

Nobel Prize for Physics is 'wine from vines that took a decade to plant,' says Geim

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As joint-winner of this year's Nobel Prize for Physics - awarded for the creation of the 'wonder material' graphene - Andre Geim has become a 'poster boy' for the success of UK physics.

In an exclusive interview for November's Physics World, Geim, who moved to the UK in 2001, outlines his remarkably positive views on UK research funding, singling out former science minister Lord Sainsbury as a key architect in securing support for a strong UK science base.

Geim and his Manchester University colleague Konstantin Novoselov are the first UK-based physicists to win the Nobel Prize for Physics since Nevill Mott in 1977, thanks to their isolation of [graphene](#) - a sheet of crystalline carbon just one atom thick whose remarkable electronic properties make it ripe for commercial exploitation.

Samsung, the electronics giant, is already considering the material for use as a transparent conductive material in their touch screen technology, while researchers around the world are jumping on the bandwagon to explore other applications for which the material's lightweight strength and conductivity could make it ideal.

Geim enthuses about the huge amount of research

his discovery triggered: "It's like a line of people going through a mountain pass to a new place to dig for gold. Every one of them has a rucksack full of wooden stakes to put in the ground to claim their patch."

Geim also provides some insight into why he believes the UK is well-poised for more scientific success.

As he says: "I'm scared for the moment when I next have to apply for a grant and a referee will decide that he can teach a lesson to a Nobel laureate. In the UK, your previous achievements are no guarantee of future funding and I accept, and actually salute, this system because it forces people to keep running."

When asked who should take the credit for getting things right in UK science, Geim singles out Lord Sainsbury, who he says was "exceptionally helpful" to UK science during his spell as science minister from 1998 to 2006.

"Thanks to him, it is no longer the case that when you have visitors to your university, you are ashamed to show them your facilities or even the bathroom. Sainsbury's efforts on funding have paid off with this [Nobel prize](#) -- it is the first glass of a Nobel wine from vines that took a decade to plant."

Geim, who calls for research to be restricted to just the UK's top 50 universities while leaving the others to focus on teaching, is cautiously optimistic about the future. "There is more to come," he says. "But there is a danger that with a sharp axe a decade of work can be destroyed in hours. Science is very delicate: easy to destroy but very hard to repair."

Provided by Institute of Physics

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