

**CONTROLLING OFFICER'S REPLY TO  
INITIAL WRITTEN QUESTION**

**CEDB(CT)031**

Question Serial No.

1150

Head: 155 - Government Secretariat : Subhead  
Innovation and Technology (No. & title):  
Commission

Programme: (2) Fostering University-Industry Collaboration

Controlling Officer: Commissioner for Innovation and Technology

Director of Bureau: Secretary for Commerce and Economic Development

Question: An estimated provision of \$7.5 m will be used for fostering collaboration between universities and industry in 2009-10, representing an increase of 7.5%. However, the estimated numbers of applications received and projects being monitored in 2009 are less than those of 2007 and 2008. Will the Administration inform this Committee:

- (a) The names of institutions and the project titles under the University-Industry Collaboration Programme (UICP) in the past 3 years, i.e. from 2006 to 2008. Please provide a breakdown of the funding amount;
- (b) The principles for determining the amount of provision for UICP and the reasons for the increase in provision but decrease in the number of projects funded; and
- (c) The reasons for not increasing the number of projects funded.

Asked by: Hon. LAU Sau-shing, Patrick

- Reply:
- (a) A list of the UICP projects undertaken in the past 3 years is at Annex.
  - (b) We have included a provision of \$7.5 m in the 2009-10 Draft Estimates for administering the UICP, which is adjusted slightly upwards over the provision in 2008 in line with past years' trend. The provision is mainly for additional expenditure on end-of-contract gratuities and other items like training and development.
  - (c) In the 2009-10 Estimates, we estimate that the same number of UICP applications as in 2008 will be received in 2009. If there are more UICP applications this year, we will deploy the necessary resources to process them expeditiously and provide the ITF funding support required.

Name in block letters Eddy Chan

Post Title Commissioner for Innovation and Technology

Date 16.3.2009

**University-Industry Collaboration Programme - Approved Projects in the past 3 years**  
**大學與產業合作計劃 - 過去 3 年獲批准的研發項目**

Project No 項目編號	Project Title 項目名稱	Project Period 項目周期	Approved Funding 資助金額 (HK\$)	University 大學	Remarks 附註
<b>Matching Grant for Joint Research</b> 合作研究等額補助金計劃					
UIM/047	Program for Embedded Passives on Flexible Tape Substrates 軟性基底嵌入式無源電路研究計劃	01/04/2001 - 31/03/2006	14,751,600	The Hong Kong University of Science and Technology 香港科技大學	Completed 已完成
UIM/095	Development of Cement-based Functional Piezoelectric Materials for Intelligent Civil Structures 土木智能結構中的水泥基壓電功能材料的開發	01/10/2002 - 31/03/2006	1,230,000	The Hong Kong University of Science and Technology 香港科技大學	Completed 已完成
UIM/103	Next Generation Online Multimedia Collaboration System 下一代在線多媒體協作系統	01/12/2004 - 28/02/2007	14,592,000	The Hong Kong University of Science and Technology 香港科技大學	Completed 已完成
UIM/108	Development of Globally Marketable Modernized Proprietary Natural Products for Treating Insomnia 開發具有專利權和國際市場潛力的新一代治療失眠之天然藥物	01/06/2003 - 31/05/2006	4,092,400	The Chinese University of Hong Kong 香港中文大學	Completed 已完成
UIM/113	Pharmacogenomic/ Pharmacogenetic-guided and Related Development of Therapeutics for Cancers and Lupus Erythematosus 藥物遺傳學指導新藥發展: 用於抗腫瘤及紅斑狼瘡症	01/12/2003 - 30/11/2006	3,240,000	The Hong Kong University of Science and Technology 香港科技大學	Completed 已完成
UIM/116	Development of Integrated Advanced Computer Control System for Injection Molding Machines 發展高效能一體化的注塑機控制器	01/10/2003 - 30/09/2006	2,739,250	The Hong Kong University of Science and Technology 香港科技大學	Completed 已完成
UIM/117	Smart Vibration Isolation Technology for Automation and Precision Equipment 用於自動化及精密設備之智能隔振技術	01/12/2003 - 28/02/2006	1,290,000	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIM/121	Salvage of Ischemic/Infarcted Myocardium by Dagencao Induced Rapid Angiogenesis and Myogenesis and Its Development 大根草誘導的血管形成和心肌再生的功能來挽救缺血或梗死的心肌及開發	01/02/2004 - 31/07/2007	3,500,000	The Chinese University of Hong Kong 香港中文大學	Completed 已完成
UIM/122	Develop a New Air-Conditioning System Based on Ultrasonic Actuation and RMZ Heating 超聲催動與半導體加熱的新型冷氣機	01/11/2003 - 30/04/2006	2,025,000	The Chinese University of Hong Kong 香港中文大學	Completed 已完成

