

## Team ORIC e-Newsletter, Issue 4, 2017

Editor in chiefEditorProf Dr. Ansaruddin SyedDr. Rashida Rahmat ZohraDirector ORICDeveloperDeputy Director ORICRafia Iqtadar MirzaUmair Ahmed Khan

Ms. Faiza Qamar Assistant Director ORIC

**Reviewers** 

Mr. Sani Ahmed Director Finance

## **Advisory Board**

Prof Dr. Dilshad Prof Dr. Inam Bari Prof Dr. Muhammad Shahab Siddiqui Prof Dr. Ghulam Sarwar Prof. Dr. Ghufrana Nadeem

Dean, Faculty of Business Administration Dean, Faculty of Arts Dean, Faculty of Science Dean, Faculty of Pharmacy Dean Research

## Leadership

#### Patron

Mr. Wajeehuddin Ahmed Chancellor

President

Prof. Dr. Naeem Farooqui

Vice Chancellor

#### **Vise President**

Mr. Sani Ahmed Director Finance

> Vice President Prof. Lt. Cdr. Shahid Akhtar ®

> > Registrar

# EDITORIAL

"No struggle can ever succeed without women participating side by side with men"

"No nation can rise to the height of glory unless your women are side by side with you"

~Muhammad Ali Jinnah~

Dear all,

With the flaunting flags of our dear homeland and jubilations all around, 70th year of independence of the people from inequality, injustice is in celebration.

In true essence, it's the self conscious of us which needs to be awaken. We as women of this society have been addressed by founder of nation with great dignity and always been ranked high in the process of revolution, innovation and societal reforms.

Gender equality is a misleading term; it should better be taken as performance based equality. Men and women are neither equal nor they will be. There are roles and responsibilities which makes them high performing individuals of society.

On 70th Independence year celebrations let's focus our energy and talent in promoting tolerance, patience, cooperation and collaboration in professional and personal life to develop a truly independent state.

Yes, We can do it !

Long Live Pakistan,

The Editor

# At A Glimpse





July 24, 2017 | Article

A company is heading into sci-fi territory by offering its employees "free microchipping", which will allow employees the opportunity to log in to computers, open doors and use the copy machine without having to rely on analog alternatives like fingers and brains to accomplish those tasks. Read More At: <u>https://www.livescience.com/59919-companyoffers-free-chip-implants-to-employees.html</u>

#### No more Counterfeit Goods!!!

July 19, 2017 | Article

Researchers at Lancaster University announced a relatively simple technique for confirming the authenticity of an object, an advance that could put a dent in the counterfeit industry. The new anti-counterfeiting method has two components: a unique molecular pattern that can be incorporated into a holographic label and a Smartphone app. Read More At: https://www.livescience.com/59853-atomic-fingerprinting-could-endcounterfeits.html

# **Electric Avenue: Energy-Harvesting Tiles Line London 'Smart Street':**

July 17, 2017 | Article

Could city sidewalks one day generate the energy that powers streetlights? Now even walking on your foots can help you generate power to trigger the nighttime light display with the help of "energy harvesting smart street", while Visitors can also get a breath of fresh air on a "CleanAir Bench" built by Airlabs. Read More At: <u>https://</u> www.livescience.com/59819-interactive-smart-street-london.html

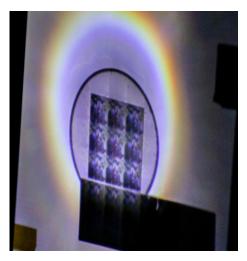
# Butterfly Wing Optics Help to Cheaply Create Bright, Realistic Holograms

July 25, 2017 | Article

A team of engineers from the University of Utah claims to have developed a game-changing technology that can cheaply create photorealistic 3D holograms that are viewable with nothing more than a flashlight. They have discovered a way to create inexpensive full-color 2D and 3D holograms that are far more realistic, brighter, and can be viewed at wider angles than current holograms. Read More At: https:// www.livescience.com/59929-butterfly-wing-optics-help-to-cheaplycreate-bright-realistic-holograms.html







