charge along every fourth row of copper atoms, as they report in a paper posted on the Los Alamos preprint server (arxiv.org).

Also, Yoichi Ando and colleagues at the Central Research Institute of the Electric Power Industry in Tokyo report that in non-superconducting LSCO and YBCO, the electrical resistance is smaller for current flowing in the direction in which the stripes are thought to run. That indicates the stripes are conductive, they argue in a paper to be published in *Physical Review Letters*.

Any theory that explains superconductivity in the cuprates must now account for their stripes, Kivelson says. But the larger question, says Douglas Scalapino, a theorist at the University of California, Santa Barbara, is whether stripes help superconductivity or—as most researchers believe—hinder it: "Do you really need these stripes? Or are the stripes something that compete with superconductivity?"

On the other hand, Shoucheng Zhang, a theorist at Stanford, argues that the pattern of charge in BSCCO looks more like a checkerboard than stripes. One-dimensional stripes may be a special case of a more general two-dimensional "charge ordering," Zhang says. If he's right, then next year's fashionable theories may exchange stripes for plaids. **–ADRIAN CHO**

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INDIA

Academic Science Gets Big Boost in Budget

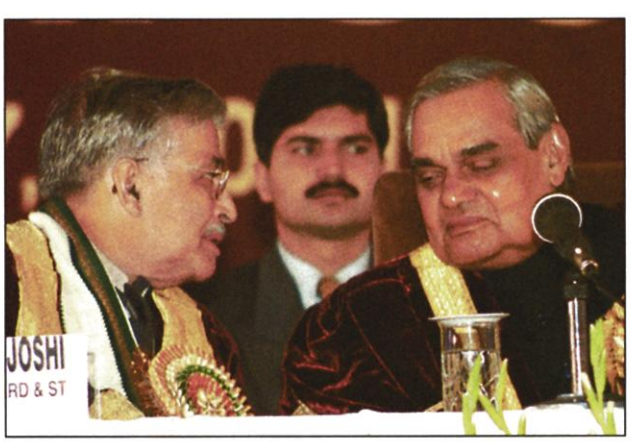
NEW DELHI—Indian university researchers are cheering the government's new science budget, which includes a doubling of funding for academic infrastructure. The overall $300 million increase, to $1.5 billion, brings the R&D budget close to 1% of the country's gross domestic product; Prime Minister A. B. Vajpayee has pledged to raise it to industrial-world levels of 2%. Scientists are also heartened that the 25% growth in civilian science will keep pace with increases for atomic energy, space, and defense, which have historically received the lion's share of the country's research dollars.

"It's a very welcome sign," says Martanda Varma Sankaran Valiathan, a cardiac surgeon and president of the Indian National Science Academy. "And it was long overdue."

The budget, presented in Parliament on 28 February, awards a 52% increase to the Department of Science and Technology (DST). Within its $152 million allocation, the department plans to double the $10 million Fund for Improvement of Science and Technology, created in 2000–01 to augment laboratory instrumentation and facilities in universities. The fund is being extended to cover school libraries, including electronic databases. Indian scientists have complained bitterly in recent years about the steady erosion and aging of scientific facilities, and last year a draft of the government's Millennium Science and Technology Policy declared that "there is an urgent need to revitalize the scientific enterprise" (*Science*, 14 December 2001, p. 2269).

Last year the fund supported 180 science departments within 50 universities. But more than 1000 departments came up empty-handed. One successful application was from a group at North Eastern Hill University in Shillong, Meghalaya, which received an automatic nitrogen-15 analyzer to aid in their search for strains of cyanobacteria that could enhance the productivity of local rice farmers. "Without this sophisticated instrument, our work was really suffering," says Ramesh Sharma, head of the university's biochemistry department. The Tata Institute of Fundamental Research in Mumbai used the fund to help purchase a $5 million, 900-megahertz nuclear magnetic resonance facility for studying biological samples.

DST also plans to double its $10 million program for multidisciplinary basic science, with substantial funding for a new program in nanotechnology. Seismic research will get a boost with a $2.5 million airborne laser terrain-mapping project by the Survey of India in Dehra Dun. All in all, says Valiathan, the new budget suggests that the government has finally embraced the idea that basic research is as important as mission-oriented science in strengthening the country's economy. **–PALLAVA BAGLA**



Good listener. Science minister M. M. Joshi (left) appears to have gained the ear of Prime Minister Vajpayee in this year's budget.

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ScienceScope

Tower Study Pushed Engineers last week told the House Science Committee that it will take several years and at least $40 million to fully understand why the World Trade Center buildings collapsed after the 11 September terrorist attacks—and how other skyscrapers might be made safer.

Researchers began studying the fall of New York City's 415-meter-tall landmarks even before the dust had settled. But their investigations were hampered by bureaucratic infighting and lack of timely access to the site, witnesses told the committee. Despite such travails, a government-sponsored panel is set to issue a preliminary report next month. It is expected to conclude that jet fuel from the hijacked airliners ignited fires that weakened steel beams, causing the collapse. But panel head W. Gene Corley said more study is needed to understand "an event of this magnitude and complexity."

National Institute of Standards and Technology (NIST) chief Arden Bement said his agency—the government's expert on fire science and building materials—is already planning studies that would examine everything from steel dynamics to sprinkler-system design. Science committee chair Sherwood Boehlert (R–NY) and other lawmakers have asked the White House to fund NIST's plan quickly. Bush Administration officials have yet to respond, although they have approved the concept.

Victory Procured French scientists have won their long battle against byzantine government rules for procuring laboratory supplies. Research minister Roger-Gérard Schwartzenberg announced last week that he had convinced the finance ministry to jettison the guidelines, which forced researchers to get competitive bids and special approval for even relatively small purchases, such as cartons of test tubes (*Science*, 12 March 1999, p. 1613). Lab directors can now spend nearly $80,000 annually on a product without triggering a bureaucratic paper blizzard.

"We have won the battle," says Betty Felenbok of the Institute of Genetics and Microbiology in Orsay, who led a reform campaign that included a petition signed by 5000 scientists. "It is truly a happy ending."

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