Project No 項目編號	Project Title 項目名稱	Project Period 項目周期	Approved Funding 資助金額 (HK\$)	University 大學	Remarks 附註
UIM/124	In Vivo Anti-tumour Activity of Recombinant Human Arginase: its Preparation Optimization, Modification and Preclinical Efficacies 人重組精氨酸西每體內抗癌活力：優化及改良製造程序、和臨床前藥效研究	02/02/2004 - 30/04/2006	1,200,000	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIM/126	Development of PDP Phosphors 研究發展 PDP 螢光粉	15/12/2003 - 14/02/2006	638,860	Hong Kong Baptist University 香港浸會大學	Completed 已完成
UIM/130	Non-stop Internet Computing with Replicate Relational XML Databases for Information Highway 資訊公路上的不停站式複製關聯式可擴展標示語言資料庫的運算	01/08/2004 - 30/09/2006	499,900	City University of Hong Kong 香港城市大學	Completed 已完成
UIM/134	Development and Technology Transfer of Intelligent Electronics Toys 智能電動玩具技術的開發和移交	01/05/2004 - 30/04/2006	986,500	The Chinese University of Hong Kong 香港中文大學	Completed 已完成
UIM/136	Voice Control with Speaker Localization in Noisy Environments via Robust Echo Cancellation and Microphone Arrays 噪音環境下通過穩健的回聲抵消和聲傳器陣列技術實現聲音控制和定位系統	01/10/2004 - 30/11/2006	513,000	The University of Hong Kong 香港大學	Completed 已完成
UIM/144	High-performance Embedded Radio-Frequency Passive Components in Thin Array Plastic Packaging (TAPP) for Wireless System-in-Package Applications 用於無線通訊封裝式系統的採用 TAPP 技術的高性能嵌入式射頻無源器件	01/09/2004 - 28/02/2006	249,800	The Hong Kong University of Science and Technology 香港科技大學	Completed 已完成
UIM/145	Authentication for Surveillance System (ATS) 視像監控系統的確認	01/12/2004 - 28/02/2006	1,561,500	The University of Hong Kong 香港大學	Completed 已完成
UIM/150	Development and Application of an Isothermal Sheet Metal Forming Process for Magnesium Alloys 鎂合金片材的等溫拉深技術的開發與應用	01/12/2004 - 31/01/2007	920,000	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIM/151	A Ubiquitous Digital Writing System Using MEMS Motion Sensing Technology 一種應用微機電(MEMS)運動傳感技術的通用數碼書寫系統	01/12/2004 - 30/06/2007	1,883,000	The Chinese University of Hong Kong 香港中文大學	Completed 已完成
UIM/160	Technology Development and Prototyping of MEMS-based Microphone 微機電式麥克風之技術開發及原型試製	01/05/2005 - 31/10/2006	388,865	The Hong Kong University of Science and Technology 香港科技大學	Completed 已完成

