DNA molecular motor walks down carbon nanotubes

Researchers have created a new type of molecular motor made of DNA and demonstrated its potential by using it to transport a nanoparticle along the length of a carbon nanotube.

The design was inspired by natural biological motors that have evolved to perform specific tasks critical to the function of cells, said Jong Hyun Choi, a Purdue University assistant professor of mechanical engineering.

Whereas biological motors are made of protein, researchers are trying to create synthetic motors based on DNA. The walking mechanism of the synthetic motors is far slower than the mobility of natural motors. However, the natural motors cannot be controlled, and they don't function outside their natural environment, whereas DNA-based motors are more stable and might be switched on and off, Choi said.

Read the full, original story: DNA motor 'walks' along nanotube, transports tiny particle