The Moscow Times
30 YEARS
INDEPENDENT NEWS FROM RUSSIA

Skoltech Strives to Repatriate Russia's Lost Scientific Talent

By Matthew Bodner

September 10, 2015



Skoltech is just one part of a larger project known as the Skolkovo Foundation, launched in 2010 by then-President Dmitry Medvedev as part of his initiatives to modernize Russia's oil- and gas-dependent economy.

Four years after the Skolkovo Institute of Science and Technology (Skoltech) was founded, the startup university has finally moved into its own purpose-built campus, and has succeeded in luring accomplished Russian diaspora scientists back to Russia after periods of up to 20 years abroad.

Some of them say they have returned for love of the country they left behind, and an opportunity to shape its scientific and technological future. They have also been enticed by the goals of the Skolkovo project, which are nothing less than to create a Silicon Valley-type ecosystem in a quiet Moscow suburb.

One of the most prominent scientists to be lured back to Russia by the Skoltech project is

Artyom Oganov, who specializes in computational materials discovery, which he describes as "a revolutionary field promising major technological innovations and discoveries in materials science."

Oganov's story is a classic example of Russia's scientific diaspora. After receiving his master's degree from the prestigious Moscow State University, he left Russia for University College London in 1998 "because at that time there was no future in science, no prospects, no possibilities to work on the cutting edge of modern science," he told The Moscow Times.

After 16 years, Oganov is back to teach and conduct research at Skoltech. Asked why he returned after so many years, Oganov said he "wanted to try this opportunity to work in my own country.

"Now science is again a major priority in Russia, science again attracts the best students, there is state of the art equipment and a desire to excel in science and technology. It is a very interesting time here," he said.

Russia's Silicon Valley

Skoltech is just one part of a larger project known as the Skolkovo Foundation, launched in 2010 by then-President Dmitry Medvedev as part of his initiatives to modernize Russia's oil- and gas-dependent economy.

In an interview (page 5) with The Moscow Times at the new campus, Skoltech president Edward Crawley explained the university's mission as an educational and research hub designed to infuse the ailing Russian economy with cutting-edge science and technology.

"Skoltech isn't just a new university, it's a different kind of university, one where the three acknowledged missions of all universities are present: teaching, research and innovation and industrial development. But here the latter role is the primary mission," Crawley said.

Read the Full Interview: 4 Years of Innovation: An Interview With Skoltech President Edward Crawley

The institute was launched from humble beginnings in 2011 as something of a virtual university hosted by the Massachusetts Institute of Technology in partnership with the Skolkovo project.

Four years on, Skoltech has grown from a small program with 20 students and a handful of dedicated professors to a university boasting some 60 professors and a few hundred students.

While Crawley estimates that 20 to 25 percent of the institute's faculty are foreign like him, the remaining 75 to 80 percent of the faculty are Russian-born scientists, he said.

"Fifteen to 20 percent of the faculty were hired in Russia, and the remaining 60 percent are diaspora who have returned. So we really have attracted a significant slice of the faculty back to Russia," Crawley said.

Reverse Brain Drain

Russia's scientific diaspora numbers several thousands, Crawley estimates. This leaves Skoltech with a large pool of talent to recruit from, but also begs the question of how many of these Russian scientists are even interested in returning to their native country after establishing themselves abroad — often in the United States and Western Europe.

Skoltech has worked since 2011 with the Russian-American Science Association (RASA) to increase interaction between Russian diaspora scientists and the community they left behind. Crawley said he is scheduled to speak at RASA's annual conference in early November.

According to the U.S. professor, there are two types of Russian diaspora scientists: those who for various reasons are not looking back, and those that are interested in the possibility of returning, and Skoltech is actively recruiting from the latter category.

The halls of the newly christened Skoltech campus are now home to Russian scientists who have in the last few years accepted offers from the institute to return to their country of origin to help work on the engine of innovation.

"I came back to my home country about a year ago to build a new kind of university," said Albert Nasibulin, who received his Ph.D. in physical chemistry from Kemerovo State University in Siberia in 1996, but left for Finland in 1999 and spent 15 years there, most of it at Aalto University.

Nasibulin, who cofounded a company in Finland specializing in commercializing carbon nanotubes, said he was enticed to come to Skoltech by its mission "to promote the commercialization of scientific results," he told The Moscow Times.

"Another reason to return to my home country was to teach my children Russian culture," he said, adding that they are able to speak perfect Russian, but were born abroad and "can hardly be treated as Russians."

Knowledge Application

Vasili Perebeinos left Russia for the U.S. in 1997 to complete his Ph.D. in physics, after which he worked on advanced materials and nanostructures for electronics at IBM's T.J. Watson Research center.

Asked why he left his career at IBM behind, Perebeinos said that Skoltech was a once-in-a-lifetime opportunity "to actually apply the knowledge I acquired abroad and influence how it is applied in the future."

Dzmitry Tsetserukou, head of Skoltech's Intelligent Space Robotics Laboratory, studied robotic technologies at the Belarussian-Russian University in Mogilyov, Belarus, but followed his mentors abroad to France and Japan, where he spent 10 years.

"In Japan I made a successful career and highly appreciate the time I spent there, but it is time to bring my expertise to a country that needs it more, there are a lot of opportunities to develop and apply new technology here in Russia. This is my new challenge," said Tsetserukou.

Philipp Khaitovich, a Moscow State University-trained biologist who left Russia 20 years ago to do his Ph.D. in the United States, echoed Tsetserukou's words, saying he decided to come to Skoltech "to use my experience to help build up a strong modern research and education base in Russia.

"I also missed Russian food," he added.

Contact the author at m.bodner@imedia.ru

Original url:
https://www.themoscowtimes.com/2015/09/10/skoltech-strives-to-repatriate-russias-lost-scientific-talent-a49490