In an age where political persecution is hopefully a thing of the past, a new crime of conscience is emerging in Russia. Like Andrei Sakharov, who built the hydrogen bomb for the Communist Party only to become persecuted for denouncing the system, a new generation of scientists is following in his footsteps. These dissidents are not nuclear physicists but chemists. The horrible new weapon of mass destruction that they developed is a binary chemical nerve gas called Novichok. Their crime of conscience is denouncing not the Party or the government, but the sprawling military-industrial complex and former KGB, both of which in post-Soviet Russia have become states within the state.

The scientists first tried to work quietly through the system, without success. They were not free to go over the heads of their superiors in the secret labs or the military and KGB enterprises which supervised them. Russian laws and legal culture view whistleblowing as a form of treason. The scientists were thus unable to communicate with Russia's democratically elected civilian leadership. Left with no alternative, they went to the press. But when they did so, they lost their jobs, their reputations, and potentially their new freedoms.

Because Russia as yet has no system for civil control and oversight of its security and military services, the civilian leadership is incapable of verifying whether or not the scientists' allegations are true. If the scientists are lying, the government could easily expose them as frauds or cranks, and leave the issue behind. But the government has done exactly the opposite, prosecuting and indeed persecuting them for having revealed “state secrets.” Meanwhile, authorities have done almost nothing to assuage concerns of the United States—from which they have requested hundreds of millions of dollars to finance chemical disarmament—that a clandestine nerve gas program is underway.

The Case of Vil Mirzayanov

Vil Mirzayanov was a scientist at a secret Moscow laboratory to develop new types of chemical weapons until he realized that the military was going ahead with development of Novichok with little regard for the public safety and in violation of his country's current and impending international commitments. His persecution and prosecution have been widely publicized in Russia, but have received very little attention in the United States.¹

* J. Michael Waller is director of international security affairs at the International Freedom Foundation (IFF) in Washington, D.C., and executive editor of Demokratizatsiya.
The chemist first drew the authorities' wrath when he co-authored an article with scientist and environmental activist Lev Fedorov in a September 1992 issue of *Moscow News*, and later gave interviews to *Izvestiya* and the *Baltimore Sun*, revealing the existence of the ongoing Novichok program. He was arrested by the Security Ministry (the new name of the former KGB internal security apparatus) and charged with revealing “state secrets.” The intervention of a reform-minded group of Supreme Soviet leaders resulted in his release from the KGB Lefortovo Prison after 11 days, but Mirzayanov remained under house arrest. To help the former KGB prosecute the case, which the defense says is riddled with improprieties, Prime Minister Viktor Chernomyrdin signed a secret retroactive decree in March 1993 to make Mirzayanov's revelations a crime. The case had not yet been brought to trial by early December 1993.²

Having followed the matter, New York Academy of Sciences President Joshua Lederberg urges that the flimsy prosecution be dropped. “Otherwise,” he reasons, “we must conclude that Mirzayanov was telling the truth and a whole new class of deadly binary chemical weapons was created and that the Russian government is reverting to the old Soviet-style practice of persecuting dissident scientists.”³

**The Case of Vladimir Uglev**

A pattern of persecution is emerging. One of the few scientists not intimidated by the rapidity of the government's response to Mirzayanov and Fedorov is Dr. Vladimir Uglev, one of the country's chief designers of binary weapons. Like Mirzayanov, the quiet and contemplative Uglev had second thoughts about his work and wanted to come to terms with himself. He finally came forward in early 1993 after Russia signed the Chemical Weapons Convention in Paris. As a council member of the closed city of Shikhany and the nearby city of Volsk 600 miles east of Moscow, Uglev relied on his immunity as an elected official to write an article for *Novoe Vremya* in which he described fifteen years of development of hundreds of deadly chemical compounds for military use, including various agents used in the Novichok binary weapon revealed by Mirzayanov. Like Mirzayanov, Uglev was fired from his job as a senior scientist and became subject of a criminal investigation by the Security Ministry that he had revealed “state secrets.” He says that, given the lack of international outcry against the secret program, he expects to be prosecuted. If convicted—a verdict that in Russia is still often preordained—he will receive from two to eight years in prison.⁴
The Case of Vladimir Petrenko

The case of Vladimir Petrenko, a third person being persecuted for talking about chemical weapons, is quite different. A Volsk city council member like Uglev, Petrenko is a military expert on nuclear, biological and chemical decontamination and a local environmental activist. Unlike the scientists who revealed current chemical weapons programs, Petrenko is being prosecuted for having spoken out against secret research and development that took place more than a decade ago.

