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Organizers:











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# Seminar on "Connected World - Latest Trends in Consumer

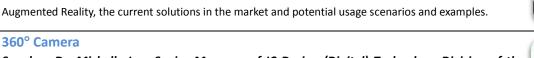
Federation of Hong Kong Industries, Hong Kong Electronics Industry Council and Hong Kong Trade Development Council will co-organize a seminar on "Connected World - Latest Trends in Consumer Electronics" during Hong Kong Electronics Fair (Spring Edition) in April 2015. Details are as below:

Kong Liecti	offics fall (Spring Edition) in April 2013. Details are as below.
Date:	13 April 2016 (Wednesday)
Time:	14:00 – 16:00
Venue:	Seminar Room, Hall 5F-G, Hong Kong Convention & Exhibition Centre
Topics and	Latest Trends on Internet of Things
speakers:	Speaker: Prof. Michael Sung, Professor of Innovation and Entrepreneurship, School of
	Engineering, The Hong Kong University of Science and Technology
	The speaker will share the IOT innovation which strategically linked to the world's electronic and product
	manufacturing ecosystem here in the Pearl River Delta.

**Latest Development in Virtual Reality Technology** 

Speaker: Mr. Constantin Stahlknecht, Business Group Lead, Windows Client & Surface, Microsoft Hong Kong Ltd

The speaker will introduce the evolution of natural user interface in the IT landscape, definition of Virtual & Augmented Reality, the current solutions in the market and potential usage scenarios and examples.



Speaker: Dr. Michelle Lee, Senior Manager of IC Design (Digital) Technology Division of the Hong Kong Applied Science and Technology Research Institute (ASTRI)

The speaker will present an introduction of  $360^{\circ}$  video, discuss the state-of-the-art  $360^{\circ}$  camera technology, outline current and future trends, and highlight + some applications of 360° video.

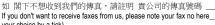


The speaker will share how the nanofiber platform technology is being integrated into different new generation wearable electronics such as smart watch, health monitoring electronic devices, and cellphone case power bank, and more.

Language:	English (simultaneous interpretation service in Putonghua will be provided)
Fee:	Free of Charge
Registration:	Please click <u>HERE</u> to go to HKTDC website
Inquiry:	Ms Ruby Yu (Tel: 2732 3101 Email: ruby.yu@fhki.org.hk)







\_\_\_\_,傅真至 2721 3494 。日後的會員通訊,請 [ ] 電郵 \*至

;或[]郵寄 \*。(請以剔號顯示您的選擇)

## **Topic: Latest Trends on Internet of Things**

#### **Abstract**

The Internet-of-Things (IOT) industry is coming of age with advances in mobile, sensor, low-power IC, cloud, and big data technologies reaching maturity and critical mass. This nexus of technologies has enabled a smart hardware innovation wave that encompasses diverse applications ranging from robotics, smart home/mobility, augmented reality, healthcare/wearables, and much more. It is estimated that there will be 50 billion connected IOT devices by 2020.

The unique characteristic of this IOT revolution is the fact that these smart "things" need to be physically manufactured, so IOT innovation is very strategically linked to the world's electronic and product manufacturing ecosystem here in the Pearl River Delta. With the flourishing of design-for-manufacturing and crowdfunding platforms that all innovators around the world can now leverage, there has been a huge innovation explosion of smart devices coming on-line in just the last few years. This seminar will give a whirlwind tour of the hottest trends of innovative connected devices developed abroad and within China. We will explore the new sophistication of new connected product offerings, shifting gradually from the predominant physical gadgets that exist today to actually useful services that enable the richness of human interaction. We are living at an exciting inflection point in history, where the next vanguard of smart device innovation will finally touch upon the promise of a truly connected world of everything.

## Speaker: Prof. Michael SUNG, Professor of Innovation and Entrepreneurship, School of Engineering, HKUST

Professor Michael Sung is a high-tech innovator and entrepreneur from the United States, and has started a number of successful ventures in the advanced materials and semiconductor industries. He is the managing director for Carbon Blue Technologies, which is involved with connecting international innovation and technologies to HK as a springboard into the market and ecosystem for China.

Professor Sung has a strong focus in intellectual property strategy and technology roadmap development, with particular expertise in defining the strategy and development of early-stage IP licensing, and tech transfer. He is a founding board member of the International IP Commercialization Council, HK Chapter, whose mandate is to facilitate IP and tech transfer opportunities between China and international countries. He is focused on developing the innovation ecosystem for HK and China via technology transfer from abroad by developing vertically integrated investment, accelerator, manufacturing, and logistics/distribution platforms. Prof. Sung is leading a task force for HK government to develop HK into a strategic hub for IOT/smart hardware innovation. He is an active early-stage investor as an angel investor and as a partner in a VC accelerator fund. He is currently developing manufacturing, investment, and tech transfer platforms to connect internationally-sourced innovation to China, particularly in the areas of smart hardware, industry 4.0, green energy, semiconductor, and other high-tech technologies.

