

HUMAN RIGHTS

Russia Seen Poised to Drop Prosecution of Chemist

For nearly three decades, Russian chemist Vil Mirzayanov labored away in obscurity in the shadowy world of the Soviet Union's chemical weapons program. But 16 months ago, he abruptly came in from the cold, when he went public with allegations that the government was developing and testing potent new chemical agents as late as 1992—5 years after former General Secretary Mikhail Gorbachev had announced an end to chemical weapons production. He has since become one of Russia's most visible scientists. The allegations were startling enough, but what really focused world attention on Mirzayanov was the reaction of Russia's security forces: They promptly arrested him and charged him with revealing state secrets, an action that drew international protests and turned Mirzayanov into a symbol of the tensions between the old traditions of secrecy and the new spirit of openness in Russia.

Last week, Mirzayanov appeared to be on the verge of winning his long battle with the security forces. On 14 February, after a 4-week trial in a closed Moscow courtroom, a panel of three judges turned the case over to Aleksei Kazannik, Russia's general procurator—a civilian post similar to the U.S. Attorney General. U.S. officials and others who have been following the case expect Kazannik will drop the charges.

A decision to clear Mirzayanov would likely please President Boris Yeltsin, who has limited authority over the processes that brought Mirzayanov to trial. A close adviser to Yeltsin was quoted earlier this month by the Russian press agency TASS as saying that the trial was "anticonstitutional" because Mirzayanov was accused under old laws that have since been repealed. Indeed, Mirzayanov's prosecution has been widely regarded in the West as part of a continuing power struggle between civilian forces loyal to Yeltsin and the security/military establishment.

Science has pieced together the following account of the tortuous path that led to Mirzayanov's trial. It relies on documents, such as interrogation records and correspondence between Russian government officials, that corroborate parts of Mirzayanov's allegations, as well as interviews with Russian chemists and others close to the investigation.

Mirzayanov was first arrested in October 1992 after he wrote an article with Russian chemist Lev Federov describing how Mirzayanov's former employer, the State Union Scientific Research Institute for Organic Chemistry and Technology (SIOCT), was

developing a nerve gas five times as deadly as any known chemical weapon. The article, which appeared on 20 September 1992 in *Moscow News*, said SIOCT had tested several such phosphorus-based compounds in 1991 and 1992 at a secret site in Uzbekistan, even as Gorbachev and former U.S. President George Bush were negotiating a ban on such weapons. Mirzayanov alleged that three chemicals, grouped under a category dubbed "Newcomer," were "considerably" more potent than VX*, a nerve gas stockpiled by the United States and presumably by Russia. Mirzayanov followed up that article with a similar account in *The Baltimore Sun*.

The articles set off alarm bells at the Security Ministry, known in Soviet days as the KGB. Mirzayanov was a highly credible source. He had worked at SIOCT from 1965 until he was laid off in January 1992, and he had served as the institute's director of counter-espionage—a post in which he allegedly had access to sensitive information on chemical weapons development. The ministry immediately asked SIOCT whether the articles were accurate. It got a prompt response on 1 October from SIOCT's director, V.A. Petrunin, who wrote to the ministry that "the publications contain strictly confidential pieces of information of governmental secrecy....The information corresponds to reality. It's true, that in [SIOCT] there have been synthesized, studied, and tested a number of new chemical combinations of different classes that significantly surpass VX..."

Three weeks later, the ministry hauled Mirzayanov downtown for questioning. After sitting in prison for 4 days, Mirzayanov offered a curious explanation for the article: He said he made up the facts. "I pointed to the creation of a binary weapon in Russia in a purely conceptual way," he wrote in a letter to the chief prosecutor. "It was a creative

imagination...expressed...mostly in an attempt to scare the Americans."

Ministry officials released Mirzayanov later that day. But apparently they didn't buy his story: On 29 October, the ministry indicted him on a charge of revealing state secrets. The next day, Mirzayanov pleaded "partial guilt" to the charge, but he called

his indictment "a political move meant to intimidate anyone who does not agree with the continuing policy of the military-industrial complex."

