Performance and Financial Reports
業績與財務報告

ASTRI™

香港應用科技研究院有限公司
Hong Kong Applied Science and Technology Research Institute Company Limited

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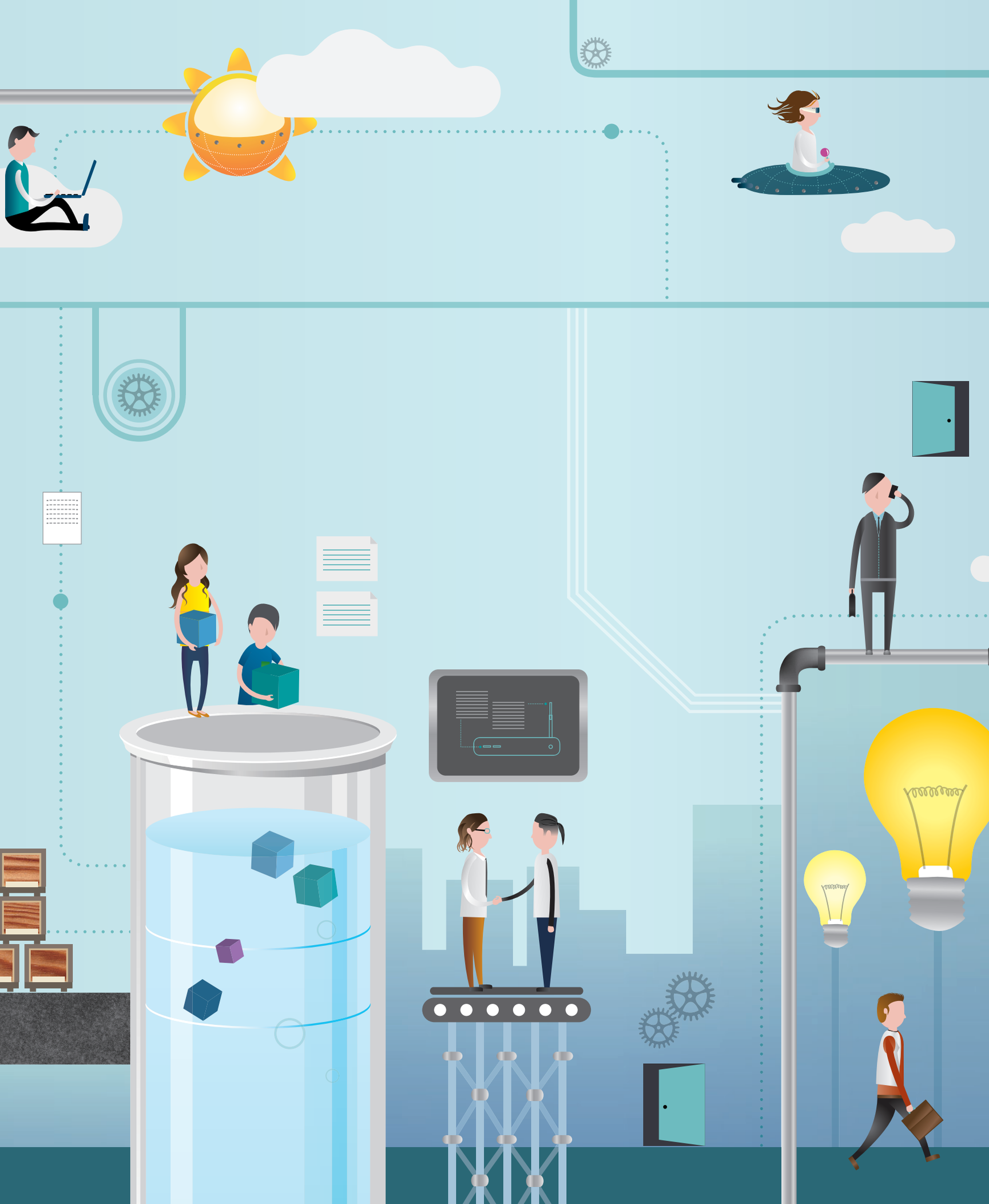
Think
Innovative
Live Smart
創新意念・智能生活



Think Innovative • Live Smart

We are living in a world full of opportunities waiting to be discovered by our imagination and creative power. At ASTRI, we aim to deliver meaningful technologies so people can lead a healthier and more comfortable life.

創新意念 • 智能生活

世界充滿無限可能，有待我們運用想像和創意來發掘。
應科院致力開發創新而實用的新科技，令生活更健康和更寫意。

Mission 使命

The ASTRI mission is to enhance Hong Kong's competitiveness in the technology-based industries through applied research.

應科院肩負的使命，是要透過應用科技的研究，
協助發展以科技為基礎的產業，
藉此提升香港的競爭力。

Goals 目標

- **Perform relevant and high quality R&D for transfer to industry**
  進行相關及高質素的科技研究發展工作，並把科研成果轉移給工業界
- **Enhance Hong Kong's technological human resources development**
  增強本港科技人才的實力
- **Act as a magnet attracting international R&D talent to work in Hong Kong**
  吸引海外從事研究發展的專才來港工作
- **Act as a spawning ground for technology entrepreneurs**
  培育科技企業家
- **Promote greater technological applications in industry**
  鼓勵將科技廣泛應用於工業方面
- **Provide a focal point for industry-university collaboration**
  作為工業界與大學合作的橋樑

Values 核心價值

Accountability 問責
We work in an ethical, honest, open and fair manner and are responsible for our actions.
我們恪守專業操守，以誠實的態度和公開公平的原則處事，並承擔責任。

Service 服務
We render timely and world-class services to our stakeholders.
我們為不同的持份者提供適時並達世界水準的服務。

Tenacity 堅毅
We strive to overcome all challenges to the best of our ability.
我們百折不撓，竭盡所能，克服挑戰。

Respect 尊重
We give due respect to self and others to establish and support an environment of teamwork and growth.
我們律己敬人，以建立團隊精神，促進個人成長。

Innovation 創新
We innovate to achieve betterment for Hong Kong, the nation and the world.
我們致力創新，造福香港、國家和世界。

Chairman's Foreword 主席序言

Mr. Wong Ming-yam, BBS, JP
Chairman of the Board
董事局主席 王明鑫先生

Chairman's Foreword

It is with immense pleasure and honour that I present my first Annual Report in the capacity of ASTRI's Board Chairman. This report highlights ASTRI's progress and achievements during the period 1 April, 2013 to 31 March, 2014.

I am deeply indebted to my predecessor, Dr. Patrick Wang Shui-chung, who masterfully guided ASTRI through a period of growth and consolidation from 2007 to 2013. Under his leadership, ASTRI not only became an outstanding research and development institute in Hong Kong and the region, but also a public organization fulfilling its mission with good governance. In vowing full commitment to my position, my fellow Board members and I are confident we can continue to count on Dr. Wang's support and advice in the future.

First of all, I would like to take this opportunity to record the Board's heartfelt appreciation to Mr. George Hongchoy Kwok-lung for his invaluable contribution as Director of ASTRI from 2010 to 2013. At the same time, I wish to warmly welcome our new Director, Mr. Ha Yung-kuen, the former Deputy Director-General (Telecommunications).

The year under review can be regarded as the beginning of a transformation period for ASTRI. Readers may remember that in June 2012 the Government established a Review Committee to take stock of our past performance and to chart our course forward to meet challenges ahead. The Committee, chaired by the Commissioner for Innovation and Technology and comprising past and present Board directors, industry representatives and other stakeholders, submitted its final report in September 2013. The report set out many insightful findings and recommendations, and in fact some of the latter have been adopted and implemented during the final quarter of 2013-14.

主席序言

本人非常高興和榮幸，首次以應科院董事局主席身分向各位提交應科院由二零一三年四月一日至二零一四年三月三十一日的年報，介紹應科院在該年度內的進展和業績。

我首先希望表揚前任主席汪穗中博士的卓越貢獻，他從二零零七年至二零一三年傑出地引領應科院度過了成長和鞏固期。在他的領導下，應科院不但成為了香港以至區內優秀的研發中心，更是一所以良好企業管治來履行其使命的公共機構。珠玉在前，我當全力以赴。我和各位董事局成員亦滿有信心，於未來的日子能夠繼續得到汪博士的支持和指導。

我也希望藉此機會代表董事局向王國龍先生衷心致謝，王先生自二零一零年至二零一三年出任應科院董事期內，貢獻良多。與此同時，我也熱烈歡迎前通訊事務管理局辦公室副總監夏勇權先生加入應科院董事局。

本年度可視為應科院轉型期的開始。讀者大概還記得，特區政府在二零一二年六月間成立了一個檢討委員會，詳細審視我們過去的業績，並訂定發展進程，以迎接未來的挑戰。該委員會由創新及科技署署長擔任主席，成員包括過去和現在的董事局成員、業界代表和其他持分者。該委員會於二零一三年九月提交的最後報告中，提出了許多有見地的結論和具前瞻性的建議，事實上，部分建議在二零一三至一四年度的最後一個季度已得到採納和付諸實行。

Mr. Wong (left) succeeded Dr. Patrick Wang as ASTRI's Board Chairman in October 2013
王明鑫先生(左)於二零一三年十月接替汪穗中博士出任應科院董事局主席

In the report, the Committee called for further strengthening of cross-domain collaboration within ASTRI to ensure its R&D endeavours adhere to corporate strategies. One of the major initiatives put forward is the establishment of "Thrusts", or collections of projects, which draw on existing expertise and resources across different research groups to target at new and much in demand technology areas. I fully support the Committee's recommendation as I have no doubt that by pooling ASTRI's technical expertise and resources to tackle the community's specific and emerging needs, ASTRI would be able to multiply its value through synergistic collaborations.