Project No 項目編號	Project Title 項目名稱	Project Period 項目周期	Approved Funding 資助金額 (HK\$)	University 大學	Remarks 附註
UIM/161	Study of Carbon Fibres and their Applications in Domestic Electrical Appliances 碳纖維的導電和發熱特性及其在家庭電器的應用	01/05/2005 - 31/08/2006	586,500	The University of Hong Kong 香港大學	Completed 已完成
UIM/166	Efficient Extraction of Trace Precious Metals in Industrial Effluents via Novel Water Compatible PEG/PS Solid-phase Separable Scavengers 用新創水容 PEG/PS 固相分離萃取劑回收工業廢水內的貴金屬	01/11/2005 - 30/04/2007	897,250	The University of Hong Kong 香港大學	Completed 已完成
UIM/167	Reliable Digital Video Surveillance Systems with Efficient Content-based Video Retrieval Support 具備以內容為主的視訊擷取支援及可靠的數碼視像監控系統	01/02/2006 - 30/06/2007	1,000,000	The University of Hong Kong 香港大學	Completed 已完成
UIM/168	Pre-Clinical Study of New Drug Candidate LC978 for the Therapy of Human Leukemia, Sickle Cell Anemia and Beta-thalassemia 治療人類白血病、鐮刀細胞及地中海貧血病的全新藥物前體 LC978 的預臨床研究	01/04/2006 - 31/03/2008	1,300,000	The Chinese University of Hong Kong 香港中文大學	Completed 已完成
UIM/169	Structural Optimization for High Dynamic Performance in Electronics Manufacturing Equipment 開發半導體設備之高動態性能的結構優化技術	16/01/2006 - 15/07/2008	990,000	The Chinese University of Hong Kong 香港中文大學	Completed 已完成
UIM/174	Virtual Reality Based Simulator for Training Percutaneous and Transcatheter Procedures 透視微创治療虛擬現實模擬訓練系統	12/03/2007 - 31/07/2009	2,798,880	The Chinese University of Hong Kong 香港中文大學	On-going 進行中
UIM/178	Development of an Automatic Electromechanical System to Sort Diamonds into Different Grades According to their Colour/impurity Characteristics 自動化鑽石分類系統的開發,系統是利用顏色及雜質來分鑽石的等級	01/04/2008 - 30/09/2009	1,092,500	The Hong Kong University of Science and Technology 香港科技大學	On-going 進行中
UIM/181	Development of New Protein Drugs ("Biologics") Associated with the Aminoacyl-tRNA Synthetase (AARS) Family of Enzymes"&CHAR(10)&" 氨酰-tRNA 合成酶 (AARS) 家族相關創新生物制劑的研發"	15/07/2008 - 14/01/2010	2,949,750	The Hong Kong University of Science and Technology 香港科技大學	On-going 進行中
UIM/182	Development of HPV Therapeutic Vaccine and Related Immunotherapy for Treating Cervical Cancer 用於子宮頸癌的人乳頭瘤病毒治療性疫苗及相關免疫療法的開發	15/08/2008 - 14/08/2010	1,571,682	The Chinese University of Hong Kong 香港中文大學	On-going 進行中

