



**KNOWLEDGE  
TRANSFER &  
INDUSTRY  
PARTNERSHIPS**  
知識轉移與夥伴業界

## Where collaboration bears fruit 讓夥伴合作開花結果

PolyU brings innovation to life in the community, business and industry. The world-changing ideas of our researchers have been put into practice, providing the driving force for societal wellbeing and economic growth.

理大為創新發明賦予生命，惠及社區和工商業界。科研人員改變世界的嶄新意念得以實踐，推動社會進步和經濟增長。



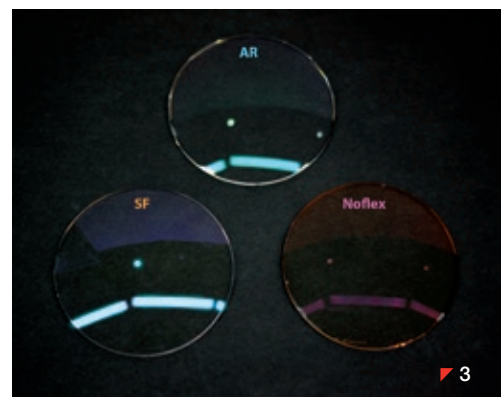
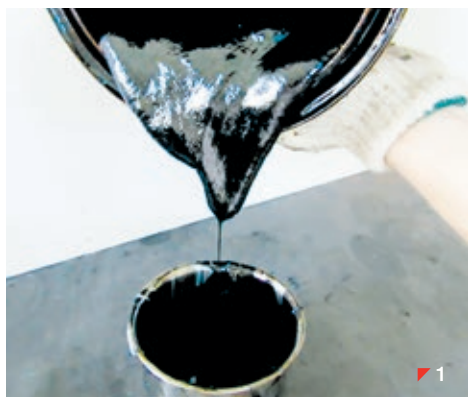
# KNOWLEDGE TRANSFER THAT BENEFITS INDUSTRY AND THE COMMUNITY

## 知識轉移 惠澤工商社群



PolyU Technology and Consultancy Company Limited (PTeC), the ISO9001-accredited commercial arm of the University, focuses on providing services with high impact and added value to the community and industry. During the year, PTeC was engaged in 533 new consultancy projects with 338 clients. More than 60% of the projects were from the corporate/industrial sector, 26% from government organizations and the remaining 13% from the NGO/education sector.

理大科技及顧問有限公司是一家擁有 ISO9001 認證、協助大學為工商界提供支援的機構，致力為社會及業界提供具影響力及高增值的服務。年內，它為三百三十八家機構提供五百三十三項顧問服務。當中超過百分之六十的項目來自企業及工商界，百分之二十六來自政府機構，其餘的百分之十三來自非政府組織及教育界。



