ESS. "But those of us in the project realize we have a long struggle to get consensus on funding—there's no single paymaster." Because the ESS was first appraised in Germany and many of the planners are there, he says, "there's a feeling that it's a German project, and that because they don't want it, it's failed. That's not true." Seventeen nations belong to the European Neutron Scattering Association, an organization that backs the ESS, Cywinski adds. "That leaves 16 nations that we have to talk to."

For now, though, Europe's usual big players are otherwise busy: The UK is intent on building a second target station for ISIS, currently the world's leading spallation source; France is focused on landing the International Thermonuclear Experimental Reactor; and Germany, in addition to giving the ESS the cold shoulder, has yet to start up its controversial research reactor, the FRM2, and has its eye on a global linear collider (see preceding story).

The best hope for the ESS may lie with regional governments. Interest is strong in Yorkshire, England; Lund, Sweden; and from a coalition of two former East German states. "They are all aware of the advantages of big science investments to develop their regions," says Kurt Clausen, a neutron physicist who moved from Denmark to Germany's Research Center Jülich to head the ESS central project team. These regions "want the ESS and work hard to get it. They also have potential access to huge sums of money—the regional development funds, which are much higher than the science budgets." **Toni Feder**

Chief Quits Spain's Research Institutions

Fed up with dwindling autonomy and a seeming lack of government support for science, Rolf Tarrach quit in February as president of the Consejo Superior de Investigaciones Científicas (CSIC), a network of about 115 research institutions across Spain. A theoretical high-energy physicist, Tarrach has returned to his post at the University of Barcelona.

Tarrach assumed the presidency about two and a half years ago, soon after oversight of the CSIC was moved from the education ministry to the newly created science and technology ministry. At the time, says Tarrach, "there was hope—that's why I accepted the position—that the new ministry would mean a boost in research, more positions, more resources, more money. But that has not been the case at all."


CSIC

Tarrach

CSIC

Lora-Tamayo

For example, Tarrach lobbied to raise the salaries of CSIC scientists, who are paid 7–10% less than university scientists, he says. The disparity stems from the decentralization of and subsequent increased regional support for the universities. "The best people will go to universities instead of to CSIC. I don't see any sense in having state research institutions if they are not attractive to researchers," says Tarrach. In mid-October, he sent a letter to the ministry asking for pay raises. But, he says, "I was not able to convince the previous or the present minister that this is an urgent issue."

The salaries issue was the last straw. More generally, says Tarrach, "I have had diminishing autonomy. This makes the system extremely inefficient. And I believe that the research should be as far as possible from the ministries—where politics dominates, and where long-term projects are not usually considered important."

The CSIC is in a critical situation now, adds Juan E. Iglesias, a researcher at the Institute for Materials Science in Madrid and a member of CSIC's governing board. "In the ministry, all the industrial things are considered as more important. We feel we have been kind of neglected. The most important thing we need is some degree of independence."

Before, there was more autonomy at the CSIC, agrees Pedro Echenique, founder and president of the Donostia International Physics Centre in San Sebastian. "Now, even the letterheads have the ministry." The issue goes beyond the CSIC, he adds. "We need to have an institutional architecture that gives scientists the power to run their own organizations."

CSIC again has a physicist as president. Emilio Lora-Tamayo comes from the National Center for Microelectronics in Barcelona and has served as the organization's vice president for research for the past five years. **Toni Feder**

Bankruptcy Hits Publishers, Libraries

When Sandy Spurlock of the Lovelace Respiratory Research Institute in Albuquerque, New Mexico, tried to confirm details of the institute's 2003 library subscriptions with RoweCom, a Massachusetts-based subscription agent that provides magazines and journals to thousands of libraries worldwide, none of her telephone calls or e-mails was returned. A few days later, RoweCom went into bankruptcy. "I first learned in late December that RoweCom had cashed our check for $79 000 but had no intention of paying [publishers] for our subscriptions," she says, "and we do not have the budget to pay for our [2003] subscriptions again. The implications for our research scientists are very serious."

Between April and December 2002, RoweCom collected more than $65 million from libraries and institutions, including the National Institutes of Health Library ($2.4 million), Virginia Tech ($1.6 million), 3M ($1.3 million), and Lawrence Livermore National Laboratory ($1.2 million). The company also collected significant sums from a number of state universities, Brookhaven National Laboratory, the US Library of Congress, and the National Academy of Sciences. In some cases, RoweCom offered substantial discounts to clients who paid early. The money was supposed to be transferred to more than 26 000 publishers, minus a commission fee. Instead, it was transferred to RoweCom's parent company, the Chicago-based divine Inc (which is now also in Chapter 11 bankruptcy). The transfer has resulted in lawsuits and a federal grand jury investigation. The only notice RoweCom gave its clients about the bankruptcy was a recommendation in late December that they find "alternate sources for their materials at this time."

News of RoweCom's bankruptcy filing did not surprise all librarians. "Given their low fees, there were serious questions about the possibility and quality of [client] support," says David Stern, director of science libraries at Yale University. He adds that he had been concerned for some time over RoweCom's balance sheet, especially after divine's purchase of the company in 2001. "The major beneficiaries from RoweCom were those investors that bailed out very quickly and saw a nice profit on their initial investments. The losers will be the remaining libraries and publishers that

will now have to subsidize the collapse through higher hidden costs," he says.

