

Micro windmills to recharge your mobile phone

Discussion in 'Other Engineering Trades' started by Kaustubh Katdare, Tuesday at 11:07 AM.



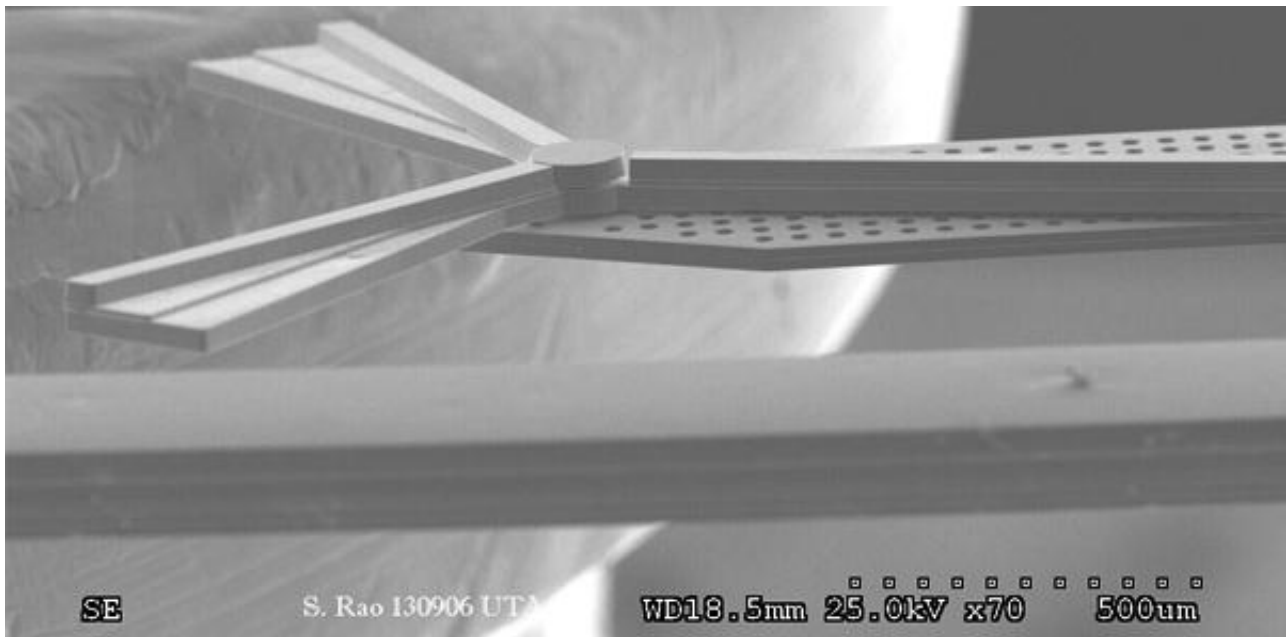
by [Kaustubh Katdare](#), Jan 14, 2014 at 11:07 AM

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How do you like the idea of about 10 windmills mounted on a single grain of rice? Well, the good news is that it's not an idea anymore; and you might soon have your own, personal micro-windmills that will recharge your mobile phones and tablet computers. Dr. Smitha Rao and J.C. Chiao from University of Texas at Arlington have been doing some crazy awesome engineering lately and have succeeded in developing micro-windmills that are just 1.8 mm at the widest point! The researcher duo believe that hundreds of such windmills can be hosted on your mobile phone and used to charge your mobile phone on the go.



Rao's work has seen a great interest from Taiwanese fabrication company, WinMEMS Technologies Co. The officials were very surprised when they saw micro windmills in action. The company is currently exploring the commercial opportunities and showcasing Rao's work through their website (see source) and public presentations.

The researchers were able to blend the concepts of origami & wafer-scale semiconductor devices allowing them to create complex 3D structure from 2D metal pieces. Rao believes that when it comes to potential applications of micro windmills, she's only scratched the surface.

Rao's micro windmills use a nickel alloy and a smart aerodynamic design which solves the problem of durability which most of the MEMS designers face. Thousands of these micro windmills working in sync can allow you to recharge your electronic devices and also power your houses. The possibilities are limitless.

Here's a video of the microwindmill in action -

Source: [UTA](#) | [WinMEMS](#)

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