# 2014/15 Project highlights

## 年度重點項目

PolyU faculty/department 理大院系	Client 服務對象	Consultancy project 顧問項目	Impact/Contributions 影響 / 貢獻
Department of Applied Social Sciences 應用社會科學系	Central Policy Unit, The Government of the HKSAR 香港特別行政區政府 中央政策組	To identify different parenting practices and examine child development outcomes 研究不同的親職實踐方式對兒童成長和發展的影響	To provide a comprehensive account of current parenting practices in Hong Kong and identify factors affecting parenting decisions, child development and family functioning through a territory-wide survey 透過一項全港性的調查，對現時香港父母的不同親職實踐方式進行全面研究，並深入探討影響親職決定、兒童成長和家庭功能的各種因素
▶ 1 Department of Civil and Environmental Engineering 土木及環境工程學系	Highways Department, The Government of the HKSAR 香港特別行政區政府 路政署	To conduct research and a study on the feasibility and cost effectiveness of high performance asphalt 對高性能瀝青路面的可行性研究及成本效益進行分析	To evaluate the engineering and acoustic performance of high performance asphalt and its suitability for use on Hong Kong's roads 評估高性能瀝青混合料的技術及噪音表現，建議是否適合在香港道路上使用
▶ 2 Department of Civil and Environmental Engineering 土木及環境工程學系	Environmental Protection Department, The Government of the HKSAR 香港特別行政區政府 環境保護署	To investigate the impact of radical chemistry on the air quality of Hong Kong (More on p.101) 研究自由基化學物質對香港空氣質素的影響 (詳見第101頁)	To make recommendations on a monitoring and control strategy to keep air pollutant levels in check 就監察及控制空氣污染水平提供建議方案
Department of Electrical Engineering 電機工程學系	MTR Corporation Limited 香港鐵路有限公司	To establish assessment criteria to monitor the healthiness of insulators used in the railway network 訂立評核準則，監察鐵路網絡所用絕緣體的健康情況	To enhance the service reliability of the rail network 提升鐵路網絡服務的可靠性
Institute of Textiles and Clothing 紡織及製衣學系	Marine Department, The Government of the HKSAR 香港特別行政區政府 海事處	To develop a type of lifejacket suitable for use by both adults and children on local vessels 為本地船隻研發一款成人及兒童均適合穿著的救生衣	To improve the existing operation of local vessels in which lifejackets for adults and children are provided separately 改善現時本地船隻需分別配備成人及兒童救生衣的運作情況
Institute of Textiles and Clothing 紡織及製衣學系	Clothing Industry Training Authority 製衣業訓練局	To research and develop an activity-based water footprint modelling system for the textile manufacturing process 為紡織生產過程中研發基礎水足跡模型	To provide insights on improving water management performance and establish best practices to reduce the water footprint of the textile dyeing and finishing industry 為紡織印染工業提供改善用水管理的技術方案，並建立減少水足跡的最佳應用技術
Department of Rehabilitation Sciences 康復治療科學系	The Mental Health Association of Hong Kong 香港心理衛生會	To design an effective way of assessing emotional health in Chinese populations and develop an online emotions management programme for service users of the Integrated Community Centres of Mental Wellness 為華人社群設計情緒健康評估的方法，並為綜合社區中心的服務使用者發展一套網上情緒管理課程	To provide better mental health services for service users at risk of developing common mental disorders and effectively monitor the emotional health of Hong Kong population 為有機會患上輕度精神障礙的患者提供更佳的心理健康服務，並可有效地監察香港人的精神健康
School of Design 設計學院	Environmental Protection Department, The Government of the HKSAR 香港特別行政區政府 環境保護署	To design an exhibition area in Tuen Mun's sludge treatment facility, the first waste-to-energy infrastructure in Hong Kong 為屯門的污泥處理設施（香港首個廢物轉化為能源的基礎設施）設計一個展覽用地	To promote environmental awareness by engaging visitors through interactive design experience 為訪客提供互動設計體驗，以提高環保意識
▶ 3 School of Optometry 眼科視光學院	Swiss Lens Laboratory (HK) Ltd 瑞士鏡片（香港）有限公司	To conduct a study to determine the effects of blue-light filtering lenses on the visual functions of young and presbyopic computer users 進行研究，以確定過濾藍光的鏡片對年輕及遠視的電腦使用者是否有視覺功能上的影響	To further develop optical products and safeguard people from the flood of High-Energy Visible (HEV) light they may encounter in their daily lives 進一步研發光學產品，為市民提供保護，不致受日常生活中經常接觸的高能量可見光而傷害



# CREATING IMPACT THROUGH PATENTING AND LICENSING

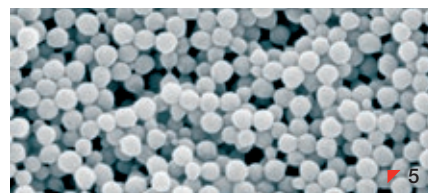
## 專利與技術授權 影響深遠

PolyU values knowledge creation and scientific breakthroughs by researchers and students. As of June 2015, the University had obtained 681 cumulative patents and filed 1,346, making it a leader among local tertiary institutions in this area. In 2014/15, a total of 96 patent and trademark applications were filed and 78 granted.

Knowledge transfer through licensing enables partner companies to leverage PolyU technologies to enhance their competitiveness or create new products. During the year, the Institute for Entrepreneurship executed over 30 licensing agreements/memoranda of understanding/non-disclosure agreements for PolyU's proprietary knowledge in areas including textile technology, engineering, health science and design.

