The award of the Nobel prize Tuesday to two Russian-born physicists based abroad cheered Russia but also showed up its losses from a calamitous brain drain since the fall of the Soviet Union.

"We need to make an effort so that our talented people do not go abroad," Russian President Dmitry Medvedev said in a regretful response to the award of the 2010 Nobel Physics Prize to Andre Geim and Konstantin Novoselov, the Interfax news agency reported.

Medvedev slammed the government's failure to provide attractive conditions for scientists to work in the country after they graduated.

"We do not have a normal system to stimulate our young specialists, talented people, so that they stay to work in this country," Medvedev said, calling government efforts to improve research facilities a "huge failure".

Both Geim and Novoselov, who share the prize for pioneering work on graphene, graduated from the Moscow Physics and Technology University (MFTI) and conducted research in the Moscow region.

In televised comments on Tuesday, Geim, 51, who has not worked in Russia since the early 1990s, praised his Soviet education: "You cannot obtain such an education, not in Harvard nor in Cambridge, nowhere."

But his strong accent gave away the fact that Geim, now a Dutch national, has long since moved on from Chernogolovka, the Moscow region town where both laureates worked in the Academy of Sciences' Institute of Solids.

The scientists' undergraduate alma mater is thrilled with their win, said Mikhail Trunin, the dean of general physics faculty at MFTI.

"Undoubtedly, both their education at the university, and research in Chernogolovka, played a role," he said. "They were taught to think... They are educated scientists, that is to the credit of our educational system," Trunin told AFP.

The university was founded by Soviet Nobel laureates Lev Landau, Pyotr Kapitsa and Nikolai Semyonov, who also developed its unique educational system that combines theoretical teaching with lab-based research.

Geim and Novoselov, 36, are the first students from the school to receive the Nobel prize and Trunin conceded they left in the "brain drain" typical of the post-Soviet era.

"They could reach these results here as well, but it was very difficult here, especially the time when Andre left, there was a great drain of scientists and students," said Trunin.

Hundreds of young scientists, especially working in applied fields that require expensive experiments, have left Russia and continue to leave in order to continue scientific work.

Novoselov, the youngest Russian national to ever win the Nobel prize, also holds a British passport.

"The fact that they work abroad speaks of a pitiful state of our science," said Konstantin Indukayev, director of research in Amphora Labs that specialises in nanotechnology and applied physics.

While the fundamental educational base of the Soviet system has reared scientists highly qualified in both theory and experimental work, the "lack of financing, modern equipment, living and working misery" have not encouraged them to stay, he said.

Medvedev said Tuesday that Russia now offered "decent grants" to scientists but that it fell down on the quality of its research facilities.
"Our laboratory research base unfortunately is quite seriously outdated," he said. "We have not developed it in recent years, or if we have, only in major scientific centres such as Moscow and Saint Petersburg state universities."

Vitaly Ginzburg, the last Russian physicist to receive the Nobel in 2003 and died last November at the age of 93, was an outspoken critic of bureaucracy and misdirected funding in Russian science.

"If a scientist proposes a genius idea in Russia, our bureaucrats will stuff that idea in a coffin," Ginzburg said in an interview to Izvestiya daily in April 2009.

Ginzburg was prevented from working abroad by the Iron Curtain most of his long life, but today young physicists don't have to. Geim's lab in Manchester has already become a magnet for other MFTI graduates, who make up most of the 90-strong team, said Trunin.

Seven Nobel prizes have now been awarded to Russian scientists for physics, the most of any other field.