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# Suit Up: Solar, Nanotech Innovations Reinvent Clothing

BY DAVID BOIS | SATURDAY, FEBRUARY 20, 2010 4:10 PM ET

Technological breakthroughs could lead to 'power suits,' literally generating electricity.

A simple compliment on your outfit will often light up your face. This February, a pair of breakthrough research projects combine technology with fabric, so the next time you receive that compliment, you will light up, literally.

GreenerDesign reports that a University of California-Berkeley team has developed a nanofiber that generates electricity through capturing the kinetic energy imposed on the fiber through twists, turns, bends and movement. At one-tenth the width of most conventional textile fibers, the new nanofiber generators could easily be incorporated into fabrics and supply sufficient energy to power small personal devices, like an iPod.



Meanwhile, Nature Materials reports that engineers at California Institute of Technology have developed a solar cell technology that is as efficient as conventional cell technology, can be made less expensively and offers a range of potential applications that run from rooftops to clothing. The application uses less of the very expensive crystalline silicon found in solar panels because it comes in the form of fibrous nano rods that are about one-hundredth the diameter of a human hair. In fact, it can capture 85 percent of incoming solar energy, 95 percent of which is then converted to electricity, making this innovation "very comparable to the highest quality solar cells and well above that of other flexible thin film solar cells" according to Cal Tech physicist Harry Atwater in an interview with LiveScience.

It'll be an entirely new take on the concept of the 'power suit.' Some day soon, whether we're dressing to go dancing or jogging, what we're wearing will help make other things go as well.

Photo courtesy of Lululemon Athletica via Flickr.

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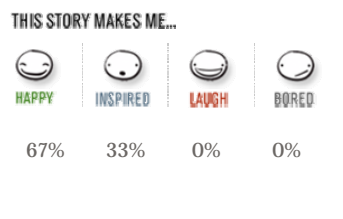
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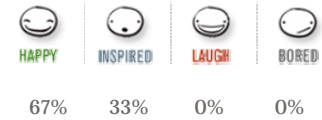


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Dave Bois is a native of Maine and has lived in the San Francisco bay area since 2000. He graduated from Tufts University with degrees in geology and sociology and pursued graduate studies in physical geography at the University of

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