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Micro-Windmills Recharge Cell Phones



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A UT Arlington research associate and electrical engineering professor have designed a micro-windmill that generates wind energy. The technology may improve cell phone batteries constantly in need of recharging and home energy generation where large windmills are not preferred.

Smitha Rao and J.-C. Chiao designed and built the device that is about 1.8 mm at its widest point. A single grain of rice could hold about 10 of the tiny windmills. Hundreds of the windmills could be embedded in a sleeve for a cell phone. Wind, created by waving the cell phone in air or holding it up to an open window on a windy day, would generate the electricity that could be collected by the cell phone's battery.

Because of the small sizes, flat panels with thousand of windmills could also be made and mounted on the walls of houses or building to harvest energy for lighting, security or environmental sensing, and wireless communication.

[Source](#)

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