I am pleased to report that the first "Thrust" project on next-generation mobile communication technologies was approved during the year and the second project on technology for the ageing is already in the pipeline.

Meanwhile, the Management is positively coping with recommendations related to the revised calculation method and collection schedule of industry contributions, while at the same time revisiting its current set of key performance indicators against pre-set goals. I think this reassessment is timely and crucial. I strongly believe that with a set of clear, relevant, measurable and attainable targets, the overall efficiency of ASTRI's R&D efforts would be greatly augmented.

Driving a performance culture was another major recommendation. Accordingly, the appraisal and reward systems were revamped during the year to encourage continuous improvement from each and every member of the ASTRI community. I have no doubt that a performance culture shared by all ASTRI members will further enhance their productivity and personal achievement.

As one of ASTRI's goals is to serve the industry by meeting its needs, customer satisfaction is also a very important, if not the most, performance indicator in measuring our success. I am excited to inform our readers that an independent customer satisfaction survey commissioned by the Review Committee found that more than 70 per cent of our 124 customers were satisfied with our overall performance. They were particularly happy with the relevance of our work to their needs, as well as our staff calibre

在報告中，委員會呼籲進一步加強應科院內部跨領域合作，以確保其研發在堅守發展策略時可人盡其才，物盡其用。其中重大舉措之一是建立「主推」項目，「主推」項目是利用不同研發組別現有的專業人才和資源，致力開拓新的、需求甚殷的技術領域。我全力支持委員會的建議，深信應科院藉著匯集技術專長和資源來應對社會上具體的新需要，將能夠通過協同合作提升它的效能。

我欣然報告，第一組「主推」項目已於本年度獲得通過開展，專注於發展下一代移動通訊技術；而第二組為老齡化社會而研發的科技「主推」項目亦已經在積極籌組中。

委員會亦作出了修訂業界資助計算方法和收取時間的其他建議，管理層正積極處理，而同時，管理層正按其預先訂立的目標，重新審視其當前設定的關鍵表現指標。我認為這重新評估是適時和重要的。我深信設立了明確、相關、可衡量和可實現的目標，必會大大增強應科院研發工作的整體效率。

推動績效文化是委員會的另一個主要建議。評核和獎勵制度也因應這建議而於年內修訂，以鼓勵每一位應科院員工不斷提升工作表現。我深信由應科院所有成員認同的績效文化，將進一步提升他們的工作效率和個人成績。

由於應科院的目標之一是滿足產業界的需求，客戶的滿意度就算不是首要的，也是非常重要的指標，以衡量我們的成績。我欣然報告，從一個由檢討委員會委託的獨立客戶滿意度調查中發現，在一百二十四個客戶受訪者中，超過百分之七十對應科院的整體表現感到滿意，他們特別欣賞我們的工作與其需求相關，以及我們員工在技術知識和項目管理能力方面的素

regarding technical knowhow and project management capability. Despite these most positive and encouraging findings, there is no room for complacency. The Board and senior management have already proceeded to formulate strategies to further expand and enhance the quality of our services. Our ultimate objective is to become the industry's close partner meeting and serving the needs of our customers.

質。儘管這些調查結果極其正面和令人鼓舞，我們決不能自滿。董事局和管理層已著手制定策略，進一步擴大我們的服務範圍和提高服務質素。我們的最終目標是要成為業界的緊密合作夥伴，致力滿足客戶需求。

Mr. Wong (left) and Mr. Li Dong-sheng, Chairman of TCL Communication, exchange toasts at an agreement signing ceremony between ASTRI and TCL

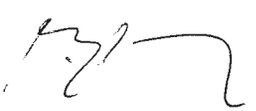
王明鑫先生(左)與TCL通訊主席李東生先生於兩家公司簽約成為長期策略合作夥伴儀式上互相祝賀

Mapping the way forward, ASTRI will adhere to the Review Committee's recommendations with the aim to boost Hong Kong's economic and social impacts. Indeed, ASTRI since its inception has provided no fewer than 1,000 job opportunities for local engineering and science talent and R&D professionals, attracted many investments towards Hong Kong's technology industry and created substantial value for Hong Kong with its impressive patent portfolio. At the same time, ASTRI has established itself as a platform that enables companies to access new ideas and knowhow, facilitates information flow and enhances product and process improvements. Furthermore, the talent pool it has built over the years for the industry will be instrumental in driving Hong Kong's economy and the technology industry forward in the years to come. With the dynamic flow of talent and resources and the deployment of research output across the border, the technology-based industry on the Mainland will also benefit substantially from ASTRI's contribution.

ASTRI, during the past 13 years, has proved beyond doubt it is an invaluable asset to Hong Kong. Today, it is assuming an even more distinct role in supporting Hong Kong's technology, economic and social development. The challenges ahead will be both monumental and critical for us to maintain our momentum in bringing success to the next level. However, with the support of the ASTRI Management, the Hong Kong SAR Government and the community at large, my fellow Board members and I are determined to rise to the challenges and try our utmost to ensure this R&D centre will continue to deliver the greatest benefit to Hong Kong in the years to come.

應科院在描繪未來發展路向時，將依照檢討委員會的建議，以求對香港的經濟和社會作出更大貢獻。事實上，應科院自成立以來，已經為本地理工科人才和研發專才提供了不少於一千個就業機會，並吸引了眾多本地和海外的風險投資者參與拓展香港的科技產業，更藉著取得大量專利，為香港創造了重大價值。與此同時，應科院的努力也為業界帶來新意念和專有技術，促進信息流動，及協助產品和工藝改進。此外，本院多年來為業界建立的人才庫亦可在未來的日子裡進一步推動香港經濟和科技產業向前邁進。隨著人才和資源的流動和研究成果的跨境應用，內地以技術為基礎的產業也必可受惠於應科院的貢獻。

在過去的十三年中，應科院已充分證明它是香港的一項寶貴資產。今天，它在支援香港在科技、經濟和社會不同方面的發展之際，擔當著更獨特的角色。未來的挑戰無疑是龐大而艱鉅，我們當再接再厲，力爭上游，務求更上一層樓。在應科院管理層、香港特區政府和社會大眾的支持下，董事局各成員與我都決心迎接挑戰，並會盡最大努力確保應科院在今後的歲月裡繼續為香港作出最大貢獻。



Wong Ming-yam
Chairman of the Board
董事局主席 王明鑫

Chief Executive Officer's Review 行政總裁回顧

Dr. Cheung Nim-kwan, PhD
Chief Executive Officer
行政總裁 張念坤博士

CEO Review

ASTRI, by successfully connecting the innovative minds of its research personnel and their commitment to pursuing customer-focused R&D, continued to make a positive difference in the continuous development of the industry and community at large during the year under review.

Indeed, the year 2013/14 has been one with successful developments on different fronts which are elaborated in various chapters of the Annual Report. Nevertheless, I would like to highlight some of our key accomplishments:

- We carried out 82 research projects, including 32 new ones, during the year. These projects were supported by the Innovation Technology Fund (ITF) of nearly HK$205 million. Also, there are seven ongoing Industry Collaborative Projects, including three new ones started during the year, with a combined value of HK$23.93 million.
- ASTRI signed 88 contracts for technology transfers with global industrial partners.
- A record $87.8 million industry income was achieved representing a substantial increase of 29 per cent over the previous year. The percentage of industry income received over total project spending also reached a record level of 39 per cent.
- ASTRI filed 72 patent applications for technologies and was granted 95 patents, bringing the total number of patents under ASTRI's belt to 461.

行政總裁回顧

憑著研究人員的共同努力和創意精神，應科院去年繼續為業界和社會的發展作出貢獻，積極開拓以顧客需要為主導的創新技術。

本院在二零一三／一四年度在不同領域上都取得驕人成績，詳情刊載於本年報其他章節，以下是一些摘要：

- 年內我們進行了八十二個研究項目，當中包括三十二個新項目。應科院從創新及科技基金共獲得近二億零五百萬港元的研究資助。過去一年共進行了七個「業界合作項目」，包括三個新項目，合約總值達二千三百九十三萬港元。
- 應科院與世界各地合作夥伴共簽訂了八十八份技術轉移合約。
- 從業界所得收入達八千七百八十萬港元，比去年大幅增加百分之二十九。從業界所得收入佔總研發項目支出百分之三十九，創歷年新高。
- 知識產權方面，應科院共提交了七十二項專利申請，同時又獲授九十五項新專利，令本院擁有之專利增加至四百六十一項。

During the year, ASTRI established collaborations with two esteemed international companies. In October, we entered into a long-term strategic partnership with TCL Communication Technology Holdings Limited to enhance TCL's global product portfolio with our expertise in 4G and future 5G standards. Our impressive track record in LTE and LTE-Advanced small cell and terminal technologies will certainly make a significant contribution to our partner in further developing its products.

In December, ASTRI and HP Hong Kong jointly established the ASTRI-HP Information Technology Research Centre to foster adoption of information technology by Hong Kong business enterprises. The collaboration will drive the development of solutions for big data analytics and cloud computing to benefit the commercial sector. I am pleased to point out the two partnerships well illustrate the unique value that ASTRI can bring to our global partners.

ASTRI, during the year, also made full use of different channels and occasions to show the world its latest innovations. One such occasion took place at the International Consumer Electronics Show in Las Vegas in January. I am very happy to report that our displays caught the attention of global buyers. One of the product highlights is the BoBo Nano PC co-developed by ASTRI, which is hitting both local and international markets. It is the world's first multi-window Android nano PC empowered by ASTRI's graphics processing unit technology.

