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Nano in My Life

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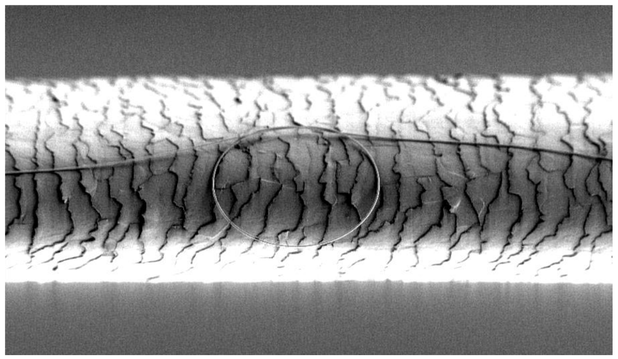
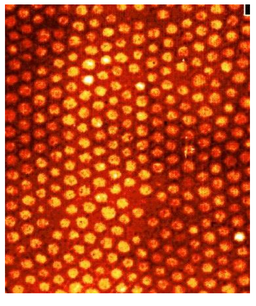
Nanotechnology is the engineering of tiny materials, atom by atom.

One ‘nanometer’ is equal to one billionth of a meter. The width of a human hair is about 50,000 nanometers.



Properties often appear different at the nanoscale, e.g., gold at the nanoscale is red.

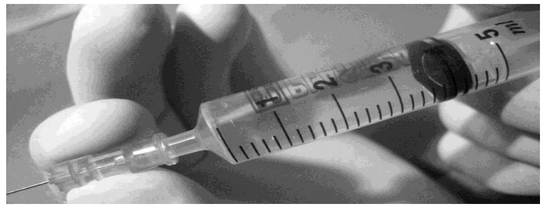


You could even be wearing nanotechnology right now. Nanotechnology is being used to waterproof clothing!

While we might not realise it, nanotechnology is all around us. Nature provides the inspiration for today’s nanoscientists.

For example, by analysing geckos, and their ability to walk upside down on even the smoothest of walls, Nanoscientists have been able to make a strong durable adhesive that is also easily removed.

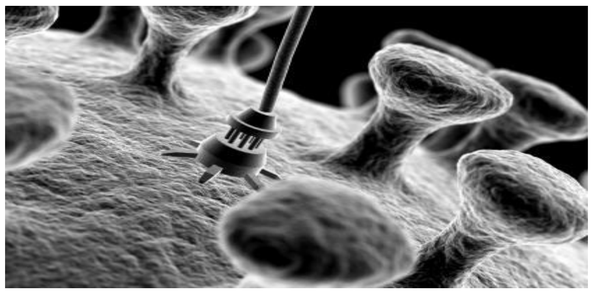
Great advances are being made in medicine with the use of nanotechnology. Drugs are being engineered to only attack diseased tissue, leaving healthy tissue untouched. This means less medicine being used and quicker healing time.



It’s amazing how much nanotechnology we already use, and maybe not in the way we might think. A lot of the new sun cream brands use nanoparticles of zinc or titanium oxide. Because of the smaller particles, the sun cream, when applied, is completely transparent.

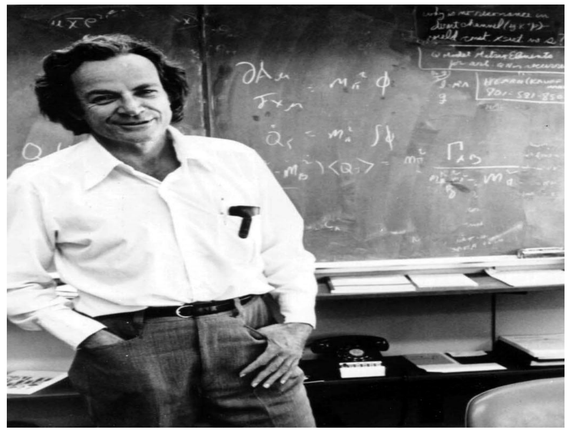
The use of carbon nanotubes in bicycles and tennis rackets make them both lighter and stronger. Nanotechnology is also being used to make scratch resistant coatings, which can be used on everything from the lenses in your glasses to the paintwork on your car.

“The next big thing is really small”, is the title of Jack Uldrich and Deb Newberry’s book on nanotechnology, and they’re definitely right. Nanotechnology is expanding rapidly, and the future is exciting. In our lifetime, nanotechnology could find less intrusive ways to fight cancer, clean polluted water and change the world of technology as we know it.



Nanotechnology is a vital component in everyday life, whether we realize it or not. With the use of nanotechnology, things are getting smaller, lighter, stronger and cheaper, and because of this saving us all money. And, the smaller everything gets, the easier it is to transport, so even the environment benefits.

Nanotechnology proves that less is more, and small is certainly the way to go.



“THERE’S PLENTY OF ROOM AT THE BOTTOM”

-Richard Feynman, credited with the idea of Nanotechnology