## 8 Habits that leads you to the road of success!!!

September 15, 2016 | Travis Bradberry, Co-author of Emotional Intelligence 2.0 and President at TalentSmart

In a study at Stanford University it has been stated that delaying satisfaction is the main key to accomplishment, but that's far from the only theory. According to Stanford psychologist Carol Dweck, it all comes down to mindsets. She conducted a series of experiments in which she analyzed that while a normal person focus on their abilities and characteristics, considering them their fixed asset, a successful person is more concern about dealing with challenges he is facing and learning through their mistakes. They accept challenges to overcome them and to explore their skill rather than accepting them according to their ability.



In another study conducted by Penn State and Duke, they evaluated the social skills of 700 kindergartners and after twenty years they found that social skills and success have a very strong and direct relation in between. The children having best social skills are more successful in their careers while those who battled with their social skills found to be involved in criminal cases and applying for public houses.

And the list of different theories goes on but what I think is that the characteristics of a successful person are so unusual that cannot be compared to normal person characteristics. They are so complex that many of their defining qualities are more like a puzzle. Instead of depending on "either/or" set of static attributes they prefer to present both. Following are some examples Travis Bradberry, President at TalentSmart, is referring to:

• **Polite, yet unafraid to rock the boat:** They are daring and they know it, they accept challenges in order to bring the positive changes. They stand for the right direction and are unafraid to stop people going in wrong one. Being polite, they do not humiliate people by pointing out their mistake just for the sake of their own satisfaction, but for their betterment

they do it in a polite manner.

- Being deeply passionate, yet logical and objective about their work: Successful people are enthusiastic about their work but still they do not let it change their thinking. They try hard and if their hard work results in a misfortune, they still accept it and learn from their mistakes as they consider every mistake as a lesson for life. They also recheck their work and positively accept the flaws in it. This allows them not to take other people critical feedback personally.
- **Convergent and divergent thinkers:** Conventional thinking according to IQ tests refers to evaluating one typical right answer in a result of rational thinking, while Divergent thinkers think out of the box and try to bring something new. These both characteristics are important in order to be successful. One should have rational thinking skills to get successful and to judge their own ideas. At the same time new ideas that can only come by thinking outside of the proverbial box.
- They are both, calm and energetic: Having both characteristics at the same time is main quality of a successful person. They are extremely energetic for the tasks they are fond of but they aren't violent. They have their energy under control and they perform their hard task in a manner that it looks like fun and a piece of cake to others. They do not panic and get hyper while performing tough tasks; instead they do it in a cool manner while regulating their behavior wisely. This helps them maintaining the progress they are achieving in their work.



ORIC e-Newsletter, Issue 4, 2017

- They like to work and play: Successful people exemplify the often-repeated quote, "Do what you love, and you'll never work a day in your life." They take interest in their work as they love doing it. However they consider their work important, the pleasure and delight they get from it obscures the basic boundary amongst work and play. They find brainstorming, and grinding out tough projects interesting, appealing and deeply satisfying.
- Ambiverts: Ambiverts are the people who have characteristics of both, an introvert and an extrovert. Successful people found to be ambiverts and they act according to what is the need of the situation they are going through. A person being ambivert can sit in a meeting and listen all the points silently and they very same person can hold the microphone and amaze the whole audience through their words. Doing this is a piece of cake for them. Acting according to the situation plays a vital role in making them successful.
- They are naïve and smart: This is a common belief that knowledge is a major essential of success and no one would deny it. A successful person understands every task smartly but many of them have less awareness regarding the things that a normal person trusts blindly. May be this is because they do not respect what other people believe.
- They are both, humble and proud: Taking pride about their work is not a negative thing. It's a right of every successful person to be proud of whatever they do. But they all know that it's not an effort of a single person, many other hands have helped them to reach this stage. They value and respect every single person who has worked with them, helped them or people who came before them. This is why we find them polite, humble and down to earth when we meet them in person.
- The reason that there are so many different theories about what traits are necessary for success and are that successful people are complex. They have a wide variety of mysterious skills that they call upon as needed, like a mechanic with a well-stocked toolbox.