年內，應科院與兩間國際知名企業建立了緊密合作關係。去年十月，本院與TCL通訊科技控股有限公司正式成為長期策略合作夥伴，利用本院通訊科技提升TCL旗下無線產品，以符合4G甚至未來5G制式的需要。應科院在LTE及LTE-A小基站和終端基帶的技術開發，過去曾屢創佳績，我們有信心可以為TCL開發未來產品時提供有力支援。

去年十二月，應科院與HP香港合作成立「應科院 • HP資訊科技研究中心」，攜手推進資訊科技在本地企業的應用。是次合作將涵蓋有關大數據分析和雲端運算方面的解決方案，藉此為香港企業提升業務及增值。能夠和上述兩家大企業攜手開創新科技，突顯應科院的技術可為業界帶來獨有價值，本人對此感到十分欣慰。

應科院在過去一年也充分利用不同的渠道和場合向世界展示我們最新的研發成果。例如於今年一月在美國拉斯維加斯舉行的國際消費電子展，本院的科技便大放異彩，吸引各地買家關注。應科院與客戶合作研發的寶寶超微電腦便是其中一個亮點，此產品採用了本院研發的安卓圖形處理器技術，是全球首部多視窗安卓超微電腦。該產品已積極部署進軍本地及國際市場。

Dr. Cheung (fourth from left) at the opening ceremony of the 46th Joint School Science Exhibition
張博士(左四)主持第四十六屆聯校科學展覽開幕儀式

Other ASTRI debuts include the solar street light management system, which is undergoing field tests by a partner in Wuhan, and the market viable and award-winning HD to 4K super resolution conversion platform and portable interactive surface. I am also certain many of you will remember vividly "Legends of the Giant Dinosaurs" staged at the Hong Kong Science Museum with ASTRI's augmented reality technology bringing life to those pre-historical creatures.

As we forged ahead to achieve new R&D accomplishments, we are mindful that one of our key social missions is to enhance the quality of life of the people, particularly the welfare of the elderly. Under this focus, ASTRI's smart reflective pulse oximeter for remote healthcare monitoring, to our delight, has been adopted by several tier-one healthcare equipment manufacturers in their products. Furthermore, ASTRI is offering the public sector healthcare related technologies, such as the community care identification system for Tung Wah Group of Hospitals to prevent Alzheimer patients from wandering off their care centres. Another technology is the tele-health platform we developed to provide convenience for community nurses conducting patient home visits.

To further enhance the competitiveness of the local industry, we decided to embark on a series of "Thrust" projects, which is a corporate level initiative leveraging ASTRI's broad technical competencies and resources across various R&D groups to target new technology areas in emerging markets. Hence, "Thrust" encourages cross-domain collaboration and each "Thrust" project encompasses multiple solution-driven projects.

其他重點展示的新技術包括太陽能路燈管理系統，目前有客戶正就該套系統在湖北省武漢市進行實地測試；還有高清至4K超高解像度轉換平台及便攜式互動桌面，該兩項技術均獲獎項及正進行產業化。此外，我相信大家對於在香港科學館舉行的「巨龍傳奇」恐龍展覽印象猶新，該展覽是採用了本院的擴增實境技術，讓史前巨獸復現眼前，令觀眾眼界大開。

在不斷努力尋求科技突破的同時，應科院並沒有遺忘服務社會、提升生活－特別是老年人福祉的重要使命。我很高興告訴大家，在醫療保健電子這個本院極為重視的技術範疇下，我們研發的反射式脈搏血氧測量儀，已獲得多家知名的醫療設備製造商青睞，將應科院的技術結合在他們的產品中。我們也積極為公共部門提供醫療保健相關技術。例如，我們為東華三院設計了一個社區關懷識別系統，以預防腦退化症患者在沒有醫護人員監護下擅自離開護理中心。另一項技術是遠程健康照護技術平台，為社區護士進行病人家訪提供方便。

為進一步加強本地產業的競爭力，本院決定開展一系列命名為「主推」項目的科研專項計劃。「主推」項目主要是結合各研發群組的資源和技術專長，以跨領域合作形式，開發針對新興市場需要的新科技。每組「主推」項目又包含多個以提供解決方案為主導的子項目。

Dr. Cheung (second from right) introduces ASTRI's solar street light management system to a visitor during the InnoCarnival
張博士(右二)在創新科技嘉年華向賓客介紹本院的太陽能路燈管理系統

Dr. Cheung and Ms. Cally Chan, Managing Director of HP Hong Kong, shake hands after signing an agreement to jointly establish a research centre

張博士與HP香港董事總經理陳珊珊女士於「應科院 • HP資訊科技研究中心」成立典禮上握手互相祝賀

Two "Thrust" projects were identified in response to market demands. "Thrust 1" which focused on "Open Broadband Wireless Network and Applications" was launched with a platform and a seed projects. We are vigorously planning to launch "Thrust 2" later this year with the focus on "Healthy Ageing Technologies". We are convinced that through these "Thrusts", ASTRI can best synergize its resources and strengths to develop high-value and highly impactful technologies for industry as well as society.

Meanwhile, ASTRI is going through a number of organizational changes to improve operation focus and efficiency. From 1 April, 2014, two R&D groups will be renamed to reflect clearly the focus of their core R&D efforts. The Material & Packaging Technologies Group will be designated Sensing & Integration (SI) Group, while the Enterprise & Consumer Electronics Group will become Software & Systems (SNS) Group. The Bio-Medical Electronics Team will merge with SI to optimize ASTRI's expertise and efforts in this promising but highly competitive area.

因應市場需要，本院目前已推出和準備推出兩組「主推」項目。其一以「開放式寬頻無線網絡和應用」為主題，已經啟動了一個平台項目和一個種子項目。我們正在積極籌備另一組「主推」項目，它將針對人口老化問題研發健康監察和居家安老的輔助技術。我們相信透過這些「主推」項目，應科院可以更充分利用自身的資源和優勢，為科技行業以及整個社會開發高附加值和具影響力的科技。

另一方面，應科院的內部架構將進行一些改變。由二零一四年四月一日起，材料與構裝技術群組將正式改名為感測與集成群組；企業與消費電子群組則改名為軟件與系統群組。新名字可以更貼切地反映該兩大群組所專注的主要技術範疇。同時，生物醫學電子組將合併至感測與集成群組，令本院能夠集中人力及資源，拓展這個競爭激烈但潛力優厚的科技領域。

Facing a staff turnover rate of 23 per cent in 2013/14, competition for technological and professional talent remained intense. Since human capital is one of ASTRI's most critical success factors, management believes a good performance culture will motivate individuals to unlock their potentials and achieve excellence. ASTRI has a holistic plan to drive good performance, which includes enhancing the performance-linked reward system to clearly differentiate and reward top performers. There will also be an award programme to recognize outstanding performance and innovation. An enhanced grading structure and managerial training programmes will also be introduced. Recognizing that culture building is a long process requiring continuous and considerable cultivation, we, nonetheless, are determined that promoting performance-driven culture would continue to be one of our top priorities.

On a personal note, I would like to mention that this is my last review as I will step down as CEO at the end of August. It is my pleasure to inform you all that Dr. Frank Tong Fuk-kay will take over from me in September 2014.

It has truly been an honour and privilege to work hand-in-hand with such a resourceful, professional and dedicated team during my tenure of almost six years at ASTRI. I would like to take this opportunity to express my sincere gratitude and appreciation to my colleagues, the Board of Directors, our partners and associates, and above all, the Hong Kong SAR Government for their unfaltering trust and support. My days at ASTRI will be a precious and unforgettable part of my memory which I will forever cherish.

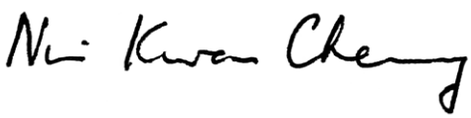
I wish ASTRI and all our readers every success in the years to come.

應科院在過去一年的員工流失率為百分之二十三，反映市場對技術和專業人才需求甚殷。人力資源是本院賴以成功的其中一項最重要因素，管理層相信一個良好的績效文化有助激勵員工盡展所能，追求卓越。因此應科院已制定一個全面計劃來推動績效文化，包括以績效來衡量報酬，明確區分及獎勵表現優秀的員工。本院並準備實施獎勵計劃，表彰員工的傑出表現和創新精神。同時，我們將會重新規劃職級和為員工提供適切的培訓課程。我們深信要建立一個企業文化，須要有決心和長時間努力經營才能達成，故此推動以績效為主導的企業文化將會是本院未來的其中一項首要任務。

本人將會於八月底退任應科院行政總裁一職，此回顧將會是我任內發表的最後一份報告。本人欣然告訴大家，董事局已任命湯復基博士由二零一四年九月起接替本人出掌應科院。

在我近六年的任期內，能夠和一群優秀、專業和有承擔的員工並肩為應科院的持續發展共同努力，本人實在深感榮幸。我希望藉此機會向全體同事、董事局、我們的客戶和合作夥伴，還有香港特區政府，過去一直的信賴和支持致以衷心的感謝。我在應科院的日子將會成為我生命中一段難忘和寶貴的回憶。

