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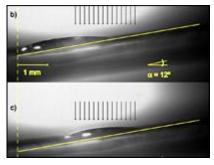
## Nanotech team move water droplets

Scientists at Edinburgh University have used nanotechnology to move an object visible to the naked eye.

Researchers moved a tiny droplet of water along a surface, and even up a slope, using only light sensitive molecules.

They said it means that an age where laser beams are used to lift objects up and move them around could be closer than previously thought.

The machines used were 80,000 times thinner than a hair's breadth.



Researchers succeeded in moving liquid droplets

It is the first time nanotechnology has been used to move an object large enough to be seen by the naked eye.

Team members stressed that the research was in its early stages.

Professor David Leigh told BBC Radio's Good Morning Scotland programme: "Getting things from the lab to the real world is a major hurdle and what we've been able to demonstrate is that artificial molecular machines can be interfaced with, and perform a physical task in, our everyday world.



There are high hopes for the future of nanotechnology

"In the short term we're thinking of 'lab on a chip' technologies, where we move a droplet of liquid around on a silicon chip and it can be used for many different sorts of tests."

But he said in future it is hoped to be able to move much larger, more solid objects, using something as simple as a laser point.

In the future, the technology could lead to artificial muscles being built and the creation of surfaces that change their shape in response to light or electricity.

Nanotech manipulates molecules, and even atoms, to make novel materials.

The precision engineering exploits unusual electrical, optical and other properties - and the global race is on to develop the potential of the science.

A human hair is about 80,000 nanometres wide, while one nanometre is about a million times smaller than the diameter of a pinhead.

Nanoscale coatings are used to make stronger tennis rackets, clothes that are stain resistant, and windows that clean themselves.

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However, the emerging science has its critics.

One organisation, the ETC Group, wants more commitment to the possible risks of nanotech already in use.

Prof David Leigh