CityU Chaired AUTM Asia 2017 in Hong Kong – Building Hong Kong’s Technology Transfer Leadership Position in Asia

The Knowledge Transfer Office (KTO) of CityU led the organizing committee for one of the most successful AUTM Asia conferences with some 600 attendees and a long list of luminary speakers which included a Nobel Laureate gathering at Hong Kong Science Park in April 2017.

The Conference included a one-day pre-conference TT workshop, a two-day conference and a day-trip visiting the techno-preneurship ecosystem in Shenzhen which is dubbed the Silicon Valley of China. In the Presidents Forum, university leaders, including Professor Jian Lu, our Vice-President (Research and Technology), shared their views on meaningful measurements of success for university technology transfer effort, and their observations on the entrepreneurship developments in Hong Kong and Mainland China.

Leveraging on the success of the Conference, CityU drives to bring more lasting changes to Hong Kong’s TT community through building connections with AUTM, bringing more international speakers, seminars, training programs to Hong Kong to highlight our status as the Knowledge Transfer hub in Asia.

Prof Lu shares his views on Hong Kong and CityU technology transfer and the successful stories of CityU during the Presidents Forum.

(Continued on next page)
Belt & Road Seminar

With its extensive network and profound knowledge in technology transfer, Knowledge Transfer Office (KTO) has proactively formed strategic partnership with a number of research institutions and universities in China and overseas, building up a multi-party collaborative platform.

In the seminar on 27 April 2017, speakers from CityU and partnering institutions in Belt & Road countries were invited to talk about the latest technologies for transfer to global business and industrial sectors at Connie Fan Multi-media Conference Room.

Speakers included Mr Clement Lam, Associate Director of CityU’s Knowledge Transfer Office; Dr Yang Hongbo, Researcher of Suzhou Institute of Biomedical Engineering and Technology; Dr Ning Zhi, Assistant Professor of CityU’s School of Energy and Environment; Dr He Mingliang, Associate Professor of CityU’s Department of Biomedical Sciences; Dr Jiang Ji from International Cooperation Division of Tianjin Municipal Science and Technology Commission; as well as Mr Tristan Walker and Mr Ian Proctor from King Abdullah University of Science and Technology in the Kingdom of Saudi Arabia.

Mr Tristan Walker, Vice-President of Innovation and Economic Development, King Abdullah University of Science and Technology in the Kingdom of Saudi Arabia shares the power of creative and authentic partnerships between industry and academia.

The speakers at the seminar gather together for a group photo.
Strategic Partnership on Technology Transfer

Further to the success of AUTM Asia 2017, KTO has extensively fostered technology transfer in building external partnerships with leading universities worldwide, so that a much larger and more comprehensive portfolio of technology solutions can benefit our own technology marketing efforts. These important external partners also help us identify licensing opportunities in their home countries.

As of 2017, we have established strategic partnership with Stanford University, Cedars-Sinai Medical Center and Arizona State University in the US, McMaster University in Canada, King Abdullah University of Science and Technology in the Kingdom of Saudi Arabia and Shanghai University in Mainland China, IPI in Singapore and Louisiana State University.

On the market development side, we have expanded our reach into inland market, establishing new relationships with inland government agencies. Apart from the collaboration programmes with Shenzhen, Yangzhou and Jiangsu, KTO has successfully expanded the technology transfer collaboration programmes to Nanjing, Chengdu, Yunnan, Beijing and Tianjin, aiming to create a comprehensive network of TT platforms covering strategic locations in China for synergistic effect. Such strategic alliances and inland marketing programmes offer CityU’s innovators better understanding and direct access to the market.
CityU Entrepreneurs

No business plan is perfect right at its inception. KTO strongly encourages our innovators to participate in innovation and start-up competitions where they can learn from peers and judges in refining their plans.

National Challenge Cup 2017
The National Challenge Cup is a biennial competition for extracurricular scientific and technological inventions. It is considered to be the largest and most influential comprehensive contest for university students in China.

The 15th National Challenge Cup was hosted by Shanghai University in 2017. Over 30,000 student projects participated in the first round of competition, of which 1,230 were selected for the national contest and 755 were selected for the final. The final teams had to defend their works on the spot.