最後我衷心祝願應科院與所有讀者百尺竿頭、更進一步。



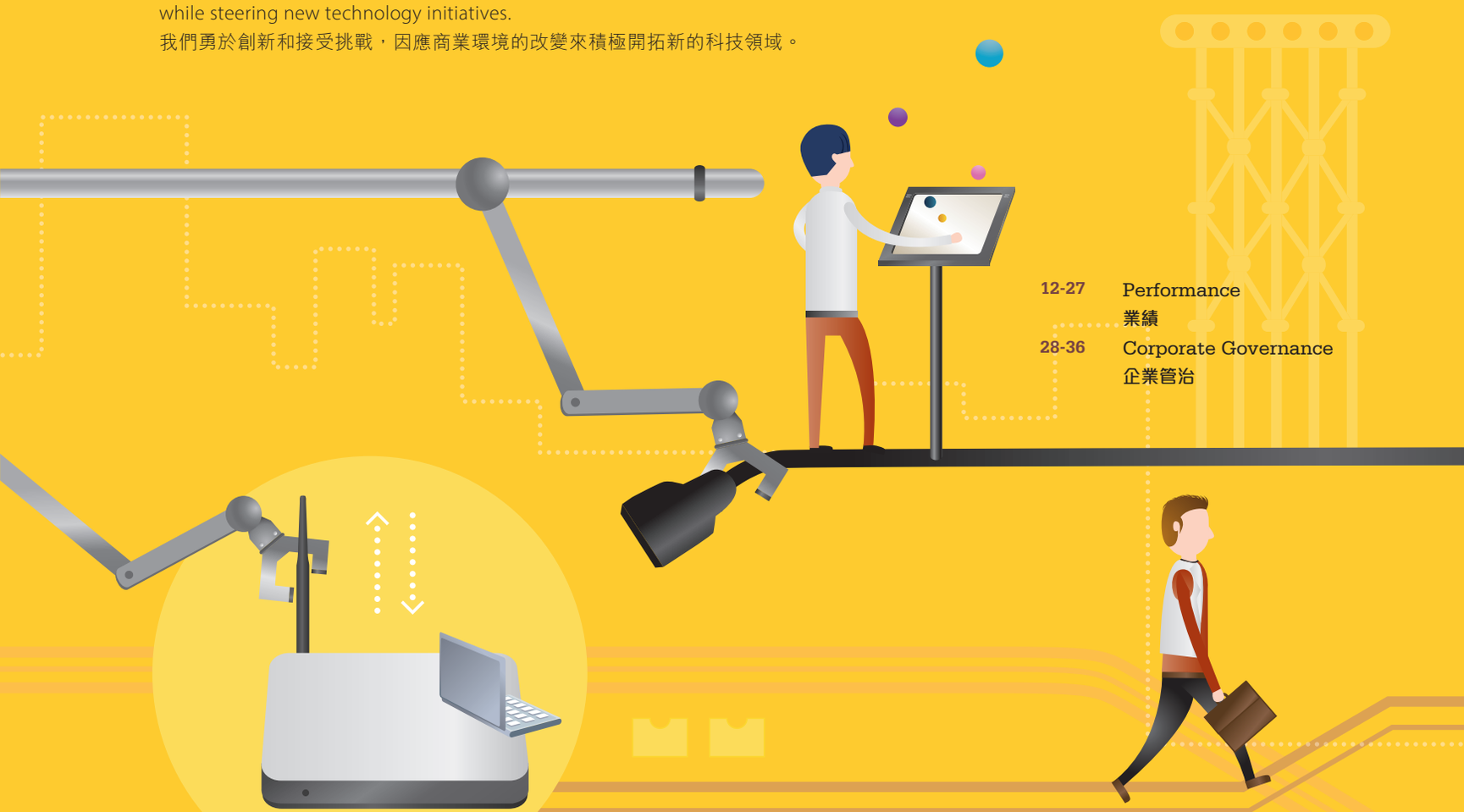
Cheung Nim-kwan
Chief Executive Officer
行政總裁　張念坤

Performance and Corporate Governance
業績及企業管治

See Beyond • Move Forward
目光遠大 • 積極進取

We pride ourselves as forward looking and innovative.
We proactively respond to changing business environments
while steering new technology initiatives.
我們勇於創新和接受挑戰，因應商業環境的改變來積極開拓新的科技領域。

12-27 Performance 業績
28-36 Corporate Governance 企業管治



Performance 業績

As a publicly-funded applied research institute, ASTRI firmly believes that it should try its utmost to maximize "public good", which is measured by the economic impact and other benefits it brings to industry and the community. To generate economic impact, ASTRI vigorously focuses on customer needs and commercialization of its technologies.

A very critical part of ASTRI's customer-focused R&D practices is the rigorous setting and monitoring of quantitative performance targets. The targets are used as essential basis for appraising performances of the different teams within the R&D groups. The three main quantitative performance targets are:

作為一家政府資助的應用研發機構，應科院堅守一個信念，就是以產生最大的「公眾利益」為目標，而此公眾利益是以應科院帶給業界和整體社會的經濟效益和其他得益來衡量。為了創造更大的經濟效益，應科院過去一直全力以赴，以顧客需求和將技術市場化作為工作重點。

應科院為其業績設立嚴謹的可量化目標，成為其以顧客為導向的研發工作中重要的一環。這些目標會用作對應科院的研發團隊進行年度工作評審的主要基準。應科院採納的三大可量化工作目標如下：

Quantitative Performance Targets 可量化工作目標

Number of technologies transferred to industry per year
每年轉移至業界的技術數目

This is most crucial as they are the "path" towards commercializing IPs developed by R&D projects.
由於這是研發項目所開發的知識產權轉至市場化發展的「門徑」，所以至為重要。

Number of patent applications filed and granted and their success ratio
每年申請和取得的專利數目及其成功率

This is important because patents are essential indicators of the worthiness of innovations and are used to increase the value of technology transfers.
專利是評估所研發的技術是否有價值的主要指針，並可增加技術轉移活動的價值，因此十分重要。

Annual income from industry
每年從業界所得的收入

As ASTRI continues to engage customers and build a valuable brand name for its customer base, the eventual income from this base through services such as licensing and technology sales, design and product development will increase.
隨著應科院繼續爭取顧客並在顧客心目中建立有價值的品牌，透過各種服務，如授權協議、技術轉售、定制設計、產品開發等，自顧客取得的最終收入將會增加。

ASTRI achieved all the above targets with satisfactory results, thus maintaining strong and steady progress during the year.

年度內，應科院在各個工作目標都表現理想，維持顯著和平穩的發展。

Planning and Monitoring

Under the theme "customer-focused R&D", ASTRI aims at maximizing R&D impact on customers and converting research into real results. The latter is a systematic process building customer focus into every aspect and every step of ASTRI's R&D programmes, from initiation to transfer of the generated intellectual properties (IPs) to customers. In addition to developing world-class IPs and transferring them to customers, ASTRI puts much emphasis on assuring the quality of both its researches and management processes.

To assure the quality of its R&D programmes, ASTRI conducts an Annual Planning Cycle comprising the following steps:

- Annual update of technology roadmap in December for review by the Board's Technology Committee
  每年十二月更新應科院的技術路線圖，並由應科院董事局的科技委員會審閱
- Reviewing every two years ASTRI's overall strategy and its execution by ASTRI's Technology Advisory Committee comprising world-renowned international technology experts
  由世界知名的國際科技專家組成的應科院科技顧問委員會，每兩年檢討應科院的整體策略及其執行情況
- ASTRI Board's review and approval
  由應科院董事局審閱及批核

Selected ongoing R&D projects are reviewed by the Technology Committee between six and nine months from project commencement to evaluate effectiveness of customer engagement.

Biannual reports are submitted to the Innovation and Technology Commission to examine project progress against stated milestones. The projects are also subjected to quarterly reviews by the Technology Committee and each ongoing project is monitored monthly for progress by ASTRI's Chief Technology Officer.

Focusing on improving patent quality to increase financial returns, ASTRI adopts a balanced measure that includes the number of patent applications filed, successful granting rate of patents and income from patent licensing to gauge success of its R&D output.

策劃與監察

應科院的經營模式建立在「顧客導向研發」的主軸上，確保研發活動產生最大顧客效益，並使研究轉化為具體成果的過程系統化。這套系統化過程把顧客導向納入各研發項目的每一環節每一步驟，由研究計劃開始直至將所研發的知識產權轉移至客戶。除了不斷努力研發世界級知識產權及將其轉移給業界外，應科院對確保其研究和管理過程的質素也非常重視。

為確保其研發項目的質素，應科院以年度週期作出規劃，當中包括以下步驟：

應科院董事局的科技委員會於這些項目開始後的六至九個月內進行抽核，以評估其獲取顧客支持的成效。

每半年向創新科技署提交的進度報告也便於查考項目的進展以及達標程度。董事局的科技委員會並會於每季審核各項目，而應科院的首席科技總監會監察各項目每月的進度。

應科院管理層著重透過提升專利質素來增加收入，採用多個合理指標以評估研發成果的成績，其中包括申請專利數目、成功獲批專利比率及專利授權收入等。

Four main types of research projects undertaken by ASTRI
應科院的研發項目主要分四大類

1. ITF-funded[1] platform projects
創新及科技基金資助平台項目

2. ITF-funded[1] seed projects
創新及科技基金資助種子項目

3. Industry Collaborative Projects in which both ASTRI and partners contribute fund and other resources
由業界夥伴及應科院共同投入資金及其他資源的業界合作項目

4. Contract research projects which are R&D projects customized according to industry partners' requests. Partner is responsible for 100 per cent of R&D project costs
按業界夥伴個別需要而定制的合約研究項目，業界夥伴須負責全部研發成本

[1]Innovation and Technology Fund

New Class of Strategic R&D Project – "Thrust"

The idea of "Thrust" was introduced in 2013 to capture commercialization opportunities by leveraging ASTRI's broad technology base. "Thrust" is a collection of platform and seed projects targeting at new technology areas in an emerging market. Thrust projects are cross-domain in nature and will draw on the existing expertise and resources within ASTRI.

