

# Weekly Discovery

We SHARE to inspire and ignite ideas!

15 February 2016 – 19 February 2016

## 3D PRINTING

### Scientists Successfully 3d Print A Functioning Human Ear



[Here](#) is a new breakthrough in 3D printing. Scientists have now successfully 3D printed a functional human ear! This is not too far from replacing damaged or missing body parts or organs with 3D printed substitutes. The scientists have even managed to overcome technological difficulties in keeping the cells alive during the printing process.

Source: [Inhabitat.com](#) (February 2016)

## OPTICS

### Eternal 5d Data Storage Could Record The History Of Humankind



Have you seen the “memory crystals” in Superman films? Now you can see them in real life. Scientists have developed a ground-breaking digital data storage that can last for billions of years. Made from nanostructured glass and data written with ultrafast laser, this memory crystal can have useful applications in preserving human memory in many ways. You may refer to this [link](#) to find out more.

Source: [Phys.org](#) (February 2016)

## ROBOTICS

### Death-Defying Cockroaches Help Build Better Bots



Attention: the video [here](#) may cause discomfort to those who are extremely afraid of cockroaches! The researchers, who are obviously less so, have developed a highly resilient robot with inspirations from cockroaches. Why are they so tough that they can sometimes survive a deadly squashing force? Find the answer in this [article](#).

Source: [Science](#) (February 2016)

## TRENDS

### Euromonitor’s Top 10 Global Consumer Trends for 2016



Discover future opportunities among consumers, who are seeking value innovatively in this [trend report](#) which analyses trends, consumer decisions across industries and countries. Trends include brand-agnostic and over-connected consumers, greener food, solo travelling and more, which could inspire you to create something new! Sign up is required to download the report [here](#).

Source: [Euromonitor](#) (January 2016)

## DIGITAL MANUFACTURING

### Metal-Cutting Tool Innovations



Technology growth has spurred many metal cutting methods to cut metals in different shapes, sizes and dimensions. The technical insight at this [link](#) features four innovations in metal cutting processes. Besides that, it mentions up-and-coming companies in various fields that include metal 3D printing and key patents.

Source: [Frost & Sullivan](#) (February 2016)

## MATERIALS

### Plastic With Smarts



Nancy Sottos at the University of Illinois at Urbana Champaign is a pioneer in the field of plastics. Together with her colleagues, she has developed plastics that are capable of independently repairing themselves. They will be used in various day-to-day applications, such as in fixing cracked phone screens and in reconnecting plane wings. Find out more about these plastics in this [link](#).

Source: [Popular Science](#) (March/April 2016)

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