

- Dow Jones Reprints: This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers, use the Order Reprints tool at the bottom of any article or visit [www.djreprints.com](http://www.djreprints.com)

[See a sample reprint in PDF format.](#) [Order a reprint of this article now](#)

**THE WALL STREET JOURNAL.**

- [WSJ.com](http://WSJ.com)
- [PAGE ONE](#)
- MARCH 5, 2010

## **Russian Inventor Has Friends in Kremlin, but Skeptics Outside It**

### **Viktor Petrik Says He Can Turn Radioactive Waste Into Drinking Water**

By [GREGORY L. WHITE](#)

VSEVOLOZHSK, Russia—Viktor Petrik shows off what he describes as his discoveries: a cell that generates electricity when you breathe on it. A new way to produce silicon for computer chips from fertilizer waste. A filter that cleans the toxins—and the color—from red wine.

"This is real, serious science here," he says as he shows visitors around his modest labs and factory.

He has won some high-level support. United Russia, the ruling party, regularly gives him prominent roles in events on innovation, while officials including Boris Gryzlov, the speaker of Russia's parliament and No. 2 in the party, have publicly endorsed his products. The two men are listed as the authors of a patent granted in 2009 for a filter that Mr. Petrik says can turn radioactive waste into water that's safe to drink.

[View Full Image](#)



*Oleg Nikishin for The Wall Street Journal*

Viktor Petrik stands outside his factory near St. Petersburg. His work has raised eyebrows among Russian scientists.



But to some prominent Russian scientists, the 64-year-old Mr. Petrik is a charlatan. "He's a master of bluff," says Eduard Kruglyakov, a physicist who heads a special commission of Russia's Academy of Sciences set up to expose pseudoscience. He says he has spent months investigating Mr. Petrik's claims and has concluded that they are scientifically impossible in some cases, or borrowed largely from others. "He hasn't discovered anything." Others echo those concerns.

In recent weeks, the conflict has heated up, with critical articles about Mr. Petrik in the national press and Mr. Gryzlov denouncing the pseudoscience panel as "obscurantism."

Mr. Petrik's detractors say he's the latest in a long history of false experts who owe their success to their ability to fool people in power. Says Petrik critic Rostislav Polishchuk, a member of the pseudoscience commission: "Russia is especially vulnerable to this."

Mr. Petrik dismisses his academic detractors as small-minded and jealous. "I'm not restricted by the boundaries" of traditional scientific disciplines, he says, adding, "I'm an inventor, not a scientist." Most of his breakthroughs, he says, come to him while he is in a state of self-hypnosis.

Mr. Petrik's best-known products are his household water filters, which he says use nanotechnology—sheets of carbon the thickness of an atom—to deliver unique results. The filters won a 2007 competition sponsored by United Russia. Several party-controlled regional governments have installed them in schools, homes and hospitals.

"The water-filter systems he invented provide water of the highest quality, unattainable with other systems," United Russia's Mr. Gryzlov said at a party-sponsored conference a year ago, as Mr. Petrik sat with him on the dais.

Mr. Petrik says his filters have been tested in labs in Russia and Europe and found to be effective. Mr. Kruglyakov says he studied the contents of one of Mr. Petrik's filters with high-powered equipment and found no sign of nanotechnology. Mr. Petrik rejects that.

In 2007, a state-run nuclear agency in the Urals tested a different Petrik filter on radioactive waste but found it to be inadequate, according to agency officials. Mr. Petrik says the test wasn't conducted properly.

In February, United Russia presented to the government a national clean-water program that some officials have said could be worth as much as \$500 billion over the next decade. Mr. Petrik says he plans to compete to have his filters included in the project.

United Russia referred questions about Mr. Petrik to Mr. Gryzlov, who declined though a spokesman to comment for this article. Mr. Petrik declined to comment on his relationship with the party chief.

At the government-sponsored St. Petersburg International Economic Forum in June 2008, Mr. Gryzlov glowingly introduced Mr. Petrik as "a person who has a large quantity of inventions and patents."

According to an official transcript, Mr. Petrik responded in kind: "Boris Vyacheslavovich [Gryzlov] personally doesn't just observe, he participates in all the experiments," Mr. Petrik said, according to an official transcript.

A year ago, Mr. Gryzlov visited Mr. Petrik's labs with the head of Rusnano, the state nanotechnology company, according to Rusnano and Mr. Petrik. Seven months later, Rusnano approved 79 million rubles (\$2.6 million) in venture funding for Mr. Petrik's

project to extract the chemical element rhenium from scrap. Rusnano says the project met its strict technical standards.

Mr. Petrik says he learned hypnosis from his uncle. He got an undergraduate degree in psychology at Leningrad State University in 1976, according to university records.

He says he also studied physics but didn't get a degree. The university says it doesn't have detailed records of the courses he took.

He spent much of the 1980s in prison. Yevgeny Zubarev, a journalist who wrote frequently about Mr. Petrik in the 1990s, says he saw the criminal file and the central charge was smuggling antique furniture. Mr. Petrik acknowledges he was in prison but declined to comment on the charges.

After Mr. Petrik won early release in 1989, St. Petersburg officials asked him to make the rare metal isotope osmium-187 in his basement lab to sell for export, he says. But the plan fell apart when Russian customs agents stopped a shipment of samples bound for Germany for lack of export permits.

[View Full Image](#)



*Oleg Nikishin for The Wall Street Journal*

Mr. Petrik, who is close to the speaker of Russia's parliament, demonstrates a scientific concept in his conference room.





A top city official involved later told a local newspaper that he was initially skeptical of the scheme but was convinced after he met the "inventor." That official was Vladimir Putin, now Russia's prime minister.

Mr. Petrik won't comment on any contacts with Mr. Putin. Mr. Putin's office declined to comment.

Mr. Petrik says he has also met prominent people outside Russia and shows pictures to prove it. In December 2004, he visited former President George H.W. Bush in Texas and discussed his technology for cleaning groundwater. "When we met, Bush knew a lot about me already," he says, adding that he hopes to have another meeting with him in the next few months.

A spokeswoman for Mr. Bush said the meeting was "a very short courtesy call" and that they haven't been in touch since and have no plans for further meetings.

In Russia, the controversy around Mr. Petrik has put the Academy of Sciences on the spot. Once one of the world's leading scientific institutions, the academy has struggled since the 1991 Soviet collapse with deep budget cuts and neglect by top officials.

At a session chaired by Mr. Gryzlov at a Moscow chemistry institute last spring, top academy scientists outlined funding and other problems they hoped he would help with.

Then, Mr. Petrik presented 11 of his discoveries, which the academics endorsed as being of "substantial scientific interest," according to an official record of the session.

Later, some of the same scientists visited Mr. Petrik's lab. Russian TV captured the scientists enthusing about what Mr. Petrik had shown them. One prominent chemist compared him to Thomas Edison.

Once the video became public, the leader of the delegation told a Russian news Web site the effusive praise for Mr. Petrik was "in joking form." He declined to comment for this article.

Under pressure from critics who claimed the academy was hurting its reputation by kowtowing to powerful politicians, the academy in February ordered an inquiry into the science behind 11 of Mr. Petrik's inventions.

He says he's confident he'll be vindicated. In his lab, he shows a board with the United Russia logo and panes of glass treated with another of his inventions, a compound that he says generates electricity from light. A small red light shines from the panel. "It will glow for 1,000 years," he said.

**Write to** Gregory L. White at [greg.white@wsj.com](mailto:greg.white@wsj.com)