The first Thrust project entitled "Open Broadband Wireless Network and Applications" was launched in December 2013. A seed project "Network Planning and Interference Management for LTE Heterogeneous Network Deployment" and a platform project "Internet-of-Things Management and Application Platform with Broadband Wireless" were subsequently launched.

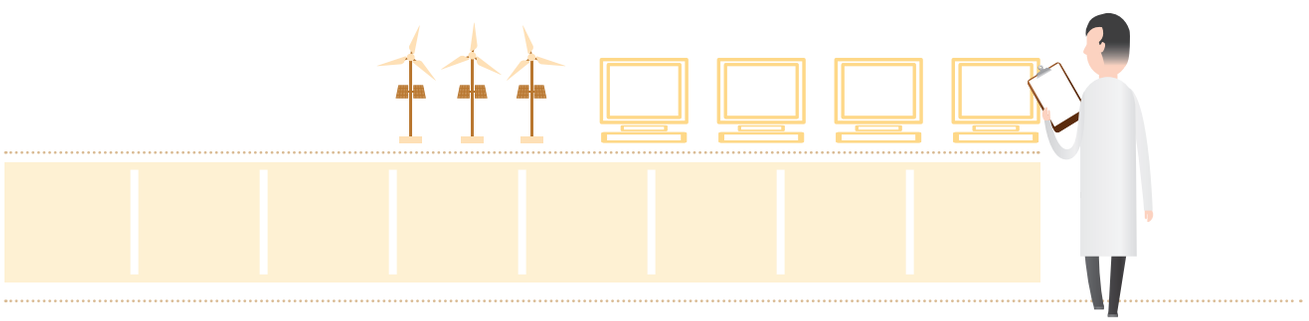
The second Thrust project focusing on technologies related to facilitating healthy ageing, which is awaiting government approval, is expected to be launched in 2014/15.

全新推出策略性「主推」項目

「主推」項目的概念在二零一三年產生，其主旨是要充份利用應科院廣泛的科技基礎來推動技術市場化。每組「主推」項目都由幾個平台及種子項目組成，針對新興市場需要開拓新技術領域。「主推」項目亦是跨領域合作項目，結合本院各群組的資源和技術專長進行技術研發。

以「開放式寬頻無線網絡和應用」為主題的首個「主推」項目已於二零一三年十二月展開，旗下的一個種子項目「LTE異構網絡規劃與干擾管理」及一個平台項目「物聯網設備管理及應用平台」亦隨即展開。

另一組「主推」項目，將針對人口老化問題研發健康監察和居家安老的輔助技術，現正等候政府批核，預計可於二零一四／一五年度推出。



Technology Transfers

The number of technology transfers to industry was 88 during the year. The following is the breakdown for the past three years:

Number of technology transfers by R&D Groups

R&D Group	研發群組	2013/14	2012/13	2011/12
Communications Technologies	通訊技術	16	19	18
Enterprise & Consumer Electronics	企業與消費電子	13	23	17
IC Design	集成電路設計	28	24	18
Material & Packaging Technologies	材料與構裝技術	28	45	26
Bio-Medical Electronics (Team)	生物醫學電子(組)	2	1	1
Exploratory Research Laboratory (Team)	信息研究室(組)	1	1	3
Total	總數	88	113	83

The following table illustrates the number of technology transfers to industry by various channels during the past three years:

Number of technology transfers to industry by various channels

Contracts signed	簽訂項目	2013/14	2012/13	2011/12
Industry Collaborative Project	業界合作項目	3	1	4
Contract research project	合約研究項目	60	75	51
Licensing agreements	授權合約	24^	37^	28
Patent assignments	專利轉讓	1	NA／不適用	NA／不適用
Total	總數	88	113	83

^ Some licensing agreements comprise contract research services provided by ASTRI

The following table shows the three major types of projects undertaken by ASTRI in the past three years. The number of new projects was 32 in 2013/14:

Number of projects undertaken

Project type	項目種類	2013/14	2012/13	2011/12
ITF-funded Platform Projects	創新及科技基金資助平台項目	53	49	51
ITF-funded Seed Projects	創新及科技基金資助種子項目	22	25	18
Industry Collaborative Projects	業界合作項目	7	6	9
Total	總數	82	80	78

技術轉移

年度內應科院向業界作出共八十八項技術轉移，過去三年的技術轉移數量表列如下：

各研發群組向業界轉移技術的數量

下表列出過去三年應科院通過各種途徑向業界轉移技術的數量：

向業界轉移技術的途徑及數量

^ 部分授權合約包含合約研究服務

下表展示過去三年應科院進行的三類主要研發項目的數量，二零一三／一四年展開的新項目共三十二項：

應科院開展的研發項目數量

Patents

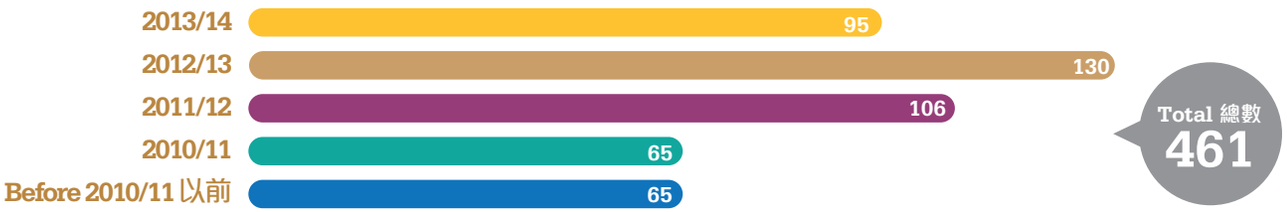
A total of 95 new patents were granted to ASTRI during the year, taking the total number of ASTRI-owned patents to 461 as at 31 March, 2014. The following table shows the pattern growth of previous years, including patents granted in the U.S., the Mainland and other countries:

Number of patents granted

專利

應科院本年度共獲發九十五項專利，截至二零一四年三月三十一日止，應科院累積專利共四百六十一項。下表展示應科院過去數年從美國、中國內地及其他國家取得專利的數目：

獲得專利數目



A total of 72 patent applications were filed on the Mainland, the U.S. and other countries during the year. The number of applications filed by R&D groups in the past three years is tabulated below:

Number of patent applications filed by R&D Groups

本年度應科院在中國內地、美國及其他國家共提交七十二項專利申請。下表列出過去三年各研發群組申請的專利數目：

各研發群組申請的專利數目

R&D Group	研發群組	2013/14	2012/13	2011/12
Communications Technologies	通訊技術	5	17	12
Enterprise & Consumer Electronics	企業與消費電子	6	17	8
IC Design	集成電路設計	7	22	18
Material & Packaging Technologies	材料與構裝技術	44	37	62
Bio-Medical Electronics (Team)	生物醫學電子(組)	10	0	0
Exploratory Research Laboratory (Team)	信息研究室(組)	0	0	0
Non-R&D department	非研發部門	0	0	1
Total	總數	72	93	101

Income from Industry

Income received[2] from industry for all projects amounted to HK$87.8 million. The growth rate is 29 per cent compared with the previous year. The contribution level[3] also increased to 38.8 per cent. The table below shows income from industry received in the past three years:

業界收入

本年度應科院從所有項目取得的業界收入[2]總額為八千七百八十萬港元，較去年增幅達百分之二十九。業界投入資金水平[3]亦上升至百分之三十八點八。下表顯示過去三年從業界所得收入總額：

Income received[2] from industry (HK$M)

已收取的業界收入[2]（百萬港元）

[2] Including cash and in-kind contribution 包括現金及物資資助

[3] Percentage of industry income received over total R&D project spending 從業界所得收入佔總研發項目支出的百分比

Income received[2] from industry by various R&D groups in the past three years is tabulated below:

下表列出過去三個財政年度各研發群組所獲得的業界收入[2]：

Income received[2] from industry

已收取的業界收入[2]

R&D Group	研發群組	2013/14 (HK$M) （百萬港元）	2012/13 (HK$M) （百萬港元）	2011/12 (HK$M) （百萬港元）
Communications Technologies	通訊技術	32.75	21.56	17.62
Enterprise & Consumer Electronics	企業與消費電子	10.04	11.68	12.65
IC Design	集成電路設計	20.06	14.60	10.29
Material & Packaging Technologies	材料與構裝技術	20.05	18.92	19.49
Bio-Medical Electronics (Team)	生物醫學電子(組)	0.41	1.21	0.80
Exploratory Research Laboratory (Team)	信息研究室(組)	3.50	0.06	0.02
Thrust Project	主推項目	0.70	NA／不適用	NA／不適用
General Support Programme	一般支援計劃	0.29	0.04	0.05
Total	總數	87.80	68.07	60.92

[2] Including cash and in-kind contribution 包括現金及物資資助

Successful Commercialization

ASTRI signed 88 agreements for technology transfers to industry through licensing, contract research and other means, resulting in many fruitful collaborations and commercialization. The following are highlights of some outstanding cases.

應科院技術成功市場化

在二零一三／一四年，應科院藉技術授權、合約研究及其他形式與業界簽訂八十八項技術轉移合約，成功市場化的個案很多，以下是一些重要例子。

Dr. Cheung Nim-kwan (front, right), CEO of ASTRI, and Dr. George Guo (front, left), CEO of TCL Communication, sign an agreement to kick off a strategic partnership between the two companies

應科院行政總裁張念坤博士(前右)與TCL通訊科技控股有限公司首席執行官郭愛平博士(前左)代表雙方簽署協議，開啟長期策略合作關係

Strategic Partnership with TCL Communication

ASTRI formed a strategic partnership with TCL Communication Technology Holdings Ltd in October 2013, focusing on sustainable wireless technology and product application development. The partnership involved applying ASTRI's key communications technologies to its partner's 4G product portfolio, as well as developing 5G standard and future generation wireless products to enable the TCL smart devices to deliver superior performances over their competitors, while at the same time bringing new value and services to consumers.

