

# Graphene pioneers follow in Nobel footsteps

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Two physicists from The University of Manchester who discovered the world's thinnest material have scooped a major award for their work.

Professor Andre Geim FRS and Dr Kostya Novoselov of the Centre of Mesoscience and Nanotechnology have been awarded the prestigious Europhysics Prize for discovering graphene – and also their subsequent work to reveal its remarkable electronic properties.

Graphene is a one-atom thick gauze of carbon atoms resembling chicken wire. This incredible new material has rapidly become one of the hottest topics in materials science and solid-state physics.

Presented since 1975, the Europhysics Prize is one of the world's most prestigious awards for condensed matter physics.

Many winners have subsequently been awarded the Nobel Prize in recognition of their achievements, including the last year Nobel Laureates Albert Fert, Peter Grünberg and Gerhard Ertl.

The Europhysics Prize recognizes recent work by one or more individuals, which, in the opinion of the European Physical Society, represents scientific excellence.

The 2008 Award was presented at the 22nd General Conference of the EPS Condensed Matter Division in Rome.

Aside from the prestige, Prof Geim and Dr Novoselov will share a cash

prize of Euros 10,000.

Since the discovery of graphene in 2004, Prof Geim and Dr Novoselov have published numerous research papers in prestigious journals such as Science and Nature, which have demonstrated the exquisite new physics for the material and its potential in novel applications such as transistors just one atom thick and sensors that can detect just a single molecule of a toxic gas.

Prof Geim said: "To receive this award is a great honour. We have been working very hard and putting in long hours for the last five years. Hundreds of other researchers have now joined us in studying graphene.

"But still we have not yet explored even a tip of the iceberg. Graphene continues to surprise us beyond our wildest imagination.

"It works like a magic wand – whatever property or phenomenon you address with graphene, it brings you back a sheer magic.

"A couple of years ago, I was rather pessimistic about graphene-based technologies coming out of research labs any time soon. I have to admit I was wrong. They are coming sooner rather than later.

"In ten years time I believe the word graphene will be as widely known to the public as silicon."

Source: University of Manchester

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