理大重視研究人員及學生在創造知識和創新科研方面的貢獻。截止 2015 年 6 月，大學獲批專利累計六百八十一項，而申請中的專利則有一千三百四十六項，足證理大在這範疇領先本地其他高等院校。在 2014/15 年，理大提交了九十六個專利和商標申請，並有七十八項獲批。

透過技術授權進行知識轉移，夥伴機構可以利用理大的科研技術來提升競爭力和開發新產品。年內，理大企業發展院與業界簽訂逾三十項技術授權協議/備忘錄/保密協議，以轉移理大的專有知識，涉及範疇包括紡織技術、工程、健康科學及設計等。



# Licensed Technologies and Designs

## 授權技術及設計

PolyU faculty and department 理大院系	Inventor 發明者	Technology 科技	Licensee 獲授權機構	Benefits/ Applications 優點 / 應用
▶ 4 Department of Applied Biology and Chemical Technology 應用生物及化學科技學系	Prof. William Chan and Prof. Larry Chow 陳德恒教授及周銘祥教授	Flavonoid Dimers for Reversing Drug Resistance (More on p. 98) 腫瘤抗藥性抑制劑黃酮類二聚物 (詳見第 98 頁)	Kinex Pharmaceuticals (HK) Ltd.	Reverse common multi-drug resistance (MDR) in cancer cells, which hinders chemotherapy, and enhance the bioavailability of anticancer drugs 癌細胞的多藥抗藥性會降低化療的療效，此二聚物逆轉癌細胞抗藥性，加強抗癌藥物的功效
Department of Applied Biology and Chemical Technology 應用生物及化學科技學系	Prof. William Chan 陳德恒教授	Ionic Liquid Supported Peptide Synthesis 離子支撐縮氨酸液相合成	AUM LifeTech Inc.	A cost-effective peptide synthesis technology that can potentially be used in large-scale synthesis of short DNA and RNA for use in nucleic acid therapeutics 具成本效益的縮氨酸合成技術，可大規模合成 DNA (脫氧核糖核酸) 及 RNA (核糖核酸) 作核酸治療
▶ 5 Department of Applied Biology and Chemical Technology 應用生物及化學科技學系	Prof. Li Pei 李蓓教授	Amphiphilic Core-Shell Nano-Particles (More on p. 100) 兩親性核殼納米粒子 (詳見第 100 頁)	MJ Medical Gel Systems Limited 美生醫學凝膠系統有限公司	The core-shell nano-particles encapsulated with anti-pruritic agents function as a drug carrier of medical gel that facilitates long-lasting relief from itching during healing of post-burn scars 核殼納米粒子可作抗癢藥物的載體，在治療燒傷後的疤痕期間可有效延長抗癢的功效
Department of Applied Biology and Chemical Technology 應用生物及化學科技學系	Prof. Wong Kwok-yin 黃國賢教授	Luminescent Chemosensory Material for Detecting Organic-Halogen Compounds 用作檢測有機鹵素化合物的發光化學感應材料	Versitech Ltd. 港大科橋有限公司	This material gives out a "switch-on" luminescence signal upon its exposure to organic-halogen compounds that pose a health risk. It is a highly sensitive chemosensory material for developing chemosensory devices 這種材料遇到對健康有害的有機鹵素化合物時會發出螢光，是一種高敏度的化學感應材料，可用作製造化學感應器
▶ 6 Department of Building and Real Estate 建築及房地產學系	Prof. Albert Chan 陳炳泉教授	Anti-Heat Stress Clothing for Construction Workers 建造業工人抗熱工作服	Construction Industry Council 建造業議會	Effectively alleviate heat stress of construction workers during outdoor work 有效舒緩建築工人在戶外工作時的炎熱情況
▶ 7 Department of Mechanical Engineering 機械工程學系	Prof. Wallace Leung 梁煥方教授	Multilayer Nano-Fiber Filter 多層納米纖維過濾器	Avalon Nanofiber Ltd. 雅護納米纖維有限公司	Achieve high particulates capture efficiency while maintaining good air permeability for applications such as facemasks that require high filtration efficiency, as well as cabin and space filtration 能有效地阻隔微型污染物，同時保持良好透氣，可應用作面罩及在客艙與室內場所，以過濾空氣