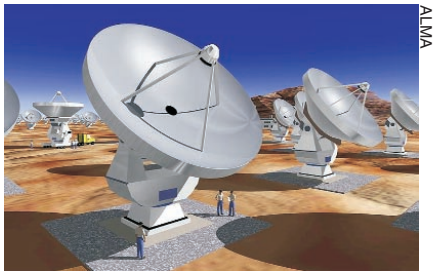
Among the journal publishers caught off-guard by the bankruptcy were Elsevier Science, Oxford University Press, the American Institute of Physics, the American Physical Society, the American Association of Physics Teachers, the Optical Society of America, and the American Geophysical Union. Those publishers have had to quickly develop procedures to limit their more than six-figure losses and help their subscription bases. The publishers helped form a creditors' committee with the libraries and, in some cases, they have offered to provide the libraries with 2003 subscriptions on the understanding that the libraries let the publishers take over financial claims against RoweCom. "I have been surprised and even touched by the generosity of many publishers during this difficult time," says Spurlock.

On 5 March, EBSCO Industries Inc, one of two remaining large international journal subscription agents, announced that it had reached an agreement to purchase RoweCom and its customer base for up to $6 million. The final price depends on a number of conditions, including having the 25 publishers that are owed more than half the subscription money sign on to EBSCO's takeover. All the library creditors will have their 2003 subscriptions fulfilled as long as they agree to sign up with EBSCO for 2004, but publishers will not be paid in full. Instead, EBSCO is proposing putting the financial burden on the publishers. They will receive payment from RoweCom's remaining assets—the equivalent of 10 to 20 cents on the dollar—for fulfilling this year's subscriptions.

The RoweCom bankruptcy may lead to a reluctance by libraries in the future to use subscription agents, says Spurlock, as online site licenses become more attractive. "These are actually easier to handle without an agent as a middle person in the communication cycle," she says. **Paul Guinnessy**

News Notes

ALMA green light. A powerful tool for peering at the early universe got the go-ahead on 25 February, when the North American and European partners signed an agreement to jointly build and run the Atacama Large Millimeter Array. The partners, represented by Rita Colwell and Catherine Cesarsky, directors, respectively, of NSF and the European Southern Observatory, will split the $620 million tab.


ALMA

An interferometer consisting of 64 dishes, each 12 meters across, ALMA will provide an unprecedented view of the distant, highly redshifted early universe. It will be used to study the formation of structures from organic molecules to planets, stars, galaxies, and galaxy clusters.

"ALMA heralds a breakthrough in submillimeter and millimeter astronomy, allowing some of the most penetrating studies of the universe ever made," says Piet van der Kruit, director of the Kapteyn Astronomical Institute at the University of Groningen in the Netherlands and president of the ESO council. "It is safe to predict that there will be exciting scientific surprises when ALMA enters into operation."

ALMA will be built at an elevation of 5000 meters in the Atacama desert in the Chilean Andes. Construction is slated to be completed by 2011. **TF**

Irish visitor awards. Fourteen scientists from abroad have been invited to Ireland for research stays. The new annual E. T. S. Walton Visitor Awards, named for Ireland's 1951 Nobel laureate in physics, were created by Science Foundation Ireland (SFI). Announcing the awards on 30 January, Mary Harney, the Minister for Enterprise, Trade and Employment, said, "In making these awards Ireland is not only recognizing these outstanding scientists, we are also building links with institutions across the world of international science."

The awards are to scientists in SFI's chosen niche investment areas of information and communications technology and biotechnology (see PHYSICS TODAY, April 2002, page 26). The awards total €1.7 million (roughly $1.8 million), with recipients getting up to €200 000 each to cover their relocation, research, conference attendance, and stipends for stays in Ireland of 3 to 12 months.

The inaugural E. T. S. Walton visitors in physics-related fields are Vladimir Buzek of the Institute of Physics in Slovakia, who will spend time at the National University of Ireland, Maynooth; Michael Carroll of Rice University (NUI, Galway); Christopher Fuchs of Lucent Technologies' Bell Labs (Dublin Institute of Technology); Atsuo Fukuda of Shinshu University, Japan (Trinity College Dublin); Mary Beth Ruskai of the University of Massachusetts at Lowell (DIT); and Stafford Withington of Cavendish Laboratory in Cambridge, UK (NUI, Maynooth). **TF** ■

WEB WATCH

http://www-mtl.mit.edu/semisubway.html

Duane Boning, an electrical engineering professor at MIT, has collected a set of online information sources about semiconductors and microsystems. For convenience, efficiency, and ease of use, Boning displays the links in the form of a map of what he calls **The Semiconductor Subway**.

http://rain.create.ucsb.edu/~clang

"Like the quantum world of the quarks, leptons, hadrons, gluons, and bosons, the micro-sonic domain remained invisible for centuries. Recent advances in technology let us probe and manipulate this formerly unseen world." Thus composer **Curtis Roads** introduces his approach to computer-generated music. Roads is the associate director of the Center for Research in Electronic Art Technology at the University of California, Santa Barbara. Extracts from his compositions are available on his Web site.

http://aa.usno.navy.mil

The **Astronomical Applications Department** of the US Naval Observatory provides precise astronomical data for defense, scientific, commercial, and civilian communities. Among the offerings on the department's Web page is a tool that calculates the times of sunrise and sunset for any day of the year and any location on the globe.

To suggest topics or sites for Web Watch, please phone the editor at (301) 209-3036. *Compiled and edited by* **Charles Day**