Headlines: Patience Worn Thin, Physicist Turns To NUS
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Patience worn thin, physicist turns to NUS

By Liaw Wy-Cin

THE father of the world's thinnest material, which could replace silicon in computer chips, is fed up.

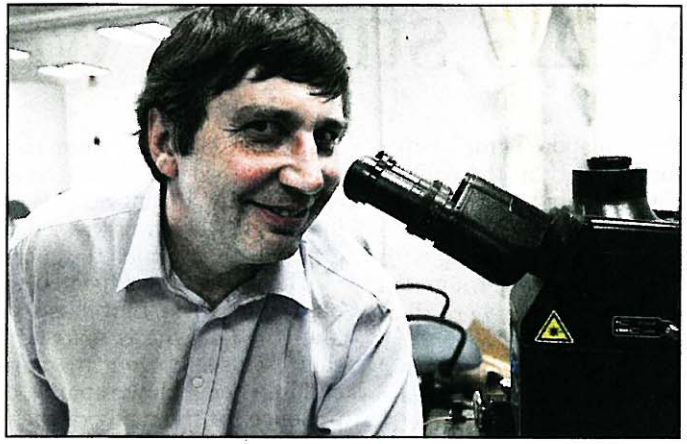
Dutch physicist Andre Geim unveiled his discovery, graphene, to the world five years ago, but still has not seen it bear commercial fruit on either side of the Atlantic.

So the professor is now here, hoping that a new centre the National University of Singapore (NUS) plans to set up will speed up research into graphene and take his invention to the market.

He told The Straits Times: "I feel so sour that we know so much about its properties but are so slow in utilising them."

He said a major initiative like the setting up of a centre to develop graphene applications was likely a non-starter in the United States or England, as funding there is hard to come by.

Professor Geim, the director of the Manchester Centre for Mesoscience and Nanotechnology at Britain's Manchester University, will be talking to scientists here about the new centre on carbon science and technology and deliver a public lecture on his discovery this evening at NUS in Kent Ridge.



Prof Geim, who discovered graphene, is in Singapore to help NUS beef up research capabilities in the material. ST PHOTO: ALBERT SIM

Graphene is a single layer of carbon atoms a million times thinner than a strand of human hair. But it is stronger than diamond and conducts electricity better than copper – and is stretchable to boot.

About 10 companies around the world are working on making things out of it, ranging from wearable electronic gadgets to more powerful transistors in electronic devices such as mobile phones.

With the silicon chip already being as small as it can ever be, scientists like Professor Antonio Castro Neto of Boston University believe graphene can take miniaturisation further – chips could be 10 times smaller than what they are now.

The emerging field of carbon science and technology is the very area NUS wants to go into with the new centre.

The dean of the university's science faculty, Professor Andrew Wee, wants to grow the team of researchers from the current 10 to 200. To get there, the university has roped in Prof Neto to set up and helm the centre. He will join NUS as a visiting professor in August, and if all goes well, the centre should be up and running by January, said Prof Wee.