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8 Department of Rehabilitation Sciences 康復治療科學系	Prof. Cecilia Li-Tsang 李曾慧平教授	Smart Pressure Monitored Suit (SPMS) 智能壓力衣	Champion Rehabilitation Ltd. 創理復康有限公司	Enable faster production of pressure garments; speed up and enhance scar treatment 可加快生產壓力衣物，促進及改善疤痕治療
Institute of Textiles and Clothing 紡織及製衣學系	Prof. Winnie Yu and Dr Joanne Yip 余詠文教授及葉曉雲博士	Teaching Materials of Intimate Apparel Technologies 內衣技術教材	Clothing Industry Training Authority 製衣業訓練局	The teaching materials cover the know-how and provide information on intimate apparel design, development and technologies that enhance the competitiveness of the local clothing industry 教材除了技術部分，亦有提供內衣設計、發展及科技方面的資料，有助提升本地服裝業的競爭力
Institute of Textiles and Clothing 紡織及製衣學系	Prof. Tao Xiao-ming 陶肖明教授	Pressure Sensing Fabric (More on p. 99) 織物壓力感測器 (詳見第 99 頁)	Footfalls and Heartbeats Ltd.	This pressure sensing fabric with interlocking loops of conductive yarns can be used to develop pressure sensing textile products for sports and healthcare applications, such as sportswear with sensing switches 這種可導電的相扣環形紗線壓力感測織物，可用以開發運動及保健的壓力感測衣物，例如有感測開關的運動服裝
9 Institute of Textiles and Clothing 紡織及製衣學系	Dr Ameersing Luximon Ameersing Luximon 博士	Knowledge-Based Foot Scanning System 三維足部掃描系統	Cloudolp Business Analytics Co., Ltd. 深圳市雲智數據服務有限公司	Generate 3D foot-shaped digital representations from the 2D images captured by the system with a foot shape prediction model. The system can provide a virtual shoe fitting solution for the footwear industry to facilitate online shopping 以腳形預測模型，將系統取得的二維圖像轉為三維腳形數碼顯示，以提供虛擬的合適鞋履方案，協助鞋業發展網上銷售



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## 授權技術及設計

PolyU faculty and department 理大院系	Inventor 發明者	Technology 科技	Licensee 獲授權機構	Benefits/ Applications 優點 / 應用
10 School of Design 設計學院	Prof. Michael Siu 邵健偉教授	Recycling Bin - Green Hunger Green Hunger 循環再用 垃圾箱	Poon Kei Engineering Ltd. 磐基工程有限公司	With its attractive appearance and user-friendly features, the Green Hunger recycling bin will encourage the promotion of waste recycling and raise awareness of environmental sustainability 循環再用垃圾箱「Green Hunger」外型美觀、使用方便，可鼓勵推廣廢物循環再用及提高可持續發展的環保意識
School of Design 設計學院	Mr Stefan Sonntag and students of School of Design Stefan Sonntag 先生及設計學院學生	Design MINI Pulze 設計 MINI Pulze	MINI Hong Kong MINI 香港	Unconventional and effective promotional concepts for MINI cars 為 MINI 汽車設計出新穎而有效的推廣意念
School of Design 設計學院	Mr Stefan Sonntag and students of School of Design Stefan Sonntag 先生及設計學院學生	Design paper cutting, Santa and reindeer decorations 設計剪紙、聖誕老人和馴鹿裝飾	MINI Hong Kong MINI 香港	Creative designs for MINI car decorations 為 MINI 汽車開發具創意的裝飾設計
School of Design 設計學院	Mr Fred Han and students of School of Design Fred Han 先生及設計學院學生	Design of a Smartwatch 設計智能手錶	TARC Holdings Limited	Creative product ideas, user interface and appearance of a smartwatch 具創意的產品概念，為智能手錶設計用者界面和外型
School of Design 設計學院	Mr Rémi Leclerc and students of School of Design Rémi Leclerc 先生及設計學院學生	Toy airplane designs 玩具飛機設計	Educational toy company 教育玩具公司	Arouse children's interest in science and airplane design 引起兒童對科學及飛機設計的興趣



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# INDUSTRY PARTNERSHIPS WITH FRUITFUL ACHIEVEMENTS

## 攜手業界 共享成果



During the year, PolyU partnered with companies in various sectors to create many innovations that benefit society, from life-saving breakthroughs to green initiatives.