Project No 項目編號	Project Title 項目名稱	Project Period 項目周期	Approved Funding 資助金額 (HK\$)	University 大學	Remarks 附註
UIM/183	Inelastic Electron Tunneling Spectroscopy for Ferromagnetic Material Nanometer-Thin Film Junction 鐵磁物料納米薄膜結的非彈性電子隧道譜	01/09/2008 - 31/08/2010	499,000	City University of Hong Kong 香港城市大學	On-going 進行中
UIM/184	Evaluation of an Oxygen Therapeutic (IKOR-2084) in the Enhancement of Chemotherapy and Radiotherapy in Rodent Cancer Models 載氧藥物對提高腫瘤化學治療及放射治療功效的研究評估	15/09/2008 - 15/03/2010	946,715	The University of Hong Kong 香港大學	On-going 進行中
UIM/186	Development and Characterization of Human Mast Cell Culture Systems 肥大細胞培養系統的開發及鑑定	01/03/2009 - 28/02/2011	977,500	The Chinese University of Hong Kong 香港中文大學	On-going 進行中
<b>Teaching Company Scheme</b> 廠校合作研究計劃					
UIT/057	A Study on Low Cost High Security Data Exchange in a Large Scale Logistic System 大規模後勤系統中低成本高安全性數據交換的研究	01/02/2004 - 31/01/2006	173,000	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/058	Robust Object Segmentation Method for Video Surveillance System 用於視像監控系統的強健物件分割技術	01/09/2004 - 31/08/2006	185,000	The University of Hong Kong 香港大學	Completed 已完成
UIT/061	Development of Thread Tension Control System for Embroidery Machines 刺繡機線張力控制系統的研究	01/09/2004 - 31/08/2006	185,000	The Hong Kong University of Science and Technology 香港科技大學	Completed 已完成
UIT/062	Intelligent Production Control Decision-Making System for Apparel Manufacturing Process 智能生產控制判決系統在服裝縫合過程之應用	06/09/2004 - 05/09/2006	158,600	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/064	Discovering Association Patterns in Large Temporal-Spatial Databases 於時間空間資料庫發現關聯模式	04/10/2004 - 30/09/2006	158,600	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/065	Development of an Information Discovery System to Achieve Process Optimization 優化生產工序的訊息探索系統	01/09/2004 - 01/09/2006	158,600	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/066	A Detailed Study of Enhanced Lead Free SnAgCu (i.e. SnAgCuIn) Solder Reliability and Wetting Ability for Surface Mounting Application 用於表面貼裝的增強無鉛 SnAgCu 焊料可靠性和潤濕性的研究	01/10/2004 - 30/09/2006	185,000	City University of Hong Kong 香港城市大學	Completed 已完成

Project No 項目編號	Project Title 項目名稱	Project Period 項目周期	Approved Funding 資助金額 (HK\$)	University 大學	Remarks 附註
UIT/067	Methodology Development of Wearing Behaviour in a High Frequency Fatigue Motion (HFFM) System 高頻疲勞全動系統的磨損特性基礎研究	01/11/2004 - 31/10/2006	171,800	City University of Hong Kong 香港城市大學	Completed 已完成
UIT/068	Enhancement of the Tribological Performance of a High Rotational Speed Mechanical System 優化高速旋轉機械系統的摩擦性能	01/11/2004 - 31/10/2006	171,800	City University of Hong Kong 香港城市大學	Completed 已完成
UIT/069	An Investigation of Tribological Characteristics of an Electromechanical System 機電系統的摩擦特性研究	01/11/2004 - 31/10/2006	171,800	City University of Hong Kong 香港城市大學	Completed 已完成
UIT/070	Development of an Energy-efficient Burn-in System for Switching Mode Power Supplies 開發一個高效能開關電源老化系統	01/11/2004 - 31/10/2006	335,000	City University of Hong Kong 香港城市大學	Completed 已完成
UIT/071	Trapped-Energy High-frequency Piezoelectric Resonators 能阱式高頻壓電諧振器	01/10/2004 - 30/09/2006	158,600	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/073	Analysis of Rubbers Used in Venting Systems for Rechargeable Batteries 充電電池排氣裝置用膠粒分析	01/03/2005 - 28/02/2007	159,320	City University of Hong Kong 香港城市大學	Completed 已完成
UIT/074	Development of an Intelligent Supplier Evaluation System for Streamlining Purchasing Operations in a Logistics Network 開發供應商評估智能系統，精簡物流網絡上的採購運作	01/03/2005 - 28/02/2007	158,600	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/075	Intelligent Decision Models for Optimizing Polishing Quality 開發拋光技術及智能決策系統	01/09/2005 - 31/08/2007	155,000	The University of Hong Kong 香港大學	Completed 已完成
UIT/078	Soft-measurement of Temperature Distribution for Optimal Control and Design of the Cure Oven 基於溫度場軟測量的加熱固化爐優化設計和控制	01/10/2005 - 30/09/2007	161,000	City University of Hong Kong 香港城市大學	Completed 已完成
UIT/079	Low-power Integrated Circuit Design Techniques for Digital Audio Coder/Decoder 低功耗數字音訊集成電路設計方法	01/09/2005 - 31/08/2007	155,350	The University of Hong Kong 香港大學	Completed 已完成
UIT/083	Generations of Bio-degradable Plastics for Pharmaceutical Uses 可降解塑膠的製成與藥學使用	02/01/2006 - 01/01/2008	147,000	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/086	Intelligent CAD/CAM Tools for Mould Insert and EDM Electrode Design 智能化 CAD/CAM 模具鑲件及 EDM 電極設計工具	03/04/2006 - 02/04/2008	194,000	City University of Hong Kong 香港城市大學	Completed 已完成

