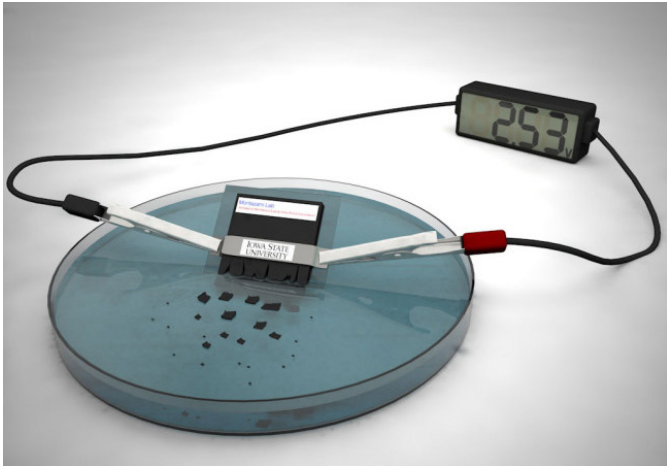


To Destroy this Battery, Just Add Water

Written by Marco Attard
10 August 2016

Here's a means of powering gadgets that sounds ideal for Ethan Hunt and the Impossible Mission Force-- a battery one can destroy through the simple application of water.



Developed by Iowa State University, the battery is designed to power so-called "transient electronics," devices able to perform a variety of functions until exposure to light, heat or liquid. An obvious application for such devices is the military and espionage, but these also find use in medicine (specifically implants able to melt away when no longer needed) and temporary environmental sensors.

However, until now, transient electronics had a power issue-- they either relied on external, non-transient, power sources or early attempts at transient batteries with limited power, stability and self life. The Iowa State researchers claim to fix such issues, since their attempt at the technology powers a desktop calculator for around 15 minutes and self-destructs after being submerged in water for 30 minutes.

The battery is based on the same lithium-ion chemistry found in most batteries, and consists of lithium and silver nanoparticles encased in a degradable polymer casing. It is 1mm thick, 5mm long and 6mm wide, and delivers over 2.5V.

What next for the battery? The scientists are now looking into the mechanics behind the self-destruction in order to design "more controllable systems," as well as scale up the battery for the powering of more sophisticated devices.

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Go [Iowa State Scientists Develop Quick-Destructing Battery to Power "Transient" Devices](#)