年內，理大與各行各業的機構建立夥伴關係，一起進行科研創新，從拯救生命的發明，到保護環境的新猷，均以裨益社會為依歸。

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### Flavonoid Dimers to reverse cancer drug resistance

The University successfully synthesized flavonoid dimers to address common multi-drug resistance (MDR) in cancer cells by inhibiting undesirable drug efflux. As polyphenolic compounds are commonly found in food, flavonoids are good candidates for reversing MDR because of their low toxicity. This innovation was licensed to Kinex Pharmaceuticals (HK) Limited, which in turn will support further research of flavonoid dimers for oncology indication and treatment.

### 黃酮類二聚物逆轉癌細胞抗藥性

大學成功研發黃酮類二聚物，可防止癌細胞把藥物排出和逆轉多藥抗藥性。由於食物中普遍含有多酚類化合物，毒性低的黃酮類化合物是逆轉多藥抗藥性的理想物質。理大已將這創新發明的專利權授予 Kinex Pharmaceuticals (HK) Limited，該公司將支持進一步研究黃酮類二聚物在診斷及治療腫瘤上的應用。



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## Rapid authentication of edible oils and gutter oils

PolyU's Food Safety and Technology Research Centre developed a novel method using matrix-assisted laser desorption/ionization mass spectrometry to screen non-referenced sub-standard oils within five minutes. This innovation protects consumers from health hazards associated with illegal oil recycling. (More on p. 80)

## 快速鑒別食用油和地溝油

理大的食物安全及科技研究中心發明了一個嶄新方法，利用矩陣輔助的激光吸附/質譜離子化技術，可在五分鐘內驗出不合參考標準的油。這項發明可保障消費者，避免受非法再用油對健康造成影響。（詳見第80頁）

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## Pressure sensing fabric

Researchers of the University invented a fabric pressure sensor with interlocking loops of yarns that can demonstrate a change of resistance from conductive fibres when pressed. The fabric sensor can be used to develop pressure sensing textile products for sports and healthcare applications, such as sportswear with sensing switches. The same research team also developed a fabric sensor using elastic fabric coated with conductive composite materials to function as a strain gauge. This type of sensor can be used to make novel healthcare and medical products, such as wearable respiratory monitors and pressure-sensing shoes for diabetics. These technologies have been licensed to Footfalls & Heartbeats Ltd. in New Zealand and locally to AdvanPro Limited.

## 壓力感測織物

大學研究人員發明了相扣環形紗線的壓力感測織物，這種導電的織物在受壓時會出現電阻轉變，適用於運動及保健的壓力感測衣物，例如有感測開關裝置的運動服裝。同一研究團隊亦研製出另一類壓力感測織物，這種塗上傳導合成物的彈性織物可用以量度壓力，適用於創新保健產品，例如可穿戴的呼吸監察器及適用於糖尿病患者穿著的壓力感測鞋。這些技術的特許使用權已授予新西蘭的 Footfalls & Heartbeats Ltd. 及本地的安潤普有限公司。

## Building Information Modelling

A research team on Building Information Modelling (BIM) provided consultancy services to the Hong Kong Housing Authority which has adopted the University's proprietary BIM system in several public housing development projects. With its clear graphical details, automatic generation of drawings and reports and design analysis, the modelling system enables builders to make better-informed decisions, improve the efficiency and accuracy of building design and construction, optimizing the time and resources used.