Reference: https://www.entrepreneur.com/article/282247

## Feeling the animated characters in real is no more a dream now!!

#### July 26, 2017 | Disney research

It has been a dream for us to see the animated characters, we love, in real. Now Disney World has discovered a advanced way to make the dream come true. The process doesn't require any handled device, any kind of special glasses or any thing else. You just need to sit on a magical bench which itself contains all the necessary equipments. This will show people a mirror image of their own self on a large screen in front of them, creating a third person point of view. The scene is reconstructed using a depth sensor, allowing the participants to actually occupy the same 3D space as a computer-generated character or object, rather than superimposing one video feed onto another.



Credit: Disney Research

ORIC e-Newsletter, Issue 4, 2017

According to principle artist at Disney Research, Moshe Mahler, the purpose of this initiative is to make people feel, hear and see the animated characters which they have been watching on screen through out their lives. It creates a direct interaction between them and make it more interesting. The research team will present and demonstrate the Magic Bench at SIGGRAPH 2017, the Computer Graphics and Interactive Techniques Conference, beginning July 30 in Los Angeles.

The researchers used a color camera and depth sensor to create a real-time, HD-video-textured 3D reconstruction of the bench, surroundings, and participants. The algorithm reconstructs the scene, aligning the RGB camera (that delivers the basic color components i.e. Red, Green and Blue) information with the depth sensor information.

A large team of scientists worked for the invention of magic bench. In addition to Mahler, it includes Kyna McIntosh, John Mars, James Krahe, Jim McCann, Alexander Rivera, Jake Marsico, Ali Israr and Shawn Lawson.

This new advancement in the field of technology, in future, may create a great challenge for us to differentiate between the mirror image or the real one. At the other hand is has provided us a new form of entertainment.



Reference: https://www.sciencedaily.com/releases/2017/07/170726102958.htm

# A Robot That Can Lengthen Itself To Reach Target Destination Without Moving Its Body

July 20, 2017 | Stanford University

Imagine rescuers searching for people in the rubble of a collapsed building. Instead of digging through the debris by hand or having dogs sniff for signs of life, they bring out a small, air-tight cylinder. They place the device at the entrance of the debris and flip a switch. From one end of the cylinder, a tendril extends into the mass of stones and dirt, like a fast-climbing vine. A camera at the tip of the tendril gives rescuers a view of the otherwise unreachable places beneath the rubble. This seemed quite impossible but now a new type of robot created by mechanical engineers at Stanford University, that can reach to its target destination without even moving its body. This growing robot comprises of a soft material folded inside itself like an inside-out sock. The robot grows in one direction when the material at the front of the tube everts, as the tube becomes right-side-out. In the prototypes, the material was a thin, cheap plastic and the robot body everted when the scientists pumped pressurized air into the stationary end. In other versions, fluid could replace the pressurized air.



The vinebot is tube of soft material that grows in one direction.

Credit: L.A. Cicero/Stanford News service

The group tested the benefits of this method for getting the robot from one place to another in several ways. It grew through an obstacle course, where it traveled over flypaper, sticky glue and nails and up an ice wall to deliver a sensor, which could potentially sense carbon dioxide produced by trapped survivors. It successfully completed this course even though it was punctured by the nails because the area that was punctured didn't continue to move and, as a result, self-sealed by staying on top of the nail.

In other demonstrations, the robot lifted a 100-kilogram crate, grew under a door gap that was 10 percent of its diameter and spiraled on itself to form a free-standing structure that then sent out a radio signal. The robot also maneuvered through the space above a dropped ceiling, which showed how it was able to navigate unknown obstacles as a robot like this might have to do in walls, under roads or inside pipes. Further, it pulled a cable through its body while growing above the dropped ceiling, offering a new method for routing wires in tight spaces. As it exists now, the scientists built the prototype by hand and it is powered through pneumatic air pressure. In the future, the researchers would like to create a version that would be manufactured automatically. Future versions may also grow using liquid, which could help deliver water to people trapped in tight spaces or to put out fires in closed rooms. This is a useful invention specially when we need to rescue people from place where a normal human being can't reach physically by themselves. Currently it is 1.8mm, researchers are try-

ing to improve its length. These kind of invention are more helpful to save environment as well as human beings.

