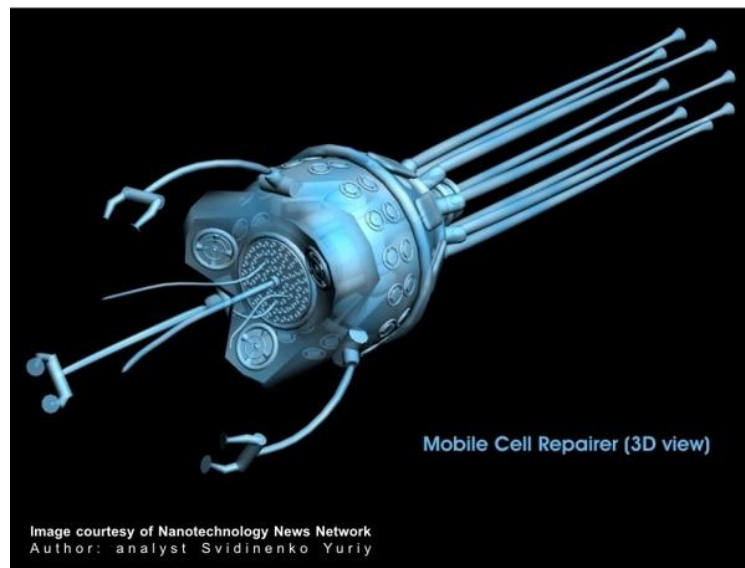


# Nanorobots

Nanorobots off-load in military and medicine fields.



A nanorobot is a nano scale robot, manufactured using nanotechnology. They are composed of about a hundred atoms and are powered by engines that use catalytic surrounding fluid as fuel. They are used for medicine and are also used in the army. Nanorobots are controlled by a computer. They are able to manipulate materials, and even cells, on the scale of atoms and molecules.

Nanotechnology is expected to save energy and result in extraordinary advances in the fields of health (treatment of cancer ...).

The "Ares" project: since 2008, researchers from the European project "Ares" have been working on the design of nanorobots that can be swallowed by a patient in order to avoid invasive surgery. These nanorobots would be robots that are as small as prescription pills controlled remotely by computer. They are composed of several parts each with a specific function. Once ingested by the patient, these assemble in different parts in the human body to form a autonomous robotic system that is more powerful. All of this is thanks to a magnetic field that allows assembling on their own.

Other recent advance; chemists at Tufts University in the United States have made the smallest molecular motor in the world. They put a molecule on the surface of a copper with the tip of a scanning tunneling microscope, so they were able to obtain an ion that can be electrically rotated.

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