In 1982, as a young army lieutenant, Petrenko volunteered to test a new type of chemical warfare protection suit. Soon afterward, he developed a plague of health problems ranging from the loss of melanin in his skin to severe respiratory and liver disorders. He soon came to realize that he had been subjected to a small amount of a new chemical designed to destroy the body's metabolism. Today, at age 33, he is haggard and gaunt with a gray beard that makes him look twenty years older. He has been in and out of military hospitals to treat his deteriorating condition. Petrenko says that the Soviet—now Russian—Army consistently has denied that his illnesses are in any way related to chemical weapons. Yet his military medical record supports his story. Petrenko alleges that the military has persecuted him for years, even when he kept the matter restricted to doctors, friends and colleagues at the top-secret chemical weapons laboratory at Shikhany. He says, and his official military record shows, that he was forced to be part of the radiation cleanup at Chernobyl in 1986 where he spent 50 days at the reactor site, despite physicians' findings that he was medically unfit for such service.

These incidents helped make him aware of the military's disregard for the safety of its own personnel and of the civilian population. When he raised concerns in early 1990 that Soviet military plans to recall obsolete chemical weapons stocks to a central destruction facility in Shikhany—at what he felt would pose a severe hazard to neighboring cities—he decided to run on an ecological platform for a seat on the city council in nearby Volsk. He won the race, becoming chairman of the local ecological commission, and spoke out forcefully against the chemical weapons establishment, but the victory came at a price. He was expelled from the army and deprived of the pension and other benefits he had earned. Taking advantage of immunity that elected officials enjoyed in the USSR and in Russia today, Petrenko told his constituents about his ordeal and about continued chemical weapons development in the area's secret laboratories. His immunity protected him from prosecution—until he began speaking out on behalf of Mirzayanov and Uglev.
In February 1993 the poisoned and slowly dying former soldier left the isolation of Volsk to address an international conference in Moscow chaired by former prisoner of conscience Sergei Grigoryants. In a public speech, he excoriated chemical weapons authorities and the Security Ministry for “lawlessness”:

They are wasting time looking for enemies, instead of performing their duties. They regard as enemies Mirzayanov and Fedorov who dared to reveal the corporate skeleton in the cupboard. They want to frame me as an enemy, as well as Vladimir Uglev, the binary weapons inventor who published his revelations in a newspaper. I appeal to the Security Ministry representatives at the conference: let's overhaul our values and tackle those problems for which you are paid, mind your line of duty and stop persecuting people who are trying to help Russia and us to survive in these conditions.\(^8\)

Three days later, leaders of the military laboratory where he had worked in Shikhany (Volsk-18) assembled scientists and urged them to pass a resolution urging the city council to lift his immunity so he could be tried for revealing “state secrets.” His accusers, in a written statement, say that 100 percent of the scientists voted against him,\(^9\) while Petrenko's supporters say that 800 of the 1,100 who voted were with him. Meanwhile, a graying old man who should be at the prime of his life at age 33, he checks himself into a military hospital for one to two weeks per month to treat his deteriorating liver, lungs and skin. The treatment is of dubious value, and he is unable to go to Japan where he has been offered free, state-of-the-art medical attention. He has a wife and two small children, but no pension to support them after he is gone.\(^10\)

The “state secrets” of which he is accused of betraying are the fact that the Soviet Army engaged in chemical warfare experiments under the Andropov regime. The military's public response has been contradictory. While it reportedly labeled him a fabricator and a mentally disturbed individual on the one hand, it accused him of exposing secrets on the other, confirming, in a sense, the veracity of his claims.

**Crackdown on the Press**
After the Mirzayanov-Fedorov revelations in *Moscow News*, the weekly's offices on Pushkinskaya Square were visited by state security officers who demanded any documents the scientists may have given the publication. The offices of *Izvestiya*, across the street where the scientists gave an interview, were also searched. After Uglev's appearance in 1993, the secret police moved in on journalists who published his words. On April 8 *Baltimore Sun* correspondent Will Englund—the only American reporter in Moscow following the story—was called into Security Ministry headquarters and interrogated for three hours. Later, a group of secret policemen led by KGB Colonel Mikhail Zhestkov demanded notes, tapes and documents from *Moscow News* and *Novoe Vremya* (New
Times). Editors handed over unpublished articles, but said they had no other materials. *Moscow News* science editor Leonard Nikishin said, “There were no secrets in our publication. Our position is, there can be no state secrets regarding chemical weapons after the signing of the Paris [Chemical Weapons] Convention. We think the KGB visit was entirely groundless.”