## 建築資訊模型

香港房屋委員會轄下數個公共房屋項目採用了大學的專利建築資訊模型系統，有關的研究團隊並為委員會提供專業意見。該系統能夠繪製清晰的圖形細節，並能自動製作繪圖、報告及設計分析，可讓建築商了解資訊後作出更佳決定，提高建築設計及建造的效率與準確度，從而善用時間及資源。



## Thermal functional textile with conductive materials

A thermal functional fabric was developed by PolyU with conductive fibres directly knitted into the fabric using integrated knitting techniques to produce effective localized zone heating. With its unique stitch structure and density, electrical resistance at specific areas can be controlled to generate required temperature profiles. The precise localized heating ability enables the development of energy-efficient and lightweight heated garments for indoor, outdoor and even healthcare applications.

## 具傳熱功能的保暖衣物

理大研發出具保暖功能的織物，透過結合編織方法，可直接將傳熱的織物縫進衣物，達致局部發熱的功效。這種織物具備獨特的針織結構和密度，可控制特定部分的電阻，以調節所需溫度。這項局部發熱功能可用以開發節能而輕巧的保暖衣物，除適合室內外穿著，亦可擴展至保健用途。

## Medical gel using core-shell nano-particles

Nano-particles with amphiphilic core-shell morphology developed at PolyU can be engineered for various functional applications such as coatings, adhesives, microcapsules, sorbent and solid supports. The core-shell nano-particles encapsulating active pharmaceutical agents and cross-linked with polymer gel can also function as a drug carrier for topical medication, improving the physical properties of the resultant medical gel for better treatment administration. With anti-itching agents encapsulated, the medical gel can facilitate longer relief from itching during the healing of post-burn scars. This technology is licensed to MJ Medical Gel Systems Limited.

## 用於醫療凝膠的核殼納米粒子

理大發明的兩親性核殼形態納米粒子，可以有多方面的應用功能，包括用於塗層料、黏合劑、微型膠囊、吸收物及固體支撐物。含有活性藥物及聚合物膠體的核殼納米粒子，更可用作裝載藥物，改善藥用膠體的物理特質，提升治療效能。例如將抗癢劑放進膠囊，用以治療燒傷後的疤痕，可延長抗癢功效。這項技術的特許使用權已授予美生醫學凝膠系統有限公司。

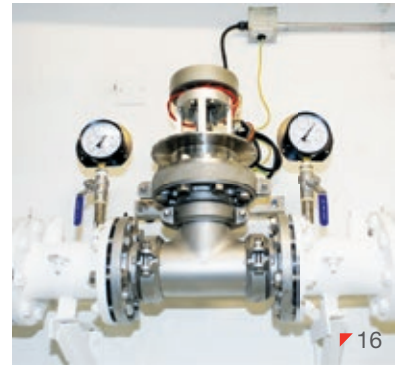
## Automation for aircraft maintenance

Jointly established by PolyU, Boeing, the Hong Kong Aircraft Engineering Company Limited and Hong Kong Aero Engine Services Limited, the Aviation Services Research Centre completed the Laser Projected Drilling Templates and Robotic Drilling project during the year. The project involved the design of an automated process that uses a portable laser drilling template to streamline the workflow for replacing the outer skin parts of aircrafts. By automating a fully manual operation, this industrial breakthrough has led to a substantial improvement in the accuracy and quality of the repair work, with a three-to-four fold improvement in process time and labour hours.

## 飛機維修自動化

年內，理大與波音公司、香港飛機工程有限公司及香港航空發動機維修服務有限公司合作成立的航空服務研究中心完成了「雷射投影鑽孔模板與自動化機械鑽孔」項目。這項項目利用手提雷射鑽孔模板的自動化程序，精簡更換飛機外層組件的工作流程。這是業界的一項突破，讓全人手操作變為自動化，大幅提升維修工作的準確度和質量，而飛機結構維修工作的工序時間及工時亦可縮減三分之二或四分之三。





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## Generating electricity from a building's water supply system

PolyU worked with Sino Green in Hong Kong Limited to explore the feasibility of generating electricity from fresh water supply pipelines in high-rise residential buildings. The study involved installation of a proprietary inline micro hydropower system jointly developed by the University and Water Supplies Department for in-depth performance tests on power generation in water supply pipelines. The system is expected to harvest just enough hydro-energy for energy-efficient light bulbs, providing cost savings to residential properties.