Project No 項目編號	Project Title 項目名稱	Project Period 項目周期	Approved Funding 資助金額 (HK\$)	University 大學	Remarks 附註
UIT/088	Categorization of Web Documents by Projective Clustering 基於映射聚類的網頁分類法	01/04/2006 - 31/03/2008	152,000	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/089	Development of Lead-free Piezoelectric Ceramic Resonators for High-Frequency Oscillator Applications 無鉛壓電陶瓷高頻諧振器的開發	03/10/2006 - 02/10/2008	158,600	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/090	Enhancement of Product Quality and Productivity of a Small Household Electrical Appliance Company by the Micro-Cellular Injection Moulding Technology 微孔泡沫注塑技術在小型電器工業中的應用	01/02/2007 - 31/01/2009	158,600	The Hong Kong Polytechnic University 香港理工大學	Completed 已完成
UIT/091	Study on the Reliability of the Selective Molecular Assembly Patterning (SMAP) at Nanoscaled Indium Tin Oxide Design Layout 對選擇性分子組成結構以得之納米氧化銻錫的可靠性提升之研究	01/04/2007 - 31/03/2009	185,000	City University of Hong Kong 香港城市大學	On-going 進行中
UIT/094	Development of a Generic Product Design Platform for Household Product Design 發展共通產品設計平台於家用電器產品的管理及應用	01/08/2007 - 31/07/2009	158,600	The Hong Kong Polytechnic University 香港理工大學	On-going 進行中
UIT/095	Development of an Intelligent Business Process Management Decision Support System for Mould Manufacturers 模具工業智能化商業流程管理決策支持系統開發	17/09/2007 - 16/09/2009	158,600	The Hong Kong Polytechnic University 香港理工大學	On-going 進行中
UIT/096	Noise and Echo Cancellation DSP Firmware Library for Automotive Applications 汽車應用的數字信號處理噪聲和回波消除技術固件庫	01/10/2007 - 30/09/2009	185,000	City University of Hong Kong 香港城市大學	On-going 進行中
UIT/097	Reliability Study of Vacuum Dielectric Capacitors for Microwave Circuit Applications 用於微波的真空介質電容器的可靠性研究	01/02/2008 - 30/09/2009	155,000	City University of Hong Kong 香港城市大學	On-going 進行中
UIT/098	Design of Intelligent Voltage Sag Compensators for Semiconductor Industry 半導體工業用智能型電壓驟降補償器的設計	01/04/2008 - 31/03/2009	79,300	The Hong Kong Polytechnic University 香港理工大學	On-going 進行中
UIT/099	Production of Photocatalytic Materials for Air Pollution Treatment by a Microwave Plug-flow Reactor 生產光催化材料用於微波栓流式反应器處理空氣污染	01/09/2008 - 31/08/2010	185,000	The Hong Kong University of Science and Technology 香港科技大學	On-going 進行中

<b>Project No</b> 項目編號	<b>Project Title</b> 項目名稱	<b>Project Period</b> 項目周期	<b>Approved Funding</b> 資助金額 (HK\$)	<b>University</b> 大學	<b>Remarks</b> 附註
UIT/100	Study on Sealing of Battery Packaging 電池包裝封口的研究	01/12/2008 - 30/11/2010	162,200	City University of Hong Kong 香港城市大學	On-going 進行中
UIT/101	Development of an Opinion Mining System for Chinese On-line Forum Documents 面向中文網論壇文本的情緒挖掘系 統的研制	10/12/2008 - 09/12/2010	165,200	The Hong Kong Polytechnic University 香港理工大學	On-going 進行中
UIT/102	Video Object Detection and Parameterization 視訊物體特徵追蹤及偵測	02/03/2009 - 01/03/2011	165,200	The Hong Kong Polytechnic University 香港理工大學	On-going 進行中

**CONTROLLING OFFICER'S REPLY TO  
INITIAL WRITTEN QUESTION**

**CEDB(CT)032**

Question Serial No.