Remarked *Novoe Vremya* editor Alexander Pumpyansky, “We published an interview which discloses secret activities of the Chemistry Ministry, but these activities are contrary to the stated policies of the government” which renounced chemical weapons at the January 1993 Paris Convention. He added, “It’s quite natural that these ministries should fight back, and use methods that have been known to us for a long time.”

A more isolated journalist was not so lucky to get off with a simple visit or interrogation. In distant Saratov, the region on the Volga which houses the large chemical weapons laboratory and facility where Uglev worked, *Biznes Novosti* journalist Sergei Mikhailov was reportedly threatened with prosecution for divulging “state secrets” by reporting Petrenko's public statements.

**Dangerous and Secretive Policies**

Driving the chemists' concerns in part is the knowledge that the “chemical generals,” as the chiefs of the weapons program are known, throughout their careers have shown no regard for the safety of their scientists, troops or the populations at large. The Petrenko case is by no means the only incident. At the Moscow organic chemistry institute where Mirzayanov worked, laboratory staff who developed the toxins complained of poor safety and penalties for reporting accidents. Poison gases discarded after tests were routinely released in the sky above the city through faulty filters, according to a scientist who handled the chemicals.

Intent on completing tests on Novichok-5 in time for the laboratory to compete for the 1987 Lenin Prize, institute leaders and their military chiefs pressured scientists to dispense with safety precautions and test the agent in adverse weather conditions under which testing was normally banned. One chemist, Andrei Zheleznyakov, developed symptoms of poisoning and realized that there was a leak in the gas chamber. *Novoe Vremya* reported, “He did not contact the local medical unit, since this was considered by institute staffers to be almost tantamount to treason: If you end up in the medical unit you would be letting down your chief, who would be held responsible. Incidents of poisoning were thoroughly concealed.”

Zheleznyakov’s colleagues rushed him to a treatment center nevertheless, where the KGB told doctors that he had been poisoned by eating a bad sausage and instructed them to sign a confidentiality pledge. When he was finally released from the hospital several months later, he was instructed to keep quiet. His colleagues tried to persuade him to accept blame for violating safety procedures, but he refused. He was ultimately allowed to retire on disability and
receive a pension—as long as he maintained his silence.\textsuperscript{16}

After the accident, the Novichok project was suspended for a year. The chemical generals, including General Anatoly Kuntsevich, ultimately did receive their precious Lenin Prize in 1991—personally bestowed upon them by Mikhail Gorbachev.\textsuperscript{17} Plagued by cirrhosis of the liver, toxic hepatitis, lesion of the trigeminal nerve, and epilepsy, Zheleznyakov after five years of silent agony went public with his story in support of Mirzayanov and Fedorov in late 1992. He died on 13 July 1993.

The fact that the entire program is so deeply shrouded in secrecy, apparently without the knowledge of Russia's elected civilian leadership and therefore beyond civil controls, exacerbates difficulties in keeping them secure from illegal transfer to other countries or rogue terrorist elements or movements. Vladimir Uglev, as one of the country's top designers of binary chemical weapons, is extremely troubled at the ease with which proliferation can take place. It is not necessary to transfer the finished product—merely the formula. The covertly developed toxins, he says, are made from commercially available chemicals and “are very easily produced once the technology is known.” He fears that the chemicals or their formulae will be sold by corrupt military officials to third countries or to terrorists.\textsuperscript{18} Ironically the service legally responsible for policing the military and fighting proliferation, the Security Ministry, is instead fighting the scientists [who blow the whistle].

Ironically the service legally responsible for policing the military and fighting proliferation, the Security Ministry, is instead fighting the scientists.

