser Science Conference, which opens on 23 May in Baltimore.

The OSA dissidents want to slow down the process so it does not go to a membership vote at the annual meeting in September. They also seek safeguards to protect scientist members and more control of the assets of any unified organization.

Rex Dalton

Weapons labs tighten computer security

[WASHINGTON] Classified computer operations at the US Department of Energy's nuclear weapons laboratories are expected to return to normal this week, after a week-long 'stand-down' intended to focus employees' attention on security issues.

The 'stand-down', which began on 2 April, was ordered by energy secretary Bill Richardson. It was supposed to make each of the three laboratories — Los Alamos and Sandia in New Mexico, and Lawrence Livermore in California — suspend their normal classified operations and draw up new security plans. Operations would then recommence with the new procedures in place to prevent any possible transfer of classified computer files or other data onto non-classified computer systems.

The laboratories' computer systems remained shut down early this week as they awaited word from the department that security measures had been sufficiently enhanced. According to a spokesman for Los Alamos, the laboratories have now submitted their plans. These focus on isolating the separate networks of computers that handle classified and non-classified work. There are concerns that it is too easy to transfer files from the classified network to the unclassified one, creating the potential for classified data to be leaked by e-mail.

The energy department has previously ordered stand-downs in response to safety

or environmental problems, most recently at Los Alamos and at Brookhaven laboratory in New York state. Although irritating for staff, they are intended to convince critics that a given problem — security, in this case — is being taken seriously.

Ernie Moniz, under-secretary for energy, says he is confident that morale at the laboratories will be restored when the security clampdown is over. "There is a lot of uncertainty at the labs," he admits, adding that things will improve when the new security arrangements are implemented.

Moniz does not believe that the turmoil at the laboratories will hamper recruitment plans. He concedes that the proposed introduction of routine polygraph testing "is probably the most sensitive issue", but says it will be targeted at people with access to certain types of sensitive information.

Asked whether the department has any data to support the usefulness of polygraph testing, Moniz says: "The FBI thinks it is an important tool for its investigations."

Moniz hopes to persuade people in Washington that the laboratories already have stringent security systems. "We need to get out the message of how our security systems actually work, and that we have appropriately graded security structures. People who haven't been to the laboratories sometimes think they operate like university campuses."

Colin Macilwain