2694

Head: 155 - Government Secretariat : Subhead  
Innovation and Technology (No. & title):  
Commission

Programme: (4) Planning for Innovation and Technology Development

Controlling Officer: Commissioner for Innovation and Technology

Director of Bureau: Secretary for Commerce and Economic Development

Question: The Administration stated that during 2009-10 it will continue to promote innovation, technology and design culture to the general public and nurture more creative young talents. In this regard, will the Administration:

- (a) Set out in details the relevant measures taken in 2008-09 and their effectiveness.
- (b) Give a detailed account on how to effectively implement relevant promotion and nurturing work with the estimated provision decreased by 3.7% under this Programme in 2009-10. Please provide a breakdown of the expenditure items.

Asked by: Hon. LAU Sau-shing, Patrick

Reply: (a) The Innovation and Technology Commission (ITC) operates a publicity programme to enhance public awareness and understanding of the importance of innovation, technology and design. In 2008-09, the following programmes were carried out and their impacts are as follows:

Programme	Impact
Innovation Festival 2008 – an InnoCarnival, 4 roadshows, 20 seminars and 160 workshops	The programmes attracted around 100 000 participants, most of them were secondary school students. Over 50 educational institutions and youth bodies joined as partner and supporting organizations.
Hong Kong Student Science Projects Competition 2008	142 teams of 525 students from 57 schools participated in the project competition. A slogan competition was also organised to commemorate the 10 <sup>th</sup> anniversary of the competition and it attracted almost 20 000 entries. The Initial Judging cum Project Exhibition as well as the Final Judging of the competition attracted almost 2 000 participants.
Hong Kong Youth 3D Animation Competition 2008	Over 500 students registered for the competition. They were provided with free training on 3D animation skill and free access to 3D software. More in-depth training was provided to winners.
TechnoFrontier – a 10 episode TV series	The TV series ‘TechnoFrontier’, jointly produced by the ITC and RTHK, were very well received by the public since its launch in October 2008. On average, each episode attracted an audience of 1 m.

Programme	Impact
Hong Kong RFID Centre	Partly funded by ITC, the Hong Kong RFID Centre serves to educate members of the public the importance and applications of RFID technology. The centre was open in early October 2008. Up to the end of 2008, over 2 000 people visited the centre.
Youth Innovation Club	The Club now has around 300 members. They were offered regular exchange and learning opportunities throughout the year to further develop their interest and knowledge in innovation and technology.

ITC also provides funding support to projects that promote an innovation and technology culture under the Innovation and Technology Fund and the DesignSmart Initiative.

- (b) The expenditure on this programme will be reduced by 3.7% in 2009-10 as compared with that in 2008-09. This is mainly due to the fact that 2 initiatives conducted in 2008-09, i.e. the production of the TechnoFrontier TV series and the setting up of the Hong Kong RFID Centre, were of one-off basis and will not be incurred again in 2009-10. ITC will continue to strengthen its partnership with other educational institutions and youth bodies to achieve synergies and to extend the reach of existing activities. It will also explore the use of new publicity means (e.g., online media) to enhance the public awareness of its activities.

The planned programmes and proposed budget for the publicity drive in 2009-10 are as follows:

1. Innovation Festival 2009	HK\$5 m
2. Hong Kong Student Science Project Competition	HK\$1.5 m
3. Hong Kong Youth 3D Animation Competition	HK\$0.2 m
4. Science Lectures on TechnoFrontier	HK\$0.2 m
5. Operation of the Hong Kong RFID Centre	HK\$0.5 m
6. Youth Innovation Club	HK\$0.6 m

Name in block letters Eddy Chan

Post Title Commissioner for Innovation and Technology

Date 16.3.2009