A regular invited speaker at various technical conferences and industry events, Professor Sung is the author of over 10 patents & 80 conference/journal papers. He has received various awards for technology entrepreneurship including Jiangsu Province's Innovation and Entrepreneurship Talent People Program and MIT Enterprise Forum's Most Visionary Technology Award. One of his projects on large-scale graphene manufacturing was recently selected for Google's Solve for X Prize, the first project ever selected for this prestigious designation from China/HK. Prof. Sung received his Ph.D. in EECS while working at the MIT Media Lab/Computer Science and Artificial Intelligence Laboratory and also has a graduate financial engineering degree from MIT Sloan Business School.

## **Topic: Latest Development in Virtual Reality**

#### **Abstract**

- Evolution of Natural User Interface in the IT landscape
- Definition of Virtual & Augmented Reality
- Current Solutions in the market
- Potential Usage Scenarios and Examples

Speaker: Mr Constantin Stahlknecht, Senior Business Group Lead, Windows & Devices, Microsoft Hong Kong

## Topic: 360° camera

#### **Abstract**

In this internet age, people are consuming more and more video on their personal viewing devices, including smartphones, tablets, and computers. As several head-mounted displays are being introduced to the mass market this year, consumers will soon be exposed to a new kind of personal viewing experience that is immersive and interactive. Demand for 360° video is expected to explode in 2016. Soon, video recorded with a mere 180-degree field-of-view will feel constrained and limited.

The wide scale adoption of immersive 360° video will enable new entertainment and advertising format, providing new growth opportunities for entertainment and media production industry. When applied to video surveillance and aerial inspection, 360° cameras would deliver an efficient solution for securing national infrastructure and land resources. In the longer term, it could realize telepresence, transforming the tourism industry to be greener and more sustainable.

The speaker will present an introduction of 360° video, discuss the state-of-the-art 360° camera technology, outline current and future trends, and highlight some applications of 360° video.

## Speaker: Dr. Michelle Lee , Senior Manager, ASTRI

Dr. Michelle Lee is a Senior Manager of IC Design (Digital) Technology Division of the Hong Kong Applied Science and Technology Research Institute (ASTRI). She has over 17 years' experience in developing intelligent products for various professional and consumer applications, including video conferencing, home automation, video surveillance, critical infrastructure protection, and retail analytics.

After completing PhD study at the University of Southern California, Michelle started her career at Philips Research where she developed various product prototypes including automatic cameramen for video conferencing, people tracking for smart home, and smart camera on silicon. She co-founded ActivEye Inc. in 2002, a pioneering company in the area of automated video surveillance. She led the development of multiple video analytics products that were successfully deployed in US, Europe, and Asia to protect various facilities, including retail banks, oil refineries, airports, water supply facilities, and Olympic game venues. When ActivEye was acquired by Honeywell Security Group in 2007, she became an Engineering Fellow of Honeywell. Michelle joined ASTRI in 2014 managing R&D of video technologies for novel applications addressing the Hong Kong and China markets.

## Title: Flexible Electronic Devices: how can nanofibers help?

### Abstract

Based on nanofiber platform technology, flexible lithium ion batteries with high safety, flexibility, mechanical property, and energy density have been developed by NAMI. This flexible is being integrated into different new generation wearable electronics such as smart watch, health monitoring electronic devices, and cellphone case power bank. Beside nanofiber energy storage system, NAMI has also developed

flexible piezoelectric energy harvesting system basing on nanofiber technology. What is more, NAMI develops light emitting nanofibers combining nanofibers and luminescent materials to allow precise tuning of the display spectrum. This highly flexible low cost quantum dot mat (QD-MAT) to be used in LCD displays to achieve rich and vivid color that can rival OLED performance but at a much lower cost. Potential applications can extend beyond improving the color gamut of LCD displays to other lightings, such as growth light and indoor light which can provide a high quality white light or a warmer, redder light source with more attractive shade.

## Speaker: Dr. Tracy Liu, R&D Director of Solid State Lighting, Display and Printed Electronics at NAMI

Dr. Tracy Liu is the R&D Director of Solid State Lighting, Display and Printed Electronics at NAMI. She received her B.Sc. and Ph.D. in Materials Science from Beijing University of Aeronautics & Astronautics. After her graduation, she worked as Post-doctoral Scholar in Materials Chemistry at National University of Singapore and later at the Hong Kong University of Science & Technology.

Dr. Liu has over 15-year R&D experience in the synthesis and characterization of nanomaterials as well as their applications in lithium ion battery, solid state lighting and electronic devices. She has published over 20 papers in renowned journals including "Advanced Materials", "JACS", "ACS Nano", etc. in the areas of nanomaterial synthesis and applications. The published papers have been cited numerous times. Dr. Liu was recognized with the 1<sup>st</sup> Prize of "National Institution of Higher Education Scientific Research Award – Natural Science Award" in 2010 and the 2<sup>nd</sup> Prize of "China's State Natural Science Award" in 2013.

Since joining NAMI, Dr. Liu has filed 12 patent applications and granted 10 licensing agreements of her projects. Dr. Liu as the Principal Investigator of the Die Attach Adhesive technology has enabled NAMI to be recognized with the Technological Achievement Award in the "2014 Hong Kong Awards for Industries".