Reference: https://www.sciencedaily.com/releases/2017/07/170720155311.htm

# **ORIC Events**

#### INNOVATIVE PUBLIC POLICIES FOR URBAN DEVELOPMENT: KARACHI

## 18<sup>th</sup> JULY, 2017.

ORIC, Jinnah University for Women invited, the director of Riphah institute of public polies, Prof. Dr. Rashid Aftab to conduct a short session regarding "Innovative Public Policies for Urban Development: Karachi". He is a well qualified and knowledgeable person who has served as a project director in PCRWR and KOICA as well as he has very good coordination with international agencies including UNESCO, World Bank, USAID, UNDP, ICIMOD, Asian Development Bank, UNIDO and J.E Austin.



Event was started by Dr. Rashida Rahamat Zohra (Deputy Director ORIC, Assistant Professor, Department of Biotechnology, Jinnah University for Women, Karachi) with the introduction of Guest Speaker and a little intro of all the guests attending the session. Guest includes faculty members of Department of Economic, Commerce and Business Administration of Jinnah University for Women, ORIC Directors from different universities of Sindh were present to attend the session including Hamdard University, University of Karachi, Bahria University and SSUET. The main objective of the session was to highlight the concept of urbanization, urban development and innovation district. He discussed the main issues of Karachi which importantly need to be resolved including water and trade deficiency. There are two types of urbanization that includes the true urbanization and the false one. In true urbanization people move to urban cities and there is a concurrent expansion of non agricultural activities while false urbanization where people live in cities but do not really have fulfilling jobs. Dr. Rashid discussed the structure of urbanization in general and in Karachi too. Further explained the principles of urbanization and key problems we face to set these principles in detail. Later he highlighted a short future of Karachi, what will be the conditions of trade, climate and energy sectors after 15 to 30 years by comparing our trade and education with Finland, Malaysia, Singapore and Korea. Idea of innovation district and Triple Helix Model were also discussed in detail. The rate of our efforts in promoting research and development is too low.



Interactive questions and answer session between the guest speakers and audience.

The event further proceeded with the question/answer session in which all the guests took active participation and Dr. Rashid appreciated the ideas and interests of the audience. By the end of the session, Prof. Dr. Dilshad Zafar (Dean Faculty of Business Administration, Commerce and Economics) bestowed the speech on promoting research and development in the universities and making effective policies as well as to implement them on large extent.



(Prof. Dr. Dilshad Zafar (Dean Faculty of Business Administration, Commerce and Economics) presenting shield to the guest speaker Prof. Dr. Rashid Aftab)

The guest speaker was pleased to visit JUW and glad by the response of the audience, He also appreciated the efforts of ORIC, JUW.

## **Scholarship Programs for Pakistani students**

## DAAD Scholarships in Germany for Development-Related Postgraduate Courses

The German Academic Exchange Service (DAAD) provides scholarships in Germany for international students for a range of postgraduate courses at German Universities which aim at providing academically educated young professionals from developing countries with further specialized studies. The scholarships include monthly payments of 750 euros for graduates or 1,000 euros for doctoral candidates; payments towards health, accident and personal liability insurance cover; and travel allowance, unless these expenses are covered by the home country or another source of funding.

The scholarship duration is 12 to 24 months (depending on the particular institution) ) and 36 months for PhD.

For More Details, Check: https://www.daad.de/deutschland/stipendium/datenbank/en/21148-scholarship-database/?status=3&origin=190&subjectGrps=&daad=1&q=&page=1&detail=10000008

## Master Scholarship at Quaid-i-Azam University in Pakistan, 2017

The Quaid-i-Azam University offers scholarship programme to pursue Master's programme in the fields of Anthropology, Archaeology, Defence & Strategic Studies, Gender Studies, History, Pakistan Studies, Psychology and Sociology. These scholarships are available only to the poor and deserving Pakistani National students.