與TCL通訊成為長期策略合作夥伴

應科院與TCL通訊科技控股有限公司於二零一三年十月宣佈，雙方就可持續無線技術及產品應用發展，正式成為長期策略合作夥伴。根據策略合作協議，應科院在通訊技術方面的幾項主要技術，將會應用於TCL 4G產品，以及5G制式發展和未來有關的無線產品，使產品表現更卓越，能夠在市場上脫穎而出，同時為用戶帶來嶄新的服務體驗及價值。

Dr. Cheung Nim-kwan, CEO of ASTRI, and Ms. Cally Chan, Managing Director of HP Hong Kong, exchange a warm handshake at the inauguration ceremony of the ASTRI-HP Information Technology Research Centre

應科院行政總裁張念坤博士及HP香港董事總經理陳珊珊女士在「應科院 • HP資訊科技研究中心」成立典禮上握手互賀

ASTRI-HP Information Technology Research Centre

ASTRI and HP Hong Kong established the "ASTRI-HP Information Technology Research Centre" in December 2013. The collaboration aims at promoting the advancement and adoption of information technology in Hong Kong business applications. It will cover big data analytics and cloud computing technologies. The centre has started an Industry Collaborative Project to develop solutions for the HP HAVEn big data analytics platform that will enable Hong Kong enterprises to transform their businesses and profit from big data.

應科院 • HP資訊科技研究中心

應科院與HP香港於二零一三年十二月合作成立「應科院 • HP資訊科技研究中心」，目標是推進資訊科技在本地企業的應用和發展。是次合作將涵蓋有關大數據分析和雲端運算方面的技術領域。研究中心已展開了一個「業界合作項目」，雙方合作開發解決方案，支援HP HAVEn大數據分析平台，藉此幫助香港企業提升業務和增值。

BoBo Nano PC

Clever Motion Technology Ltd incorporated ASTRI's Graphics Processing Unit (GPU) technology to develop BoBo Nano PC, which is known to be the world's first multi-window Android nano PC. BoBo has integrated the functionalities of Internet TV box, wireless router and PC with multi-window experience. Riding on Android's open source, it provides users with versatile choices of Apps. It can be controlled by smartphones for entertainment and gaming. The new product will soon be sold in local and international markets.

寶寶超微電腦

佳駿科技有限公司研發的「寶寶超微電腦」，採用了應科院的安卓圖形處理器(GPU)技術，是全球首部多視窗安卓超微電腦。這部嶄新產品集機頂盒、無線路由器和電腦功能於一身，並提供多視窗體驗。其作業系統採用開源安卓平台，為個人電腦用戶帶來更多元化的應用程式選擇。用戶更可以將手機或平板電腦作為遙控玩遊戲或娛樂。該產品將會在短時間內推出本地及國際市場。

Feathered dinosaur leaps to life through the miracle of augmented reality

帶羽毛恐龍通過擴增實境活現眼前

Augmented Reality for Dinosaur Exhibition

Augmented reality (AR) technology which combines virtual objects with real life images through sensors was deployed by Sengital Ltd in the talk-of-the-town "Legends of the Giant Dinosaurs" staged in the Hong Kong Science Museum from November 2013 to April 2014. Gigantic dinosaurs leaped to life through mobile Apps and 3D computer rendering designed by Sengital using ASTRI's AR technology, bringing visitors back to prehistoric age and interact with the extinct creatures. Thousands of visitors were drawn to the exhibition every day during the show period.

擴增實境技術令恐龍翻生

擴增實境是通過傳感器將虛擬影像和訊息與現實環境相結合的一種新技術。Sengital公司在香港科學館舉行的「巨龍傳奇」恐龍展中，巧妙地利用此技術設計了一個應用程式，再結合電腦立體繪圖，令這些史前巨獸，透過手機螢幕活現眼前，甚至與觀眾互動。展覽由二零一三年十一月開始至一四年四月結束，期間每天吸引數以千計人士入場參觀。

Reflective Pulse Oximeter
反射式脈搏血氧測量儀

Reflective Pulse Oximeter

The ASTRI-developed smart reflective pulse oximeter is a wearable device used for remote health monitoring, including wellness and sleeping quality checking on a continuous basis. The technology has been adopted by a leading healthcare equipment manufacturer to design a wristwatch which can be used to measure vital signs including body temperature, pulse rate, pulse oximetry and electrocardiogram at the same time. Results can be sent wireless to healthcare centres for review and monitoring. Mass production of the product is well underway. The same technology has also been licensed to several tier-one healthcare equipment manufacturers in Hong Kong and the Mainland.

反射式脈搏血氧測量儀

應科院研發的智慧型反射式脈搏血氧測量儀，是一款可用作持續檢查身體健康情況及睡眠質素的穿戴式醫療保健電子產品。此技術獲一家領先的醫療保健電子設備製造商採用來設計一款可量度重要維生指數的腕錶，包括體溫、脈搏、脈搏血氧飽和度和心電圖等。測量結果可以無線傳送至醫療中心作分析和監察，該款腕錶正在量產中。此技術亦已授權給幾家在香港和內地一級的醫療保健電子設備製造商，使用在他們的產品中。

e-Learning

ASTRI collaborated with Active Learning Solutions Ltd to develop technologies for in-class management. This together with ASTRI-developed cloud-based e-Learning technologies was adopted by HKT education in its Interactive e-Learning Solution and deployed in many Hong Kong schools to facilitate more effective and interactive learning and teaching. Primary schools taking part in HKT education's "Wi-Fi as a Service School Partnership Project" (WaaSchool Project) will also be using the solution. Active Learning Solutions Ltd has also offered in-class management solution for deployment in many Shanghai schools.

Document Digital Rights Management System

Sino United Electronic Publishing Ltd launched an online book store "SuperBookCity" in July 2013. The bookstore is supported by ASTRI's Document Digital Rights Management (DocDRM) System. Building on the scalable broadcast encryption platform, DocDRM System can support millions of titles and users without incurring heavy cost on servers and network bandwidth. With these features, the system will undoubtedly enhance the development of the e-book market.

電子學習

應科院研發的兩項技術已在香港電訊旗下HKT education的一站式電子學習方案應用，令師生在教學過程中更投入和有更多互動，增加教學成效。這兩項技術包括一個雲端學習平台及一套與Active Learning Solutions公司一同研發的課堂教學管理系統。HKT education的方案已在香港多家學校使用，HKT education亦向參與Wi-Fi as a Service School Partnership Project（WaaSchool夥伴計劃）的小學提供免費上網服務和這套電子學習方案。此外，上海多間小學也獲提供課堂教學管理方案。

數碼版權管理系統

聯合電子出版有限公司於二零一三年七月推出全新網上書店「超閱網」。作為一個大型電子書交易平台，「超閱網」採用了應科院研發的文件數碼版權管理系統，該系統基於可擴容的廣播加密平台，可以支持數以百萬計的文件和用戶而不會造成過大的伺服器負載和網絡流量，無疑有助出版商進一步發展電子書市場。

Dr. Chao Shen-chang (centre), Vice President and Group Director of ASTRI's Enterprise & Consumer Electronics Group, attends the launching ceremony of "SuperBookCity"

應科院企業與消費電子群組副總裁及研發群組總監趙盛章博士(中)應邀出席「超閱網」的發佈典禮

Use of Technologies in Public Sector

ASTRI actively takes part in the "Promotion of Innovation and Technology in Public Sector" programme initiated by the Innovation and Technology Commission. The Institute is working closely with various government agencies, academia and NGOs to introduce its technologies to the public, allowing people to experience the benefits of using new technologies in real-life context. The following are some of the projects:

Community Care Identification System

ASTRI, in collaboration with two local R&D Centres – Hong Kong Research Institute of Textiles and Apparel (HKRITA), and The Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM) developed the Community Care Identification System (CCIS) for trial in the Tung Wah Group of Hospitals (TWGH). CCIS is an alert system helping to protect and prevent Alzheimer patients from leaving care centres unnoticed. The system will be activated automatically to alert care-givers through PA systems in case a patient wanders off the centre. Two TWGH centres in Ho Man Tin are using CCIS to improve their daily care service for elderly suffering from Alzheimer.

A specially designed vest enabled by the identification system is used to track the whereabouts of Alzheimer patients in care centres

一款配備識別功能而特別設計的背心已於護理中心採用來監察腦退化症患者行蹤

在公共部門應用新科技

應科院積極參與由創新科技署推出的「在公共部門推廣創新科技應用」計劃。我們現正透過與各政府機構、大學及非牟利組織，合作將本院科技向市民推介，讓他們在日常生活中體驗新科技帶來的好處。以下為部份合作試驗項目：

社區關懷識別系統

應科院與香港紡織及成衣研究中心、香港物流及供應鏈管理應用技術研發中心共同合作，透過公共部門的試驗計劃，為東華三院開發社區關懷識別系統(CCIS)應用軟件並開始試用。CCIS是一套專為保護腦退化症患者，防止他們在沒有護理人員注視下擅自離開護理中心的警報系統。如有患者遊走離開護理中心，警報系統會自動啟動以提醒護理人員。位於何文田的兩所東華三院中心現正使用CCIS，為腦退化症患者提供更好的日間護理服務。

Solar Street Light Management System
太陽能路燈系統

Solar Street Light Management System

A solar street light management system is being deployed by a partner having plans to manage a network of more than 10,000 solar street lamps in Wuhan, China. The system, which applies ASTRI's Internet-of-Things (IoT) gateway and management platform software, allows remote but real time monitoring and status control of the city's lamps on a large scale. The partner has carried out trials with satisfactory results.

