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MOBILE TECH

# Scientists create 'micro-windmills' that could power your cellphone

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Researchers at the University of Texas Arlington have developed tiny "micro-windmills" (<http://www.uta.edu/news/releases/2014/01/microwindmill-rao-chiao.php>) so small that ten of them can fit on one grain of rice. If you were to glue a hundred of them onto a cell phone case and hold it out the window, researcher J.C. Chiao says, you could potentially revive your dead phone in just a few minutes. The 1.8mm-wide windmills look pretty fragile, but UTA says that their flexible nickel alloy components can stand up to strong winds without fracturing.

Taiwanese fabrication foundry WinMEMS has arranged exclusive rights to commercializing the concept, and has already begun work on potential applications. "These inventions are essential to build micro-robots that can be used as surgical tools, sensing machines to explore disaster zones or manufacturing tools to assemble micro-machines," UTA says. "Flat panels with thousand of windmills could be made and mounted on the walls of houses or building to harvest energy for lighting, security or environmental sensing and wireless communication."

Tiny windmills might not be the energy crisis panacea you had in mind, but thinking outside the box will very likely get us there.

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