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## Graphene research gets £21.5m investment fund

**The Chancellor, George Osborne, has outlined plans to boost development of the "super-material" graphene.**

It is one of the lightest, strongest and most conductive materials known, with great commercialisation potential.

Now, £21.5m - £12m from [a 2011 funding of £50m](#) and nearly £10m from the science research council EPSRC - will be allocated to specific universities.

In addition, those universities and their industrial partners will commit a total of £14m to the effort.

Mr Osborne said the investment fund would aim to take the technology "from the British laboratory to the British factory floor".

Graphene is sheets of carbon just one atom thick - the very same material making up a pencil's "lead", but with record-breaking mechanical strength and electronic properties.

Manchester University academics Andre Geim and Konstantin Novoselov won the [2010 physics Nobel Prize in Physics](#) for isolating the material and measuring some of its astounding properties.

But since the material's discovery in 2005, scientists have sought to make good use of those attributes - no easy task when working at the atomic scale.

The Engineering and Physical Sciences Research Council (EPSRC) has now identified the most promising graphene-related research projects in British universities to benefit from state funding.

The University of Cambridge has been awarded more than £12m for research into graphene flexible electronics and opto-electronics, which could include things like touch-screens and other display devices.

Imperial College London will receive over £4.5m to investigate aerospace applications of graphene.

The other successful projects are based at Durham University, the University of Manchester, the University of Exeter and Royal Holloway.

The universities will themselves contribute about £2m to the overall effort, and will work with industrial partners including Nokia, BAE Systems, Procter & Gamble, Qinetiq, Rolls-Royce, Dyson, Sharp and Philips Research - which will together bring in a further £12m in investment.

Mr Osborne told BBC Radio 4's Today programme there had been "enormous competition" for the graphene research to be done elsewhere in the world, rather than the UK.

He said: "We had to act very quickly... to step in and say we're going to provide funding here in Britain for that activity. That's an example of actually actively backing a winner to keep it in the UK."

Mr Osborne said there were several ways in which the UK could become an attractive location for scientific research, including more financial backing from the government, protecting spending on science, and more investment in big capital science projects.

He added that Britain's universities - the "jewels in the crown" of the UK economy - needed to be protected.

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