

News

2010 Nobel Prize Winners in Physics, Chemistry & Medicine

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Abstract

This article contains news on 2010 Nobel Prize winners in physics, chemistry & Medicine. These news items also appeared in viXra Log at <http://blog.vixra.org> .

Key Words: 2010, Nobel Prize, physics, chemistry, medicine .

October 4, 2010: [Nobel Prize in Medicine to Robert Edwards for IVF](#)



The Nobel Prize for Physiology and Medicine in 2010 has been awarded to Robert Edwards for his pioneering work on human In Vitro Fertilisation treatments. The news was leaked a few hours ahead of the official announcement by a Swedish daily - Svenska Dagbladet.

The official citation was shown in a live webcast from Sweden at 9.30 a.m. GMT this morning. But the advance rumour was propagated by Reuters and picked up by other news agencies a few hours ahead of time. The Nobel committee was repeatedly asked about the apparent “leak” at the press conference after the announcement. They first called it a good guess, but then admitted that they had been shocked to see it in the papers this morning.

Robert Geoffrey Edwards who celebrated his 85th Birthday last week first succeeded with IVF treatment for infertile couples in his work with Patrick Steptoe when Louise Brown was born at 11:47 p.m. on 25th July 1978. The technique is to extract an egg from the mother’s ovaries and fertilise it with the father’s sperm in a test-tube before replanting in the mother’s womb. Before Patrick Steptoe died in 1988, Edwards was able to convey to him the news **that 1000 “test-tube babies”** had been born at Bourn Hall in Cambridge where they had worked together. “I’ll never forget the look of joy in his eyes,” said Edwards.

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October 5, 2010: Nobel Prize in Physics to Andre Geim and Konstantin Novoselov for Graphene

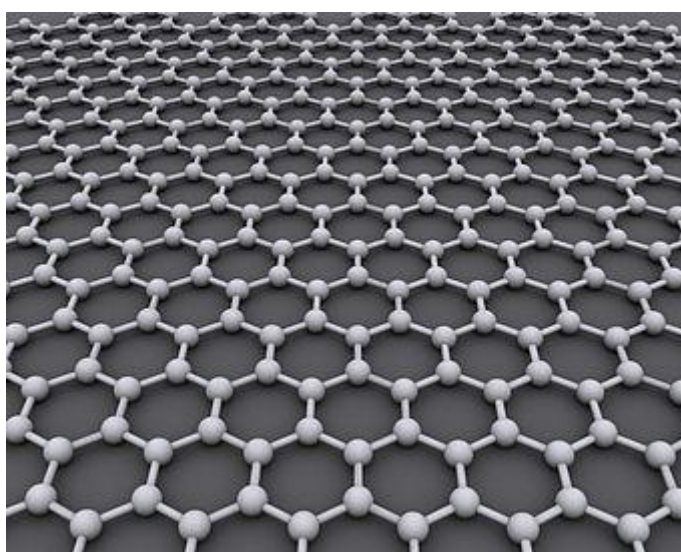


The 2010 Nobel Prize in physics has been awarded to Andre Geim and Konstantin Novoselov for the discovery of graphene. Both laureates work at Manchester University making it the second Nobel Prize this year to be awarded to work in the UK. The winners themselves are from Russia.

Graphene is a material one atom thick made of carbon atoms. Graphite which is often used in pencils or as a lubricant is actually just layers of graphene. separating the graphene and studying its properties started with the idea of using sticky tape to peel the layers off. It sounds like a simple idea but you can be sure that it was not an easy process otherwise other people would have done it first

It turns out that graphene has extraordinary properties for conducting electricity and heat and is very strong for its feeble thickness. Recently the world record for rotational speed of objects was taken by a flake of graphene that was spun using light to a million revolutions per second. Any other material would have broken apart but graphene has the potential to go even faster before it breaks.

You may be wondering why a discovery of a new type of molecular substance wins the physics prize instead of the chemistry prize. Me too. Perhaps it makes up for the fact that some recent chemistry prizes would have been better suited to the medicine Nobel.



October 6, 2010: Nobel Prize in Chemistry to Richard Heck, Ei-ichi Negishi and Akira Suzuki for Palladium-Catalyzed Cross Coupling



The 2010 Nobel Prize in chemistry has been awarded to Richard Heck, Ei-ichi Negishi and Akira Suzuki for work that has greatly improved the ability to synthesise organic chemicals. This is important in many fields of manufacturing, especially pharmaceuticals and electronics where rare compounds found in nature are often in higher demand than nature can provide. Of course the methods can also be used to produce organic (carbon-based) molecules that nature has not discovered yet, but which may still be useful to us. The work was done in the US, China and Japan.