SUTD LIBRARY

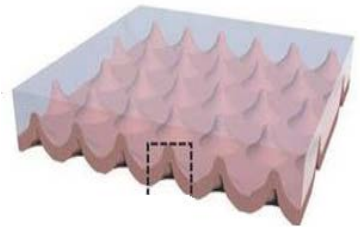
Weekly Discovery

We SHARE to inspire and ignite ideas!

25 July 2016 – 29 July 2016

ADHESIVE TECHNOLOGY

Octopus-Inspired Adhesive Pads Are Suckers For Transfer Printing



Korean scientists have designed smart adhesive pads that have similar suction as the octopus's tentacles. Designed for transfer printing and can be extended to other applications, such as for wearable sensors. Also Read this Wiley Article

Source: Asian Scientist (21 July 2016)

ARCHITECTURE

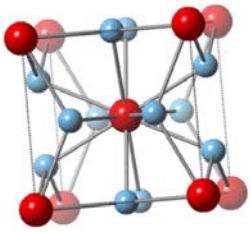
Inside the futuristic campuses tech's fastest growing companies are building

Presenting the college campuses of the future! All the college campuses are innovatively designed. Their features include domes with a collection of endangered plant species, a bicycle-friendly bridge and transparent walkways.

Source: Tech Insider (24 July 2016)

MATERIALS

Lab discovers titanium-gold alloy that is four times harder than most steels



Physicists at Rice University recently discovered a titanium-gold alloy that is 4 times harder than most steels. Expected to be used in applications that require long-term strength and stability.
Also read this SCIENCE publication.

Source: Phys.org (20 July 2016)

MEDICAL TECHNOLOGY

All sewn up

A new generation of surgical sutures that can be transformed into sensors! The sensors will then be used for applications that include monitoring wound healing and recording of cell chemical activity.
In addition read this NATURE Article

Source: The Economist (23 July 2016)

NEUROSCIENCE

The Mathematics Of Jet Lag

There is a mathematical explanation as to why we suffer from jetlag. It is due to the disruption of our circadian rhythms caused by changes in time zone. To know more about jet-lag, read this AIP Article.

Source: Forbes.com (25 July 2016)

PHYSICS

The bicycle problem that nearly broke mathematics

Jim Papadopoulos had spent many years researching bicycle motion and stability. His fruit of labour may now take shape as possible re-design of the bicycle could lead to greater stability.

Source: Nature (20 July 2016)

PROTOTYPING

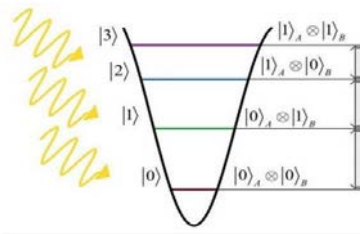
Fine-Tuned Prototyping

Outline of a process of prototyping. Illustrated with the many stages of prototype designs of speakers from product design company Bhold are described.

Source: Entrepreneur (August 2016)

QUANTUM COMPUTERS

Physicists discover a new approach for building quantum computers



Russian researchers have successfully used just one system with multiple states to overcome the difficulty of manufacturing quantum computers. This new approach seems more effective as it is easier to make a stable multi-level system.

Source: Sciencedaily (22 July 2016)

ROBOTICS

This robot will grow all the food you need in your backyard

Discover a robot that can grow food. It can grow and produce enough for household needs in their backyard.
In addition visit the website.

Source: Tech Insider (21 July 2016)