## Strategies to lower air pollution level

PolyU researchers undertook an investigation initiated by the Environmental Protection Department on radical chemistry and its impact on the air quality of Hong Kong. Their subsequent recommendations on the monitoring and control strategies for elevated ozone, secondary pollution, pollution precursors and radicals will contribute to the city's continuous efforts to keep air pollutant levels in check.

In another project commissioned by PTC International Limited and carried out at Tai Mo Shan, researchers studied photochemical processes and ozone pollution in Hong Kong. The outcome will lead to measurements of regional photochemical processes and a better understanding of ozone formation in the region.

## 利用大廈水管供水系統發電

理大與信和綠色有限公司合作，探討以高層住宅大廈供水喉管發電的可行性。研究計劃裝設了理大與水務署共同研發的管內微型水力發電系統，以深入測試供水喉管發電的表現。該系統產生的水力能源，預期剛可足夠供節能燈泡使用，並為住宅大廈節省開支。

## 降低空氣污染水平策略

理大研究人員獲環境保護署委託，就放射化學展開研究，了解其對香港空氣質素的影響。團隊其後就監測和管制上升的臭氧水平、二次污染、污染源及污染基作出建議，有助控制空氣污染的程度。

另一項研究香港的光化過程和臭氧污染的計劃是由培德國際有限公司委託，並在大帽山進行。該項研究結果將可用作量度分區光化過程，並有助進一步了解區內臭氧的形成。



# CULTIVATING "DO WELL DO GOOD" ENTREPRENEURSHIP

## 培育「創富創善」的 企業家精神

### Micro Funding Platform

PolyU has been contributing to the development of the entrepreneurial eco-system in Hong Kong through various innovation and entrepreneurship programmes for students and graduates. Since 2011, the University has established the Micro Funding Platform with collaborating partners to provide a series of seed funding programmes and create a pipeline of early stage start-ups.

#### ▣ PolyU Micro Fund Scheme

In 2014/15, the Micro Fund scheme awarded 15 new start-up companies, leading to an accumulated total of 79 start-ups since its inception in 2011. The over 70% surviving awardees have performed well, raising over HK\$40 million in investment and financial support, a leverage of 800% compared with HK\$5.6 million disbursed through the scheme. So far, Micro Fund recipients have won over 35 awards.

#### ▣ STEFG-PolyU China Entrepreneurship Fund

Jointly set up by PolyU and the Shanghai Technology Entrepreneurship Foundation for Graduates (STEFG), the fund supported 11 new ventures of PolyU students and graduates during the year to set up businesses in China. Over 90% of the awardees are still surviving and have raised over HK\$50 million in additional funding support, with Tencent and the founder of Xiaomi among the investors.

### 微型創業基金平台

理大致力為學生及畢業生提供各式各樣的創新活動及創業計劃，對香港的創業生態環境持續作出貢獻。自 2011 年起，大學與合作夥伴共同建立「微型創業基金平台」，提供多項種子基金計劃，資助初創企業的發展。

#### ▣ 理大微型基金計劃

2014/15 年度，微型基金計劃資助了十五家新的初創企業。自 2011 年成立以來，基金共資助了七十九家初創企業，當中超過百分之七十的公司運作良好，並籌得逾四千萬港元的投資金額及資助。相對於計劃下發放的五百六十萬港元創業基金，槓桿效率達八倍之多。至今，基金支持的企業更贏得超過三十五個獎項。

#### ▣ 上海市大學生科技創業基金會 – 理大專項基金

此基金由理大與上海市大學生科技創業基金會共同成立，年內資助了理大學生及畢業生於中國成立的十一家初創企業。獲資助的企業活存率超逾百分之九十，吸引逾五千萬港元的投資，投資者包括騰訊及小米創辦人等。

### ▀ Tech Incubation Fund and Tech Launchpad Fund

Supported by the Innovation and Technology Commission of the HKSAR Government under the Technology Start-up Support Scheme for Universities, two new funding schemes were launched by PolyU in November 2014: the HKSTP-PolyU Tech Incubation Fund (TIF) and the PolyU Tech Launchpad Fund (TLF).