If the question cannot be freely debated in Russia, how can it be remedied? Uglev notes the dilemma:

We can either officially make an announcement about the new materials that make up these new chemical weapons and place them under strict international control, or we can wait until a 'leak' occurs against our will. Unfortunately, Russian authorities have already chosen the worst path. Over the course of the year [since Mirzayanov first went public and Russia signed the January 1993 Chemical Weapons Convention in Paris] information concerning these new weapons has not been made available to the Chemical Weapons Convention. Even more, State Security forces and the Public Prosecutor's Office have organized the prosecution of myself and against Vil Mirzayanov and Lev Fedorov . . . . Russia stands alone in concealment of this secret. I am sure that if the formulae that make up these new weapons were known, specialists would finally understand the seriousness and validity of our arguments. My colleagues and I are prepared to meet with any official or any qualified Russian state agency to solve these problems. We will not tolerate the uncontrolled release of information concerning these new and deadly weapons. Living under the conditions of chemical prevention is the right of every person on Earth. The usurpation of this
right by Russian generals—with or without shoulderboards—cannot be tolerated. 19

Who Is in Charge of Chemical Disarmament?
The individual in charge of Russia's chemical weapons destruction effort is retired General Anatoly Kuntsevich, a former head of the Soviet Army poison gas program who is now, without shoulderboards, chief of the Presidential Committee on the Conventional Problems of Chemical and Biological Weapons Conversion. General Kuntsevich's professional record does not offer Russian political leaders or the American government, which is financing much of his program, any hope that he is trustworthy for the job. The disregard for safety of scientists and the Moscow population at large have already been discussed. Even in public, General Kuntsevich's actions have been disreputable; it was he in 1982 who officially stated that the Soviet Union would not respond to U.S. development of binary weapons with similar agents of its own while he went ahead and did so anyway. 20 He bears substantial responsibility for his country being in violation of Moscow's 1989 chemical weapons accord with Washington, which requires each side to exchange detailed lists of chemical weapon compounds under development, and specifically to itemize the nature and quantities of agents and their precise locations. As of December 1993, Kuntsevich's office has provided the U.S. with no such information. 21

“Despite the tens of millions of dollars provided by the United States and much more promised, [the authorities] have almost no accomplishments to show from what has already been invested. The Russian military establishment is reported to be disinterested in destroying its chemical stocks.”

The Lenin Prize-winning general and company have little to show their American benefactors and their own civilian leaders in Russia. U.S. observers and officials maintain that Kuntsevich has dragged his feet and demanded hundreds of millions of dollars from the West before chemical arms destruction could commence. Kuntsevich first said he would need $600 million from the U.S. and other countries, but later increased that figure to $1 billion. 22 Despite the tens of millions of dollars provided by the United States and much more promised, Kuntsevich has almost no accomplishments to show from what has already been invested. The Russian military establishment is reported to be disinterested in destroying its chemical stocks. The New York Times observed, “even as they accept hundreds of millions of dollars in American aid, Russian officials have declined to provide Washington with information about the [chemical disarmament] effort.” 23 The chemical chief has proposed that the U.S. give $30 million to fund a special laboratory in Moscow which would study the issue of chemical arms
destruction. Washington is apparently going along with the deal even though administration officials reportedly are skeptical of the necessity of the laboratory, alleging that it is “primarily a sinecure for the former general.”

However, studying weapons destruction might not be all the chemical generals have in mind. Mirzayanov alleges that they want to use American funds to bankroll the secret program the Russian government is trying so doggedly to suppress. The scientist told Moscow News, “our generals raised an outcry alleging that Russia would not manage to destroy its chemical weapons unaided and that we need at least 600 million dollars. They want to get that sum, through Yeltsin, from the USA.” The point, he says, is “to finance the destruction of obsolescent stocks and to carry on the development of binary weapons.”

Before he died of poisoning, Andrei Zheleznyakov also agreed. Novoe Vremya paraphrased his views: “The generals cannot be trusted with the destruction of chemical weapons. The money received from the Americans for this purpose will definitely be channeled into the development of new and more powerful toxic substances.”

**U.S. Policy Options**

Concern is building in the United States transcending partisan and ideological lines. Key senators and representatives have made their concern for the fate of the scientists known to administration officials. What, then, should the United States do? As long as it is providing financial and technical assistance, it has strong leverage that should be used against the chemical generals. Washington can pursue a range of low-cost policies that would help Russia's civilian leadership exert civil controls over the military.

