gone too far. I'm afraid that such a large group is more likely to come up with the usual arguments about the importance of science and the need for more money."

For David Robinson, who oversaw a series of reports by Carnegie on science, technology, and the federal government, the key question is whether the goals of science and the goals of society can be blended. "We can be world leaders in basic science without meeting our national needs," he says, referring to the title of the forum. "And we can achieve a national goal without being the world leader in that field. The trick is to

merge those goals."

Greenwood acknowledges that there is a danger the meeting could turn into a gripe session in which researchers and their lobbyists attack federal spending on basic research. But she says she hopes participants will offer a broader vision to help counter a growing public feeling that research is a luxury the country can no longer afford. "I don't know that you can prevent a group like this from doing some special pleading," she says. "What you can do is to try to structure the meeting for some honest discussion. The intellectual backlash that the country is expe-

riencing is a very real threat to the long-term health of scientific research. But rather than looking back at what's worked in the past, we need to look forward to what we can do to improve the quality of life of our citizens and to provide for our children."

Greenwood says she expects the forum to generate a series of position papers for the coordinating committee to discuss at future meetings. The end product, she hopes, will be a new national strategy for science—and a rallying cry for researchers to explain what they do and why it deserves funding.

-Jeffrey Mervis

RUSSIAN SCIENCE

## **Battle Expands Over Shrinking Budget**

MOSCOW—While the votes were being counted in last month's general election, in which reformists took a surprising battering, a new round of infighting broke out between conservatives and reformists over the future of Russian science. In this struggle—unlike in the general election—the reformists so far seem to be holding their own.

The latest skirmish was sparked when the presidium of the Russian Academy of Science (RAS)—generally considered among

the old guard of Russian science-blamed the near terminal health of Russia's basic research on the Ministry of Science and Technological Policy and called for the ministry to be abolished. Its accusations and recommendations generally echoed those put forward in early fall by Nikolay Malyshev, science adviser to President Boris Yeltsin. Minister of Science Boris Saltykov generally regarded as a re- Vying for control. Boris Saltykov (left) and Jury Osipov. formist because he has been

trying to introduce peer review into some science funding decisions—hit back just after Christmas, accusing RAS president Jury Osipov, an applied mathematician, and Malyshev of trying to win the support of scientists by making inaccurate accusations. "There are no simple solutions to complicated problems," Saltykov said. Behind this war of words is a struggle for control over Russian science.

The verbal shooting began when Malyshev drew up recommendations for the president on the restructuring of state bodies in charge of science and education. He vehemently attacked the Ministry of Science, accusing Saltykov of building up the staff of the ministry although its only job is to allocate funds. The direct management of most basic research institutes is the job of the RAS.

Now Osipov has piled on, endorsing

Malyshev's claim that Saltykov's attempt to introduce competitive funding into Russian science has been completely inefficient. Saltykov created the Foundation for Basic Research (FBR), the first western-style funding agency in Russia, and the move is seen by many as a positive reform of the old Soviet system. But its activities have been hampered by infighting, and Saltykov's opponents now claim that by diverting money to the FBR, the ministry is starving RAS insti-





tutes of their basic core funding, which covers their overheads and salaries, leading to a "termination of research" in some centers. Osipov also accuses the Ministry of Finance of holding back funds that have already been promised to RAS institutes. By the middle of December, he says, the ministry had paid only one-third of what was due to the RAS in the last quarter of 1993.

Malyshev and Osipov both call for the Ministry of Science to be disbanded and for financial responsibility for allocating core funding to pass to the RAS. Control of the FBR, they say, should be given to state committees, such as those for industry or defense industry. To look after the broader administrative aspects of science policy, both men favor setting up a new body: a ministry or state committee of science and education that would "supervise the strategic development of science without getting into niggling wardship" of scientific institutions.

In an interview just after Christmas, Saltykov totally rejected the claim that the ministry had been starving the RAS of funds. Eighty percent of the trillion-rouble (about \$790 million) science budget for 1993 had been paid to scientific institutes, he said. Although \$153 million is still owed, Saltykov said that he had reached an agreement with Prime Minister Viktor Chernomyrdin that the RAS's budget would be paid more promptly in the new year. The science budget for the first quarter of this year will be the same as the last quarter of 1993, Saltykov said, and he called on the RAS to unite with the ministry in demanding that science get a fair deal from the state, rather than blaming each other for the famine of funds.

Saltykov also denied that he was trying to do away with core funding and replace it with competitive grants. Rather, Saltykov says he is seeking to combine core funding with selective funding of research projects based on competitive grants from bodies like the FBR. Additional finds will come from international research contracts and the selling of licences.

The minister was particularly scathing about his opponents' proposals for reforming the system. He argued that the RAS could not be given exclusive control of core funding because it is principally a learned society and the Russian constitution gives the right to conduct state policy only to state bodies.

So far, Yeltsin and Chernomyrdin have not said whether they intend to restructure the Ministry of Science. Saltykov's changes to the funding system are, however, generally in line with Yeltsin's reforms in other areas, and Saltykov can at least take comfort from one development this week: As Science went to press, Yeltsin announced a reshuffling of government ministries, and the science ministry was not abolished.

-Andrey Allakhverdov

Andrey Allakhverdov is a science journalist based in Moscow.