The ministry's next move was to assign a panel of 11 experts to examine the *Moscow News* article. Nine concurred that the chemist had revealed state secrets, but two disagreed. Vadim Smirnitsky, chair of a committee on industrial policy of Russia's Defense Ministry, told prosecutors that while it was "impossible" for him to "de-

termine the level of secrecy," he said the article "did not contain any information...that can be of detriment to the defense capacity of the army." And Nikolai I. Chugunov, who had spent 30 years testing chemical weapons for the government and who served on bilateral disarmament committees in Geneva, stated that "if the information is true, it is of no governmental or professional secrecy because it doesn't contain concrete data on the structure of the new poisonous substance." Such objections were undermined on 30 March, however, when the Council of Ministers secretly amended the state secrets list to include "information revealing the contents of work in the field of chemical or biological weapons...and information on formulas."

While the security apparatus was building its case against Mirzayanov, international human rights groups and scientific societies weighed in, protesting Mirzayanov's treatment to the Russian government. They apparently caused some embarrassment within the military hierarchy. In a 13 April letter to the ministry, Viktor P. Ivanov, chair of a chemical-industry committee of the Defense Ministry, complained that "the discontinuance of chemical-weapons manufacturing in Russia, declared by [Gorbachev] in 1987, is now being doubted by people both in Russia and worldwide." On 29 April the chief of the general headquarters of the Russian Army, colonel-general Mikhail Kolesnikov, informed the ministry that the case had "caused a negative reaction" from U.S. officials.



Strong nerves. Russian whistleblowers Vil Mirzayanov (right) and Lev Federov.

* The full name of VX is: O-ethyl S-2-diisopropylaminoethyl methylphosphonothiolate.

Even the Security Ministry began to waver. On 5 May, it dropped the charge against Mirzayanov, declaring that "the expertise on the reliability and the degree of secrecy of the information disclosed by Mirzayanov established that the information...is not secret and does not constitute a state secret." But the victory proved to be fleeting. New charges were filed on 13 May, with virtually no explanation for the about-face. The ministry said only that "sufficient evidence has been gathered to elaborate and complement the previous charge." The final step came in December, when the ministry announced it would hold a trial of Mirzayanov closed to outside observers.

The start of the trial on 24 January sparked a new round of protests from organizations in the West, including the American

Association for the Advancement of Science (AAAS). AAAS, which publishes *Science*, argued in a legal brief submitted to the Moscow court that what Mirzayanov described, if true, violated at least two treaties, and that Mirzayanov's right to talk about it is protected under international law. Similar sentiments were expressed last month in a press conference by the U.S. ambassador to Russia, Thomas Pickering, who defended Mirzayanov "for telling the truth about an activity which is contrary to a treaty obligation."

The three-judge panel has apparently found a face-saving solution to the problem by turning the case over to Kazannik for further investigation. U.S. officials note that Yeltsin appointed Kazannik and has more control over him than over the Security Ministry, and they hope he will privately

persuade Kazannik to drop the charges. "I'm pretty sure Kazannik will close the case," says astrophysicist Roald Sagdeev, a former director of Russia's Institute of Space Research. Sagdeev, now at the University of Maryland, also speculates that ethnic prejudice—Mirzayanov is Tartar—may have prolonged the campaign against him.

Mirzayanov's supporters have learned not to get their hopes up too high, however. Although Mirzayanov was expected to be freed for the duration of his trial, he was instead incarcerated for almost a month and only this week released from the "Sailors Silence" jail. Still, his friends say the recent captivity hasn't dimmed his spirits. Says Lev Federov, "Vil is ready to fight to the very end."