KTO nominated three student teams to the competition and all of them were awarded Second Class or Third Class Prizes. The winning teams are:

**Project:** 高性能安全可穿戴柔性鋅離子電池  
**Members:** Li Hongfei (PhD student, Material Science and Engineering), WAN Ching Yin (Year 2 undergraduate, Material Science and Engineering), Liu Zhuoxin (PhD student, Material Science and Engineering)  
**Award:** Second Class Prize

**Project:** FastLSH 高維大數據相似度搜尋引擎  
**Members:** Wong Nok Ching (2017 graduate, Computer Science), Xu Yaohai (2017 graduate, Computer Science)  
**Award:** Third Class Prize

**Project:** 創新隧道風能發電機  
**Members:** Lam Wah Shing (Year 4 undergraduate, Mechanical and Biomedical Engineering), Leung Chiu Yee (Year 4 undergraduate, Architecture and Civil Engineering)  
**Award:** Third Class Prize

Cyberport University Partnership Programme (CUPP)
CityU is also invited to join the annual flagship event of Cyberport – Cyberport University Partnership Programme (CUPP) which aims at nurturing promising young tech and entrepreneurial talents in Hong Kong. The programme offers a unique opportunity for participants to gain insights into the global market, and receive top-notch training through company visits in Silicon Valley. The programme also includes a customized one-week entrepreneurship boot camp at Stanford Graduate School of Business, plus mentorship in Hong Kong and overseas.

Of the five teams KTO nominated in 2017, two successfully won start-up funding of HK$100,000 each to realize their fintech business idea. The winning teams are:

**Team:** ODAPP – One Device All-payment Platform  
**Members:** Lam Yu Hin (Year 4 undergraduate, Computer Engineering), Ho Lok To Toto (Year 4 undergraduate, Creative Media) & Yip Yu Cheong (Year 4 undergraduate, Information Engineering)  
**Award:** Second Class Prize

**Team:** Fund2Play – a chatbot for insurance companies  
**Members:** Suen Cheuk Wing Kevin (Year 4 undergraduate, BBA Information Management), Cheng Chi Hung (Year 4 undergraduate, BBA Information Management) & Chan Yeung Tsing (Year 4 undergraduate, BBA Business Analysis)  
**Award:** Third Class Prize

No business plan is perfect right at its inception. KTO strongly encourages our innovators to participate in innovation and start-up competitions where they can learn from peers and judges in refining their plans.
Entrepreneurship Schemes

In terms of entrepreneurship, Innovation Commons (IC), our one-stop resource centre for inno-preneurship, has further enhanced the CityU innovation and entrepreneurship ecosystem, by adding additional elements:

**Student Patent Award**

*To encourage students to innovate and to learn how to protect their innovations.*

The Award offers an award of up to HK$5,000 to reward students at CityU for each successfully filed patent application on their own inventions. (An award of HK$3,000 shall be given for each filed Hong Kong short-term patent or Chinese utility model.)

**Sponsorship for Innovation and Entrepreneurship Competitions**

*To encourage students to participate in regional and international competitions of business plans and other entrepreneurship tournaments.*

The sponsorship will cover expenses of the following items incurred by applicants in joining non-local competitions; Round-trip economy class for travelling between Hong Kong and the event destination; and suitably modest accommodation for official duration.

**CityU Incubation Programme**

*To provide a new functional co-working space for CityU start-ups and entrepreneurial teams.*

The co-working space is located at FY-305, Run Run Shaw Library of CityU. It is well-equipped under the administration of KTO, which does not only provide useful equipment and internet connection, but also necessary entrepreneurial support and services for successful applicants.

**Connect CityU Entrepreneurs with Professionals**

Inno-preneurship Mentoring Scheme was launched in late 2016 to serve as a platform for CityU communities, who desire to turn their creative ideas into start-ups, to get connected with seasoned professionals in the industries.

A Mentor-Mentee Meet-up gathering, organized by the Innovation Commons, was held on 27 June 2017, aimed at connecting the mentees with mentors in a casual event and enhancing their relationship for further communications. Over 50 scheme members participated in the event. With practical and professional mentoring, the mentees learned skills to perfect their products or services and gain insights from their mentors when they are driving through their entrepreneurial journey.
CUBIC Activities

CityU Business and Industrial Club (CUBIC) aims to build good university-business and industrial relationships. Through our recent seminars and forums, we created opportunities for CityU faculty members to meet experts in specific industries, for ideas and views exchange.

From Dream to Reality: A Success Story of a Young Engineer Coming from HK
(13 November 2017 at LT-8, Yeung Kin Man Academic Building)

CUBIC co-organized the seminar with Department of Computer Science, Department of Electronic Engineering and Innovation Commons. The speaker, Mr Clement Pang, is the Chief Architect and Software Engineer in Sunnyvale, California, and the Co-founder of Wavefront which was acquired by VMware. In the seminar, Clement shared his startup story and the life as a young developer in the Silicon Valley. Over 34 CityU students and CUBIC members joined the seminar and they were inspired by Clement’s sharing.

Emerging Technologies Forum – Advances in Battery Technology
(5 January 2018 at P1402, Innovation Centre, Yeung Kin Man Academic Building)

This is one forum of the series in collaborating with Department of Electronic Engineering, with Hong Kong Science and Technology Parks, The Institution of Engineering and Technology, and Electronics Division of The Hong Kong Institution of Engineers, as supporting organizations. Ms YS Chow, Senior Manager of R&D department of rechargeable battery section at GP Batteries International Limited elaborated the advances of fast charge technology in our daily life and in the industry, while Prof Henry Chung of Department of Electronic Engineering showcased the energy-efficient battery parameter extraction technique. Some works described in Prof Chung’s presentation are being supported by a grant from the Innovation and Technology Fund. Over 70 CUBIC and CityU members were attracted by the topic to know more about the updates on battery technology. The speakers’ sharing and answers to participants’ enquiries during the Q&A session brought insights and built network between the academia and the industry.