- All U.S. funding must be tied to guarantees of all legal and human rights of scientists such as Drs. Mirzayanov and Uglev, Dr. Fedorov, and Maj. Petrenko and others as well as the journalists who cover them.
- All such funding must also be conditioned on full disclosure of any and all covert chemical weapons research, development or production.
- The secretary of state and the assistant secretary of state for human rights and humanitarian affairs must work aggressively on behalf of the scientists and journalists, must follow their cases closely, and must press the issue before the Russian government and the appropriate international bodies.
- The U.S. must insist that any scientists, journalists or others be free to leave
Russia for medical treatment or any other reason they choose.  
• Since freedom of speech and of the press are inherent in the verification of arms  
control agreements, the United States officially must consider any attempts to  
persecute or prosecute the scientists or journalists who report their statements to  
be signs of a continued official cover-up of ongoing clandestine chemical  
weapons programs, and must therefore assume that Moscow either is or intends  
to be in violation of its international obligations.  
• The U.S. and other signatories of the Chemical Weapons Convention must  
demand that the formulas for Novichok and any agents unknown to the West be  
provided to the appropriate international regulatory bodies for addition to the  
classified roster of banned chemical compounds.  
• The U.S. must immediately terminate funding for the unnecessary $30 million  
Moscow laboratory which the administration acknowledges is a payoff to  
General Kuntsevich, and which the persecuted scientists believe could be used to  
develop new chemical weapons.  
• The secretary of defense must certify in public annual reports to Congress the  
nature of Moscow's compliance with the letter and spirit of its international  
chemical weapons obligations, and lack thereof. The secretary of defense must  
also provide Congress with non-classified annual reports assessing the extent of  
civil control over the Russian armed forces, or lack thereof.  
• The United States must also condition military conversion aid on effective civil  
control and oversight by Russia's elected leaders of the entire conversion and  
chemical disarmament process. It is in neither the interests of the Russian people  
nor the United States for the U.S. to fund a military apparatus that is not  
responsive to the instructions and desires of Russia's elected leadership.  
• To help Russia's democratic leadership in the executive and legislative  
branches to develop and exert civil controls over the armed forces and the  
military-industrial complex, the United States should embark on a long-term  
technical assistance and exchange program to expose political leaders to the U.S.  
supervision processes. A full-scale effort will give Russian political leaders the  
ideas and support needed to create their own system of civil control. Former  
Defense Secretary Les Aspin, in his earlier position as chairman of the House  
Armed Services Committee, expressed interest in such a project. It should be  
made a reality.  
• The U.S. must strongly urge G-7 and other nations which provide substantial  
aid to the Russian Federation to pursue similar policies.

Russia's uncontrolled military-industrial complex and former KGB are only  
maintaining barriers to real cooperation between Russia's democratic leaders and  
their friends and supporters in the United States. The issue of binary weapons  
and the persecuted chemists will not go away. Vil Mirzayanov said in an  
interview, "I am ready to serve a prison term if only to enable people in this  
country and the world community to realize at long last with whom they deal  
here: our military-industrial complex does not intend to disarm itself. All it wants
RUSSIAN DISSIDENT SCIENTISTS

is to get rid of the old junk.” The scientists’ selfless commitment to alerting the world about this new post-Cold War danger must not be ignored or downplayed. Russian democrats and the West must stand beside them.

Notes

1 The only U.S. newspaper correspondent in Moscow who has followed the case is Will Englund of the Baltimore Sun. For the first of several articles see Will Englund, “Ex-Soviet Scientist Says Gorbachev’s Regime Created New Nerve Gas in ’91,” Baltimore Sun, 16 September 1992.


4 Vladimir Uglev, interview with author, Moscow, 2 October 1993.

5 Vladimir Petrenko, interview with author, Moscow, May 1993. Petrenko showed the author his military medical record since 1981, which appears to support his story.

6 Ibid. Petrenko showed his military service record to the author.

7 Petrenko, interviews with author, Moscow, May and October 1993.


10 Petrenko, interviews with author in May and October 1993.


12 Ibid.


15 Ibid.

16 Ibid., pp. 25-26.

17 Ibid., p. 26. An unnamed former staffer of the State Union Scientific Research Institute of Organic Chemistry and Technology told the magazine that in early 1991 the chemical generals “decided to play it safe and based their application for the prize not on ‘Novichok,’ which was still being developed, but on the old and tested toxic substance declared by us in the draft Geneva Convention as VX.” The staffer said that Gorbachev may not have known about Novichok and bestowed the award for VX.

18 Uglev, interview with author, Moscow, 30 September 1993.


22 Ibid., p. A16.

23 Ibid.
24 Ibid.
26 Vishnyakov, p. 24.
27 Mirzayanov, interview with Nikishin, p. 10.