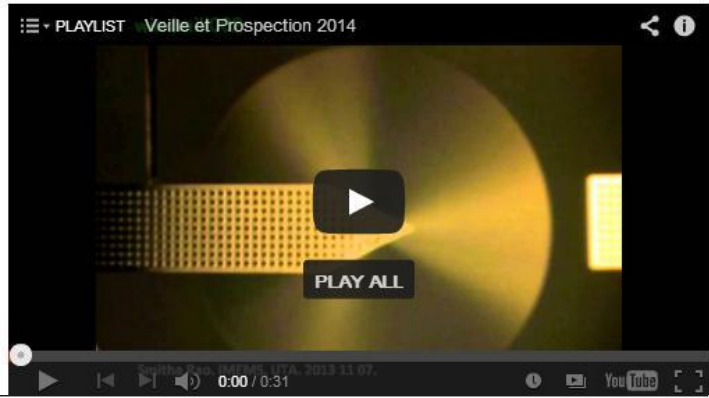


MICRO-WINDMILLS MAY ONE DAY CHARGE YOUR PHONE BATTERY



Energy generated from wind turbines or windmills is seen as a very green source of power. It produces no emissions and doesn't rely on any raw materials that will run out. You simply need a big wind turbine positioned in a relatively windy area.

Such wind turbines can be a bit of an eye sore, though, and there are limited locations where they can be erected, but nobody said wind turbines had to be big. Research being carried out at the University of Texas Arlington is looking at ways to use windmills so tiny, you could fit ten of them on a grain of rice. And yet, they could one day be used to recharge the batteries in your mobile devices.



These so-called micro-windmills have been designed by researchers Smitha Rao and J.C. Chiao. They are created using an advanced semiconductor manufacturing process offered by WinMEMS Technologies Co. with each micro-windmill no larger than 1.8mm at its widest point. Each one still relies on a source of wind with which to generate energy from, but as they are so small artificial wind, like that generated by a person moving their hand through the air, suffices.

Each micro-windmill is manufactured from nickel alloy to stop them being brittle, but do rely on an advanced fabrication system. With that in mind, UT Arlington is holding on to the IP rights while WinMEMS handles manufacturing and commercialization of the technology.

For consumers, it means the potential for a revolution in the way we recharge our devices. A case for your smartphone, tablet, or laptop could be coated in these micro-windmills which then spin even at the slightest movement of air around them. With the complementary electronics embedded into the casing, we get a passive recharge system that keeps your battery topped up throughout the day. And if you need a bigger charge, then just start moving your device more vigorously through the air.

URL source

Micro-windmills may one day charge your phone battery

Intelligence and monitoring



6 February 2014 - Step to artificial hand that feels what you touch

It's not quite the bionics of science fiction, but European researchers have created a robotic hand that gave an amputee a sense of touch he hadn't...



4 February 2014 - RYNO: When Two Wheels Is Too Many

This sci-fi electric unicycle is the RYNO, a future-badass alternative to the Segway that looks like it got beamed down from the year 2114.



4 February 2014 - Engineer Designed his own Bionic Legs

The legs have 2 microprocessors and 12 sensors that allow Hugh to walk and even run with a natural gait.

more