—Richard Stone

AAAS MEETING

Losing Friends and Influencing Policy

SAN FRANCISCO, CALIFORNIA—John Gibbons, President Clinton's science adviser, opened the 160th annual meeting of the American Association for the Advancement of Science (AAAS)* with a story about a talking frog. A man walking down the road comes upon a frog, who says, "Sir, I may look like a frog, but I'm a fairy princess" and implores the man to kiss her. The man puts the frog in his pocket and walks on. The frog, dismayed, says, "Sir, perhaps you didn't understand me" and again asks for a kiss. "Well, frankly," the man finally replies, "at this point in my life, I think I'd rather have a talking frog."

Like all parables, this one is subject to many interpretations, but some listeners concluded that Gibbons meant his job has won him few friends, and he's wary of its glitter. In fact, Gibbons said more explicitly later in his speech that he only enjoys his job "from time to time," apparently because of its bruising, political nature.

As Gibbons explained in his 45-minute, Friday evening keynote talk, since taking over the helm at the Office of Science and Technology Policy last year, he has found himself thrust into "the rough and tumble world of White House political decisions"—a far cry from his old job as head of the Office of Technology Assessment. "In that job, I provided lots of options for political decision making, but I never made recommendations or decisions—that's how you keep your friends," reminisced Gibbons. "Now that seems like a long time ago."

Among those whose friendship Gibbons would like to keep are basic researchers, many of whom fear that the Administration's zeal

for strategic or applied science is threatening support for academic science. Scientists, he said, must respond not with fear but by regrouping and providing a better explanation to society at large of just how their work benefits the greater good. "We cannot forget that the reasons scientists do science are seldom the reasons the general public funds science," he advised.

In this unsettled climate, Gibbons argued, one of the key issues for the scientific community will be the funding of scientific megaprojects, and much of Gibbons' talk focused on how the Administration intends to manage such enterprises. The Administration, he said, had drawn two lessons from the scuttling of the Superconducting Super Collider (SSC). One is that big ticket re-

search today forces the United States to make longer commitments to research projects—up to a decade at a time. The second is the need to "internationalize big science as much as possible."

Gibbons said it will fall to the president's newly formed—and as yet rather vaguely defined—National Science and Technology Council (NSTC) to direct U.S. participation in international megaprojects. The NSTC, which Clinton heads and Gibbons sits on, will work with Congress to find a way to ensure multiyear support for the most important science projects and avoid the annual budget agonies suffered by the SSC. Among the projects Gibbons thinks could require such treatment: the International Thermonuclear Energy Reactor, which is being pursued by a consortium involving the United States, Europe, Russia, and Japan; the Human Genome Project; the space shuttle and the Russian space station, Mir. And the list could soon include U.S. participation in Europe's Large Hadron Collider.

Given all the headaches involved in budgeting U.S. cooperation in those projects, by the time of the AAAS meeting next year, in Atlanta, Gibbons may well be wishing even more devoutly for the company of friendly frogs rather than tantalizing princesses.

—Jon Cohen

Science Editor to Resign

Daniel E. Koshland Jr., editor-in-chief of *Science*, announced at the AAAS annual meeting that he intends to resign to pursue his research as soon as a successor is named to guide the magazine. A biochemist at the University of California (UC), Berkeley, Koshland has been editor of *Science* since 1985 and has increased the international scope of the journal, its readership, and its advertising base. Richard Nicholson, chief executive officer of the AAAS, announced that a nine-person search committee was being formed to find Koshland's replacement. F. Sherwood Rowland of the University of California, Irvine, will head the committee, which will include Florence Haseltine of the National Institutes of Health, and Chang-Lin Tien, chancellor of UC Berkeley. Six other members will be named in "about 3 weeks," Nicholson said. The search committee will be charged with providing the names of three respected scientists as candidates "by the end of 1994," Nicholson said. In addition to scientific credentials, candidates will be judged on their "capacity to make difficult editorial choices and stand up to pressure" and their "openness to innovations in editorial content and presentation," AAAS said in a statement distributed at the press conference where Koshland's retirement was announced.

* "Science and a Changing World," 18-23 February. More coverage will appear next week.