1/25/2014 smitha-rao



Six Sigma Certification

www.villanovau.com/SixSigma Earn the Six Sigma Credentials That Will Set You Apart -100% Online









People Like Us Who Inspire Us

Main Previous Page 4

Smitha Rao, an Indian American RESEARCHER DEVELOPS TINY WINDMILLS To Recharge Cell Phones

Smitha Rao, an Indian American Research Associate at the University Of Arlington at Texas and her Electrical Engineering Professor, J. C Chiao, have developed a micro-windmill that generates wind energy that can be tapped to open a world of opportunities. This extremely tiny device, measuring only 1.8 mm at its widest part, 10 of which can be accommodated into a single grain of rice and hundreds in a sleeve of a cell phone, (and get excited about this) could be the answer to our easily discharging cell phones (finally!phew!).

According to the University News Center, Rao's designs blend origami concepts into conventional wafer-scale semiconductor device layouts. Waving the cell phone in air

or holding it up to an open window on a windy day, would generate electricity that could be collected by the cell phone's battery. The micro windmills were tested successfully in September 2013 in Chiao's lab. The windmills operate under strong artificial winds without any fracture in the material because of the durable nickel alloy and smart aerodynamic design.

Rao's works in micro-robotic devices first caught the interest of a Taiwanese company, WinMEMS Technologies Co., that is now exploring the commercial possibilities, while UT Arlington has applied for a provisional patent.

The device also has the potential of being



Top: Smitha Rao; Bottom: Micro windmills on a penny)

(Photo Credits & Source: UT Arlington, Texas, News Center)

Online Master's **Degrees**

texas wgu edu Learn at Your Own Pace & Earn Your Accredited Degree Online.



Visit the <u>desi shoppe @ desideewar</u> for beautiful designer Anarkali Suits!





Penn State Univ is Online 1/25/2014 smitha-rao

used for home energy generation where large windmills cannot be used.

Smitha Rao comes from a family of doctors and engineers. She originally intended to be a surgeon, but her life took several turns. After doing her undergraduate at the Bangalore Institute of Technology in India, she graduated with a telecommunications degree from BIT, and then joined the Electrical Engineering Program at UT

Arlington in 2002. There she met the Associate Professor, J.C. Chiao in the Fiber Optics course. Little did she know then that the alliance will lead to her glory. It was he who guided her toward MEMS, or microelectromechanical systems, a technology that builds micro-scale robots suitable for "in vivo" medical applications. Rao is currently a Associate-Research at UT Arlington.

And naturally, every time anyone of Indian origin makes a noteworthy contribution in any field, it swells our heart with pride and there's a sense of inspiration for us and our young ones.

PEOPLE LIKE US WHO INSPIRE US

Main Previous Page 4

www.worldcampu...

Check out the Graduate & **Undergrad Online** Degrees from Penn State.



COMMENTS

Name

Enter your comment here

Comment

by Html Comment Box

No one has commented yet. Be the first!