太陽能路燈系統

應科院太陽能路燈管理系統採用了本院研發的物聯網網關和管理平台軟件，可以大規模地遙控和實時管理覆蓋整個城市的路燈狀況。目前已有一個合作夥伴在湖北省武漢市試用該系統，由於測試效果相當滿意，客戶已有計劃利用該系統來監察和管理超過一萬盞路燈的狀況。

Tele-health Technology Platform
遠程健康照護技術平台

Tele-health Technology Platform

ASTRI's tele-health technology platform is a server/client-based system providing support for healthcare services such as community nurses visiting patients at home. A large scale trial has been rolled out covering seven Community Nursing Service Centres. As at March 2014, a trial involving 88 nurses and almost 62,000 patient home visits has been carried out.

遠程健康照護技術平台

應科院的遠程健康照護技術平台是一個以服務器／客戶端為基礎的系統，提供醫療保健支援服務，例如協助社區護士進行病人家訪。本院曾在七個社康護理服務中心進行大規模用戶測試。直至二零一四年三月，共有八十八位護士利用遠程健康照護技術平台完成接近六萬二千次病人家訪。

Immersive Distraction Goggle
沉浸式分散注意力醫療目鏡

Immersive Distraction Goggle

Immersive Distraction Goggle, an audiovisual eye-wear designed to allay a patient's negative feelings, such as pain and anxiety during medical treatment, is under test run in the pediatrics unit of a public hospital in Hong Kong.

沉浸式分散注意力醫療目鏡

沉浸式分散注意力醫療目鏡在病人接受療程時播放影音內容，分散病人注意力，舒緩他們在接受治療過程中的焦慮和痛楚等負面情緒。一家公立醫院的兒科部正持續測試和使用該系統。

Outreaching to Industry and Society

ASTRI is very proactive in reaching out to industry and the community. Visits, seminars and other events are organized on a continual basis to let people from different sectors gain better understanding of the Institute and its home-grown technologies. ASTRI also actively supports and takes part in activities organized by other companies or organizations so as to maintain good connection with business partners, industry and people.

Apart from these initiatives, ASTRI also signs memorandums with local and overseas counterparts for cooperation in promoting technology development in various markets.

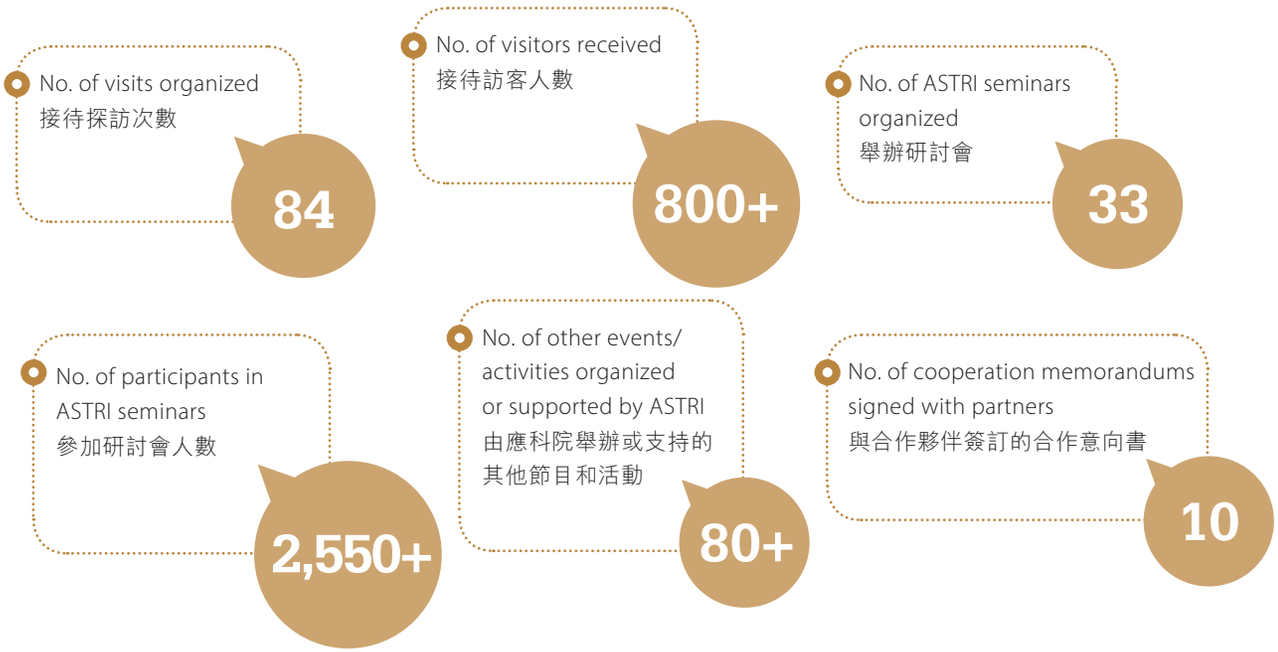
聯繫業界和社會

應科院積極聯繫業界和社會，持續接待訪客，舉辦研討會及其他活動，讓來自不同界別人士認識應科院及本地研發科技。應科院同時積極支持和參與其他公司及機構所舉辦的活動，與商業夥伴、工業界和大眾保持緊密聯繫。

除了各種活動，應科院又與本港及海外的合作夥伴簽訂合作意向書，將各種科技推廣至不同市場。

The following table summarizes ASTRI's outreaching activities for the period 1 April, 2013 to 31 March, 2014:

下表總結本院於二零一三年四月一日至二零一四年三月三十一日所舉行的活動：



Spreading Word Through Social Media

Leveraging the increasing popularity of social media, ASTRI launched its YouTube channel and Facebook fan page in January 2011 and October 2012 respectively to build awareness in the online community, especially among the younger generation.

During the year, 14 videos demonstrating ASTRI's technologies or its major events were uploaded on YouTube for public viewing. Furthermore, 1,882 fans, mainly Hong Kong youngsters, subscribed to ASTRI's Facebook fan page to follow ASTRI's posts and participated in discussions.

ASTRI will regularly review its strategy in response to challenges of the ever-changing online community and use social media and other online channels to effectively communicate and interact with the desired audiences.

透過社交媒體推廣應科院

社交媒體無遠弗屆，大受歡迎，應科院有見及此，在二零一一年一月和二零一二年十月先後推出YouTube頻道和臉書專頁，主要目的是要在網上社區，尤其是年輕一代間提高知名度。

在二零一三／一四財政年度內，十四段示範應科院技術或紀錄其要事的短片，已上傳到YouTube頻道讓公眾收看。此外，一千八百八十二名支持者，主要是本港年輕人，訂閱了應科院的臉書專頁，緊貼有關科技發展趨勢和應科院要事的討論。

應科院將定期檢討其策略，以回應不斷變化的網絡世界所帶來的挑戰，並適當地使用社交媒體和其他線上渠道，與目標觀眾有效地溝通和互動。

Awards and Accolades

ASTRI won a number of prestigious honours and awards during the year, which very well demonstrate that its R&D capabilities and innovations are well recognized and received by industry at home and abroad.

- Dr. Enboa Wu, Vice President and Group Director of Material and Packaging Technologies Group, was named "Person with Special Contribution to the LED Industry" in the 2013 LED Industry Billboard Awards jointly organized by China Shenzhen LED Industry Association, Guangdong Light Emitting Diode Industry Association and Guangdong LED Magazine.
- Portable interactive surface which can instantly turn an ordinary flat surface into an interactive touch screen won Gold Award, Best Lifestyle (Learning & Living) in the Hong Kong ICT Awards 2014.

獎項與榮譽

應科院及其員工於是年內獲頒多個重要獎項與榮譽，充分顯示出應科院的研發能力和員工的成就，得到海內外業界的認同。

- 材料與構裝技術群組副總裁及研發群組總監吳恩柏博士，榮膺「二零一三年LED行業特別貢獻人物」。「LED行業風雲榜」由半導體照明產業聯合創新中心、廣東省半導體光源產業協會及《廣東LED》雜誌社聯合舉辦。
- 便攜式互動桌面可以即時將普通的平面變成多點觸控互動顯示平面，在二零一四年香港資訊及通訊科技獎榮獲最佳生活時尚獎(學習・生活)金獎。

