

Weekly Discovery

We SHARE to inspire and ignite ideas!

19 September 2016 – 23 September 2016

ARCHITECTURE

Studio Pei-Zhu's Vaulted Museum Design Takes Inspiration from Historic Chinese Ceramic Kilns



Studio Pei-Zhu, a Chinese architectural design firm, has disclosed its design for the Jingdezhen Historical Museum of Imperial Kiln. This museum in Jiangxi, China draws inspiration from the unique design of ceramic kilns, to have vaulted structures. You can see photographs of it [here](#).

Source: [ArchDaily](#) (19 September 2016)

ARTIFICIAL INTELLIGENCE

4 Ways Every Business Needs To Use Artificial Intelligence

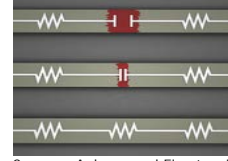


Businesses are using AI for virtual assistance, to generate insights, to automate manual processes and to unlock unstructured data. This helps to enhance decision making in businesses.

Source: [Forbes.com](#) (18 September 2016)

COMPUTER TECHNOLOGY

Complex materials can self-organize into circuits, may form basis for multifunction chips



Source: [Advanced Electronic Materials](#)

Oak Ridge National Laboratory discovered a single crystal complex oxide material that can act like a [multi-component electrical circuit](#). There is a possibility one chip can replace multiple computer chips. Find out more in [Advanced Electronic Materials](#).

Source: [Sciencedaily](#) (14 September 2016)

DRONES

The Handiest Drone Ever?



Discover the world's first drone that has two arms to carry up to a 10kg load and can complete tasks like grabbing handles and cutting cables.

Source: [Reuters.com](#) (19 September 2016)

ELECTRIC VEHICLE TECHNOLOGY

New Electric Bus Can Travel 350 Miles on Single Charge

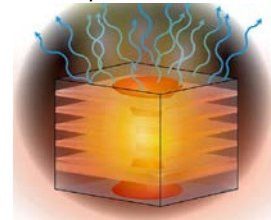


A new electric, zero-emission vehicle known as the Catalyst E2 Series, can store up to 660kWh of energy in its battery. Also, it is able to travel 560 kilometres on just one charge cycle. So, it does not have to be recharged for an entire day.

Source: [Livescience](#) (19 September 2016)

ENERGY HARVESTING

'Thermal Metamaterial' Innovation Could Help Bring Waste-Heat Harvesting Technology to Power Plants, Factories



Featuring a new material that could [control thermal radiation emission](#) from energy generation process at record high temperatures and harvest more waste heat for energy recovery. You may learn more about it in [Nature](#).

Source: [Phys.org](#) (15 September 2016)

OPTICS

New optofluidic platform features tunable optics and novel 'lightvalves'



A [new optofluidic platform](#) that is a step towards the design of multi-functional device that enable researchers to perform dual laboratory testing functions on only one platform.

Also read more in [Nature](#).

Source: [Phys.org](#) (14 September 2016)

ROBOTICS

Friendly educational robot designed to help kids with autism



These [social robots](#) developed by Aisoy can be used to enhance the effectiveness of therapy sessions for kids diagnosed with autism spectrum disorder (ASD).

Go to the [Aisoy website](#) for more details

Source: [Digitaltrends.com](#) (19 September 2016)

SMART HOME

New Smart Candle Won't Burn Your House Down if You Knock it Over

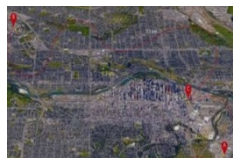


Control up to 10 candles with your smartphone to prevent fires from breaking out. Also these [smart candles](#) are equipped with sensors that can detect if any items such as curtains are near them and switch off for safety.

Source: [Popular.Mechanics](#) (20 September 2016)

TELEPORTATION

Teleportation, the next generation: Chinese and Canadian scientists closer to a quantum internet



Scientists have succeeded in the teleportation of photons across a distance of 8 Km. Possibilities of a quantum internet and enhanced security are being mentioned by the scientific community.

Source: [South China Morning Post](#) (20 September 2016)

WEARABLE DEVICE TECHNOLOGY

This New Watchband Can Turn Your Hand Into a Cell Phone



Sgnl watchband uses vibrations to transmit sound and transforms one's hand into an ear piece. Combined with a smartwatch, one can converse without the need to take their mobile phone out.

Source: [Popular.Mechanics](#) (16 September 2016)

WIRELESS TECHNOLOGY

MIT Scientists Learn To Track Emotions Using Wireless Signals



MIT scientists recently developed a system called EQ-Radio. It is capable of analyzing people's emotions by bouncing wireless signals off a person's body. It can be used to determine mental health issues and help companies detect consumers' emotional feedback to their products or services.

Source: [Fast Company](#) (20 September 2016)

To view past Weekly Alerts [CLICK HERE](#)

For more articles or in-depth research, contact us at library@sutd.edu.sg!

An SUTD Library Service©2016