Happy Hour Tea Gathering
(13 October 2017 at Staff Lounge)

A Happy Hour Tea Gathering on life science held by CUBIC attracted over 30 participants. Dr Kwok Chow, President of Covar Pharmaceuticals Inc., and Dr Herman Lam, CEO of Powder Pharma Coating Inc. were speakers of the event. Dr Chow talked about the paradigm shift in early drug development, specifically on the strategic candidate selection and formulation development; while Dr Lam explained the counterfeit pharmaceutical and nutraceutical products detection. The participants had thorough discussion on the trend and application on the advanced technology.
Patents Recently Granted to CityU

**Antenna**  
**Inventors:** Professor Kwok Wa Leung et al  
**US Patent no.:** US9793611 B2

An antenna includes a dielectric resonator coupled to a ground plane provided on a substrate having a slot structure on the ground plane; and a monopole substantially surrounded by the dielectric resonator; wherein, when the monopole, the dielectric resonator and the slot structure are excited with an electrical signal, the combination of the monopole, the dielectric resonator and the slot structure is arranged to radiate an electromagnetic signal associated with the electrical signal in a substantially unidirectional manner.

**Surface mechanical attrition treatment (SMAT) methods and systems for modifying nanostructures**  
**Inventors:** Professor Jian Lu, Dr Yangyang Li, et al  
**US Patent no.:** US9809893

This is about the systems and methods for performing a surface mechanical attrition treatment (SMAT) to the surface of a variety of materials including thin films, nanomaterials, and other delicate and brittle materials. In an aspect, a surface of a material is modified to a modified state and from an original state to a modified state, wherein the modified state comprises a physical modification, a chemical modification, or a biological modification. In another aspect, a surface mechanical attrition treatment (SMAT) is applied to the modified surface of the material for a defined duration of time, wherein a condition associated with the SMAT is adjusted based on a structural composition of the material. In yet another aspect, a defined strain is imposed on the structural composition of the material based on the SMAT.

**System and method for transmitting data in a network**  
**Inventors:** Professor Moshe Zukerman et al  
**US Patent no.:** US9769073

A system and method for transmitting data in a network comprising the steps of determining a traffic congestion variable of a data transmission node arranged to receive data from one or more source nodes of the network, using the traffic congestion variable to select a preferred transmission mode for use by the one or more source nodes to transmit data to the data transmission node, and switching an operating transmission mode of each of the one or more source nodes to the preferred transmission mode such that the one of more source nodes transmit data to the data transmission node with the preferred transmission mode.

**High Flow Capacity Multi-function Aerosol-to-hydrosol Air Sampler and Sampling Method**  
**Inventor:** Dr Ning Zhi  
**China Patent no.:** CN201310276436

The invention discloses a high flow capacity multi-function aerosol-to-hydrosol air sampler used for particle diameter differentiated acquisition of particles or viruses, and the sampler comprises an inlet end, which is used for particle diameter differentiated segmentation and input of a gas containing to-be-collected particles or viruses; a mixer, which is used for evenly mixing water vapor with the gas inputted from the inlet end to produce high humidity aerosol; a temperature control condensing tube, which is connected to the output end of the mixer to rapid cool the aerosol so as to condense the water vapor on the particle surface to increase the particle diameter; and a collector, which is connected with the output end of the temperature control condensing tube to collect particle water mist generated by the temperature control condensing tube by vortex flow and impact.
# CityU Business and Industrial Club

城大工商协进会

## Membership Application Form

会员申请表格

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For Hong Kong members, please tick the appropriate box(es) below if you want to obtain the relevant application information for:

- [ ] 1) CityU Library Borrower’s Ticket (HK$1,000/year)
  城大图书证 (每年港币 1,000 元)
- [ ] 2) CityU Credit Card (free)
  香港城市大学信用卡 (免费)

I, __________________________ (name of applicant) hereby apply for membership of the CityU Business & Industrial Club (CUBIC). I confirm that the information furnished above is complete and accurate and it can be used by CUBIC for membership and CityU related purposes.

本人 __________________________ (申请人姓名) 欲申请成为城大工商协进会(CUBIC)会员，谨此确认上述提供之数据正确无误，并可被用于与 CUBIC 会员事务及香港城市大学有关之事宜上。

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Enquiries

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Please return this form by post to

"Knowledge Transfer Office, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong" or email to cubic@cityu.edu.hk.

请将表格寄交「香港九龙达之路香港城市大学 知识转移处」或 电邮至 cubic@cityu.edu.hk。