In partnership with the Hong Kong Science and Technology Parks (HKSTP), the TIF supports early-stage technology start-ups by offering both seed funds (from PolyU) and incubation support (from HKSTP). As of June 2015, eight technology ventures have been awarded under the TIF scheme. The TLF also offers scaled-up funding to accelerate the growth of qualified ventures by matching dollar-to-dollar investments made by angel investors up to HK\$2 million.

### ▀ 科技培育基金及科技領航基金

在香港特別行政區政府創新科技署轄下的「大學科技初創企業資助計劃」的支持下，理大於 2014 年 11 月推出兩項全新的基金計劃：「科技園—理大科技培育基金」及「理大科技領航基金」。

在「科技園—理大科技培育基金」下，理大與香港科技園合作，分別為以科技為主的初創企業提供種子基金和創業培訓。截至 2015 年 6 月，此基金共資助了八家初創企業。「理大科技領航基金」則由理大夥拍天使投資者，提供一對一的資助配對，向成功申請的企業提供最高達二百萬港元的資助，以加速企業發展。

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### ▀ Good Seed

With the support of the Social Innovation and Entrepreneurship Development Fund of the HKSAR Government, PolyU was commissioned as one of the Fund's Intermediaries to launch the Good Seed social innovation programme in early 2015. Open to students and graduates of local higher education institutions, this programme focuses on leveraging design thinking and technology to come up with innovative ideas that address poverty issues in Hong Kong. This three-year programme aims to develop 1,000 young people into social innovators and support 40 projects.

### ▀ 「好耆社」計劃

理大受香港特別行政區政府之社會創新及創業發展基金委託，成為其協創機構之一，並於 2015 年初推出「好耆社」社會創新計劃。這計劃歡迎本地大專院校學生及畢業生參加，希望結合設計思維及科技應用，為本港貧窮問題提供創意解決方案。這為期三年的計劃目標是培育一千名年青人成為社會創新者，並為四十個項目提供資助。





## High-level education for professionals and executives

During the year, the Institute for Entrepreneurship delivered 562 training courses that benefited 22,122 participants from both the public and private sectors. The programmes are part of the Institute's ongoing training for professionals and executives and customized courses for industry associations and enterprises.

Similarly, the Institute of Advanced Executive Education delivered open programmes and bespoke programmes addressing a myriad of topics, including branding and marketing, crisis communication and high-impact presentations, business innovation, accounting and finance, as well as thought leadership.

## 高層次專業及行政培訓課程

企業發展院的工作，除了為專業人士及行政人員提供進修課程，亦有為工商機構提供度身訂造的培訓服務。年內，企業發展院共舉辦五百六十二項課程，為二萬二千一百二十二名來自公營和私營機構的人士提供培訓。

此外，高級管理深造學院開辦了不同類別的公開及特制課程，涵蓋品牌策略、市場營銷、危機處理溝通、具感染力的演說技巧、商業創意、會計金融，以及思維領導才能等範疇。



In 2014/15, two new interdisciplinary executive master degree programmes were launched: the Executive Master in Real Estate Finance and the Executive Master in Meaningful Innovation. For the third Executive Master in Healthcare, Technology and Management, three Professors of Practice of the University joined the programme development team to provide their expert advice.

In addition, an e-Learning series was launched with 120 handpicked courses. Based on these e-Learning courses, blended learning topics will be developed to support continuing professional development for executives. Two executive diplomas – one in accountancy and one in shopping mall management – were also offered as public courses, with the latter supported by Link Management Limited.

年內，高級管理深造學院開辦「高級管理人員房地產金融碩士」及「高級管理人員創新創意碩士」兩個跨學科深造學位課程。第三個「高級管理人員醫療保健、科技及管理碩士」深造課程更邀得大學的三位專業應用教授加入課程發展小組，並提供專家意見。

此外，學院推出網上學習系列，共有一百二十多項課程可供選擇。建基於這系列，學院將發展不同的混合學習課題，以支援行政人員的持續專業發展。學院亦舉辦了會計及商場管理兩個行政文憑課程，供公眾人士報讀，後者獲得領展公司鼎力支持。

