

On April 27, we heard the exciting news that a science town for the next generation, called Skolkovo, was being erected in Russia with a prominent American biochemist and Nobel Prize Roger David Kornberg acting as Co-Chair of the Scientific and Technical Board. **Artyom Oganov, Andrey Vinogradov, and Richard Sakwa** answered our questions about Skolkovo and the general state of Russian science.

KORNBERG IS HEADING IN THE RIGHT DIRECTION

Artem Oganov



ARTEM OGANOV is a Russian crystallographer and is considered to be one of the most sought after young scientists today. He is also a professor of the State University of New York and Adjunct-professor of Moscow State University.

■ *Dear Artem, what are some of the potential opportunities of the Skolkovo project? Do you think that young scientists working abroad will respond to the Russian government, or has the country permanently lost the generation of scientists who left Russia during the mid-90s to 2000s?*

Skolkovo's prospects depend on many factors, including the wisdom of its organizers and the quality of their strategy. They must engage the best international scientists and engineers. **Skolkovo should recruit at least 10-20 Nobel Prize winners as permanent employees, not just as temporary visitors.** During the course of its history, Russia has had only ten Nobel Prize winners, and this reflects poorly on the prestige of our scientific community. It would be a mistake to recruit only Russian-speaking scientists. We need

the best scientists, and the best, unfortunately, do not always speak Russian. Nevertheless, I believe that Russia can become a second home for many foreigners. I'm not Russian by origin, and I do not belong to the Orthodox Church (I'm Catholic), but I have always thought of myself as Russian and I'm proud of my country. Indeed, Russian records show that many foreigners have become Russian citizens. The best scientists are worth fighting for and we must engage them. Where there is a will there is a way. Skolkovo has the chance to become either a great success or a great failure. I'm optimistic and I believe in success.

■ *What benefits and implications do you see in turning Skolkovo into an international project, especially after offering an American scientist the position of co-chairman?*

I'm very glad that Nobel Prize winner Roger Kornberg will be a co-organizer of Skolkovo. If Skolkovo is not developed as an international project, it is doomed to fail. We do not need another regular research estate or another science-town. The problem with our science-towns is that they were started by outstanding and enthusiastic founders, but over the years have become stagnant due to a lack of new scientists. Instead, they chose to hire those who "belonged to them," that is, follow a system of seniority without considering international tenders for each position. I wholly stress that each candidate be selected from the best throughout the world. The **involvement of international experts at the same level as Kornberg is a necessary and crucial step.** We will see what happens as time progresses, but so far the beginnings appear to be very optimistic.

■ *What kind of setbacks do you foresee in the development of Russian scientific*

thought, and what measures should be undertaken for removing these obstacles?

Until quite recently, poor financing and lack of modern equipment were the biggest problems. Today, excellent equipment is available and adequate grants are received, but there is no one to utilize them.

We practically have no more world-class scientists, perhaps with the exception of some separate realms of science, like Dubna. The quality of education has declined rapidly. Students simply have no opportunity to encounter modern science and to appreciate its beauty.

The Russian scientific system is heavily bureaucratized. Recently, I won a grant from *Rosnauka* (Russia's Federal Science and Innovation Agency). Hardly a week had passed before they promptly required that we draw up a fifty-page report. What did they expect us to report on? Unspent money or unfinished work? We were up to our ears with absolutely ridiculous instructions. At one point, I called *Rosnauka* and told them that if this did not stop, I would be forced to give up the grant. I told them in America I am an Associate Professor. And it is much more pleasant to work there than to communicate with unreasonable bureaucrats. As a result, the nightmare stopped. Nevertheless, according to the rules, we are still required to draw up a fifty-page report every 6 months.

To conclude, the problems of Russian science are: an almost absolute lack of high-class scientists, a backward and isolated scientific community in relation to the rest of the world, an increasingly poor standard of university education, and a monstrous and overbearing bureaucracy. ■

Artyom Oganov was speaking with Konstantin Arshin and Alexander Pavlov