The aim of the scholarships is to give support to needy and poor Pakistani students For More Details, Check: https://qau.edu.pk/subjects-offered/

## Deakin University's STEM Scholarships in Australia, 2018

The Deakin University is offering STEM scholarships for international students from selected nationalities. These scholarships are open to students applying for undergraduate and postgraduate coursework degrees in the disciplines of Architecture and Built Environment, Engineering, Information Technology, Science or Environment.

The Deakin University is an Australian public university with approximately 53,000 higher education students in 2016.

For More Details, Check: http://www.deakin.edu.au/international-students/stem-scholarship

### Hubert Humphrey Fellowships in USA for International Students

The Humphrey Fellowship Program is for experienced professionals interested in strengthening their leadership skills through a mutual exchange of knowledge and understanding about issues of common concern in the U.S. and Fellows' home countries. Deadline for submission in 1st Oct, 2017. and the program starts from Apr-Sept, 2018.

For More Detail, Check: https://humphreyfellowship.org

http://www.scholars4dev.com/2887/hubert-humphrey-fellowships-for-international-students/

## **Fulbright Foreign Student Program in USA**

The Fulbright Foreign Student Program enables graduate students, young professionals and artists from abroad to study and conduct research in the United States at U.S. universities or other academic institutions. The degrees offered includes Masters and Ph.D. Deadline for submission is October 2017 while the course starts from 2018-2019. For More Details, Check: https://foreign.fulbrightonline.org/about/foreign-fulbright

ORIC e-Newsletter, Issue 4, 2017

# Conferences

### ISER- 255th International Conference on Science, Health and Medicine (ICSHM)

Global energy demand is going up while world is running out of cheap oil, therefore in coming days new discoveries, advanced technology, and unconventional energy resources will be in high demand. Developing environmentally friendly energy resources and wise use of renewable resources is essential for secure and sustainable economies. The International Conference on "Energy Systems for Sustainable Development (ESSD-2017)" will provide an internationally recognized Forum for the dissemination of the latest advances on energy planning, energy saving, energy technological developments . The conference is going to be held on November 22-24, 2017 and last date for proposal submission is 20th Ovotber, 2017.

For further details, check: http://lahore.comsats.edu.pk/essd2017/venue.aspx



### ISER - 241st International Conference on Science, Technology, Engineering and Management (ICSTEM)

ISER - 241st International Conference on Science, Technology, Engineering and Management (ICSTEM) is a prestigious event organized with a motivation to provide an excellent international platform for the academicians, researchers, engineers, industrial participants and budding students around the world to SHARE their research findings with the global experts. ICSTEM 2017 will be held in Malacca, Malaysia on 5th -6th October, 2017. Proposal should be submitted before 28th August, 2017.

For further details, check: http://iser.co/Conference2017/ Malaysia/4/ICSTEM/



## ISER - 246th International Conference on Agricultural and Biological Science (ICABS)

ISER - 246th International Conference on Agricultural and Biological Science (ICABS) is a prestigious event organized with a motivation to provide an excellent international platform for the academicians, researchers, engineers, industrial participants and budding students around the world to SHARE their research findings with the global experts. ICABS 2017 will be held in Guangzhou , China on 16th-17th October, 2017.

For More Details, Check: http://iser.co/Conference2017/ China/6/ICABS/



## ISER- 255th International Conference on Science, Health and Medicine (ICSHM)

ISER- 255th International Conference on Science, Health and Medicine (ICSHM) is a prestigious event organized with a motivation to provide an excellent international platform for the academicians, researchers, engineers, industrial participants and budding students around the world to SHARE their research findings with the global experts. ICSHM 2017 will be held in Sarjah, UAE on 2nd-3rd November, 2017.

The key intention of ICSHM 2017 is to provide opportunity for the global participants to share their ideas and experience in person with their peers expected to join from different parts on the world.

Fore More Details, Check: http://iser.co/Conference2017/ UAE/6/ICSHM/

