

endless ways a column of air can be made to vibrate, rather than as a saxophone used to punch out discrete frequencies."

Though a minority taste—just 22 people turned up to hear Butcher in Georgetown—freely improvised music has enough fans worldwide to support a host of independent CD labels (including ACTA, which Butcher runs) and an extensive network of performance spaces and festivals, most of which are in Europe. Still, no one gets rich playing such esoteric music. To supplement his income, the London-based Butcher spends eight hours a week teaching high school students a subject he hasn't completely forgotten—physics.

To hear samples of Butcher's work and learn about his upcoming concerts, visit Peter Stubley's European Free Improvisation Web page at <http://www.shef.ac.uk/misc/rec/ps/efi/eaudmp3.html>.

CHARLES DAY

Ban on Nuclear Waste Transport Eased in Germany

Nuclear waste shipments will be allowed to resume in Germany as of August. They were banned there and in several other European countries in May 1998, when it emerged that there was too much radioactivity on the outer surfaces of the containers and vehicles used—and that for years the nuclear utility companies responsible had hidden those violations from their governments (see *PHYSICS TODAY*, July 1998, page 54). Shipments were allowed to resume in France and Switzerland after just a few months, but they are still banned in the Netherlands. In Germany, where the scandal prompted the greatest public outcry, resumption remains controversial.

Germany's nuclear utilities have been pressing their government to lift the ban, with some of them claiming they are running out of on-site storage space for spent fuel, and will have to close down reactors if the waste isn't moved out. Now, waste shipments to storage sites within Germany will resume, but only with advance approval by the government on a case-by-case basis. Shipments to and from reprocessing plants in France and the UK, however, have not been given the go-ahead.

The German government has laid out 60 conditions aimed at improving the cleaning and monitoring of

nuclear waste cargo. But similar measures haven't solved the problem in France, where illegal amounts of radioactivity were found on the outer surfaces of 10 of the first 109 nuclear waste shipments made since the ban was lifted there, notes Susanne Ochse, an energy expert at Greenpeace. "The cause of the contamination has not been determined. Shipments should not start up again before the problem is understood." In allowing transports, she adds, the German government is putting "the interests of nuclear power plant operators before the safety of train workers, police, or residents along the transport route."

In Germany, the issue of nuclear waste transportation is entwined with the Social Democratic-Green coalition government's goal of phasing out nuclear power. On 26 January, in announcing the end of the ban, environment minister Jürgen Trittin warned that "if in the coming weeks the government and nuclear utilities do not reach an agreement about phasing out nuclear power, the discussion about waste transport is likely to heat up again. A technology that can be implemented only over the protests and disapproval of the majority of the population . . . hurts democracy."

TONI FEDER

Cosmology Prize Starts with a Bang

The newly established Cosmology Prize of the Peter Gruber Foundation will carry a cash award of \$150 000, and will be given annually "to an outstanding astronomer, cosmologist, physicist, or mathematician [to] recognize fundamental scientific advances that shape the way we see and comprehend the universe." Nominations are due by 31 May. The timeline is a bit tight, according to Larry E. Tise, the executive administrator for the foundation's awards, because "Peter Gruber wanted to establish and award the prize during the year 2000, as one more element of our observance of the millennium." Three more \$150 000 Gruber awards are anticipated for 2001—in science, culture, and code of law.

Gruber was born in Hungary in 1929, and moved with his parents to Calcutta, India, at age ten. When World War II reached India, he was sent to a boarding school in the Himalayas. In 1951, he came to the US, where he served in the army and ultimately built a successful asset management business on Wall Street. In 1993, he started the Peter Gruber Foundation, which is known for its

Strasbourg Interdisciplinary Institute Gets Off the Ground

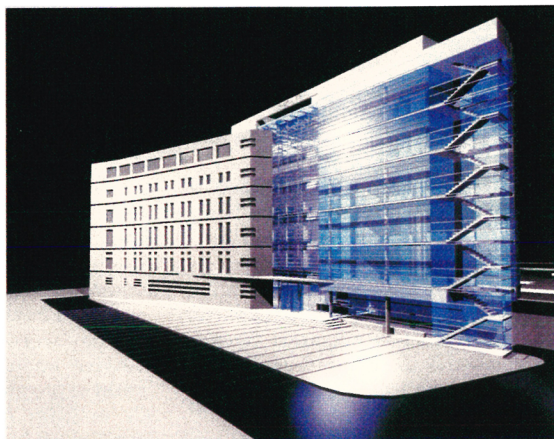
Exploring the interfaces among physics, chemistry, and biology, providing research autonomy for young scientists, and forging ties with industrial researchers are the core aims of the new Institute of Supramolecular Science and Engineering in Strasbourg, France. Says ISIS founder and chemistry Nobel laureate Jean-Marie Lehn, "The spirit of ISIS is to study complex matter seen from different points of view—it's ambitious."

The institute, which is part of Louis Pasteur University, will eventually have five departments led by senior scientists—so far, these are Lehn's own group studying supramolecular chemistry and a nanostructures and technology group under Thomas Ebbsen—and five headed up by junior researchers, as well as space rented out to private companies.

Says Lehn, who wants to break from the European tradition of investigators remaining for years under the thumb of a senior professor, "ISIS will offer young people independence and the possibility to do their own research." In addition, no more than half of the 120 or so staff positions will be permanent. "We want to have flux," says Ebbsen. "It refreshes us—and it's good for visiting scientists."

ISIS is still in temporary quarters, but work on a new building is expected to begin this summer (see architect's rendering), and it should be ready by 2002.

TONI FEDER



C. VASCONI, ARCHITECT