- ASTRI's partner Sengital Ltd designed an App for "Legends of the Giant Dinosaurs" exhibition using ASTRI's augmented reality technology and won Gold Award, Best Mobile Apps (Mobile Information) in Hong Kong ICT Awards 2014.*
- 應科院客戶Sengital公司利用應科院的擴增實境技術，為城中大型展覽「巨龍傳奇」特別設計了一個應用程式，獲得二零一四年香港資訊及通訊科技獎最佳流動應用程式(流動資訊)金獎。*
- Visually enhanced ultra-HD application platform for converting full HD (1920x1080p) videos into UHD (3840x2160p) for 4K TVs won Bronze Award, Best Lifestyle (Social, Communications & Media) in Hong Kong ICT Awards 2014.
- 視覺提升超高清顯示技術可以將一般的全高清(1920x1080p)視頻轉換為超高清(3840x2160p)視頻，使之能夠在4K電視上播放，獲二零一四年香港資訊及通訊科技獎最佳生活時尚獎(社交．傳訊．媒體)銅獎。
- Smart reflective pulse oximeter for ubiquitous health monitoring was selected "The Most Appealing Product" at the Hong Kong International Medical Devices and Supplies Fair 2013.
- 可用作隨時隨地監測健康狀況的智慧型反射式脈搏血氧測量儀，在二零一三年香港國際醫療器材及用品展中獲選最受買家歡迎產品。
- ALS System, an in-class management system jointly developed by ASTRI and Active Learning Solutions Ltd, was named "The 10 Best IT in Education Products" at the Shanghai Education Expo 2013.
- 由應科院及業界夥伴Active Learning Solutions公司合作研發的ALS課堂教學管理系統，在二零一三年第十屆上海教育博覽會榮獲十佳信息化產品獎。
- HF/UHF RFID dual reader was awarded the "Most Innovative Product Award" by RFID Standards Alliance of Shenzhen.
- RFID雙頻讀寫器獲深圳市RFID產業標準聯盟頒贈最具創新產品獎。
- ASTRI's anti-counterfeit identification microsystem developed with SiP technology was awarded Certificate of Merit in 2013 Hong Kong RFID Awards.
- 應科院利用系統級封裝技術開發的防偽認證微系統在二零一三年香港無線射頻識別大獎中獲優異獎。

*Award received by client with technology licensed from ASTRI

*獎項由採用應科院授權技術的客戶獲得

Honours for ASTRI's Annual Report

ASTRI's Annual Report 2012/13 themed "Blooming Technologies • Promising Future" won a couple of awards in two prestigious international competitions.

In the 2013 LACP Vision Awards competition organized by the League of American Communications Professionals, ASTRI's report received the following awards.

- Platinum Award, Research and Development of Information and Communication Technology
- Silver Award, Telecommunications
- Silver Award, Technology – Semiconductors and Equipment
- Top 100 Annual Reports Worldwide (Rank #62)
- Most Engaging Gold Annual Report in the Asia Pacific Region
- Top 80 Annual Reports in the Asia Pacific Region (Rank#18)
- Top 20 Chinese Annual Reports

In the 2014 International ARC Awards organized by MerComm, Inc, ASTRI's report received the following awards.

- Silver Award, Cover Design, Technologies/Engineering
- Bronze Award, Traditional Annual Report, Technologies/Engineering

應科院年報所得榮譽

以「尖端科技 • 璀璨未來」為主題的應科院二零一二／一三年報，在兩個重要國際賽事中獲得多個獎項。

在二零一三年LACP Vision Awards比賽中，應科院榮獲以下獎項。是項國際比賽由美國 League of American Communications Professionals舉辦。

- 鉑金獎(資訊及通訊科技研發)
- 銀獎(電訊)
- 銀獎(科技－半導體．器材)
- 全球最佳年報一百強(名列六十二)
- 亞太區最受注目金獎
- 亞太區最佳年報八十強(名列十八)
- 最佳中文年報二十強

在二零一四年International ARC Awards比賽中，應科院榮獲以下獎項。是項國際比賽由美國 MerComm, Inc.舉辦。

- 銀獎(科技／工程：封面設計)
- 銅獎(科技／工程：傳統年報)

Corporate Governance 企業管治

Board of Directors

ASTRI is governed by a Board of Directors comprising representatives from the industrial and commercial sectors, the academia and the HKSAR Government. Directors are appointed by the Government and have collective responsibility for ASTRI's leadership, policy and strategic directions.

To achieve good governance, the Board with the support of Management, responds flexibly to, and reflects on, the changing terms and conditions of the business environment in which ASTRI operates, with key focus on the needs of the industrial sector.

The Board and Management adhere to the four key management objectives of ASTRI: Transparency, Speed, User-friendliness and Governance.

In 2013, a Review Committee was formed to take an in-depth look at ASTRI's performance over the past years and make recommendations for improvement. The Committee comprises Government officials, external stakeholders, past and current ASTRI Board members and members of senior management. Four working groups were formed to focus on topics including (1) review of past performance of ASTRI; (2) industry contributions; (3) customers' expectations of ASTRI/commercialization; and (4) cultural and performance appraisal system.

Following the Board's decision that ASTRI should elevate efforts to create well-conceived spin-offs from its R&D operation, a special committee was also set up to map out strategies and oversee their execution. Chaired by a Board Director, the committee includes members from the Board, senior management and Innovation and Technology Commission.

Key Management Objectives
四個主要管理原則

- **Transparency**
  透明度
- **Speed**
  效率
- **User-friendliness**
  切合需要
- **Governance**
  管治

董事局

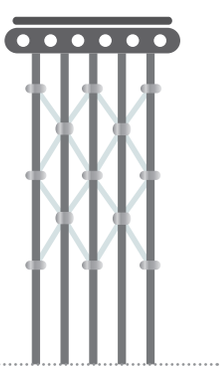
董事局是應科院的管治組織，成員包括來自工商界、學術界及香港特區政府的代表。董事是由特區政府委任，負責制訂應科院的發展政策和路向。

為實施良好的管治，應科院董事局指示管理層須因應應科院的營商環境和條件的改變作出靈活應變，並以配合工業界需要為主要工作目標。

董事局和管理層堅持四個主要管理原則：透明度、效率、切合需要和管治。

在二零一三年，一個檢討委員會特別成立，檢視應科院過往幾年的工作，並提出改進的建議。委員會由政府官員、持份者、本院過去及現任董事，以及高層管理人員組成，轄下有四個小組，研究的議題包括(一)應科院過往業績；(二)從業界所得收入；(三)客戶對本院的期望／市場化；及(四)文化和績效考核制度。

董事局決定應科院應著力造就業務分拆，因此成立了一個特別委員會，訂立策略並監督執行。委員會由一位董事出任主席，委員來自董事局、應科院管理層以及創新科技署。



Board Composition 董事局的組成

As at 31 March, 2014, composition of the Board includes the Chairman and 18 members.
直至二零一四年三月三十一日，董事局成員包括主席及十八位董事。

Chairman 主席

Mr. Wong Ming-yam, BBS, JP
王明鑫先生，BBS，JP
Director, Top Brilliant Technology Ltd.
新璟陽企業發展集團有限公司董事

Official Members 官守董事

Miss Susie Ho Shuk-yee, JP
何淑兒女士，JP
Permanent Secretary for Commerce and Economic Development (Communications and Technology)
商務及經濟發展局常任秘書長(通訊及科技)

Miss Janet Wong Wing-chen, JP
王榮珍女士，JP
Commissioner for Innovation and Technology
創新科技署署長

Members 董事

(In alphabetical order of surname)
(以英文姓氏順序排列)

Mr. Anthony Au Wai-hung, BBS
區煒洪先生，BBS
Director, Futuresuccess Consultants Ltd.
Futuresuccess Consultants Ltd. 董事

Mr. Christopher William Britton
貝敦先生
Partner and Head of Intellectual Property Department, Deacons
的近律師行合夥人及知識產權部主管

Prof. Andrew Chan Chi-fai, SBS, JP
陳志輝教授，SBS，JP
Director, Executive MBA Programme
The Chinese University of Hong Kong
香港中文大學行政人員工商管理碩士課程主任

Prof. Philip Chan Ching-ho, BBS
陳正豪教授，BBS
Deputy President and Provost
The Hong Kong Polytechnic University
香港理工大學常務及學務副校長

Mr. Chuck Cheng Cheuk-wing
鄭灼榮先生
CEO and President
Appotech Ltd.
卓榮集成電路科技有限公司總裁

Prof. Roland Chin Tai-hong, BBS, JP
錢大康教授，BBS，JP
Deputy Vice-Chancellor and Provost
The University of Hong Kong
香港大學首席副校長

Prof. Ching Pak-chung, BBS
程伯中教授，BBS
Pro-Vice-Chancellor/Vice President
The Chinese University of Hong Kong
香港中文大學副校長

Mr. Humphrey Choi Chor-ching, JP
蔡楚清先生，JP
Partner, PricewaterhouseCoopers
羅兵咸永道會計師事務所合夥人

Mr. Ha Yung-kuen, BBS
夏勇權先生，BBS

Mr. Sunny Lee Wai-kwong, JP
李惠光先生，JP
Vice President (Administration)
City University of Hong Kong
香港城市大學副校長(行政)

Dr. Tiger Lin Zhenhui
林振輝博士
Chairman and Chief Executive Officer
China Mobile International Ltd.
中國移動國際有限公司董事長兼行政總裁

Ms. Agnes Nardi Kar-wai
李家慧女士
Chief Executive Officer
Business Environment Council Ltd.
商界環保協會有限公司行政總裁

Mr. Victor Ng Kwok-ho
吳國豪先生
Managing Director
Micom Tech Ltd.
捷訊電腦科技有限公司董事總經理

Dr. Frank Tong Fuk-kay
湯復基博士
Vice President and CTO
Hisense Broadband Multimedia Technologies Co. Ltd.
青島海信寬帶多媒體技術有限公司副總經理及
首席技術官

Mr. Denis Tse Tik-yang
謝迪洋先生
Head of Asia-Private Investments
Lockheed Martin Investment Management Company
洛克希德馬汀投資管理亞洲私募投資主管

Mr. Luther Wong Lok-tak
王樂得先生
Managing Director
C&G Environmental Technology Ltd.
思捷環保科技有限公司行政總裁

Functional Committees

Three functional committees, namely Finance and Administration Committee (FAC), Technology Committee (TC) and Audit Committee (AC) were formed to assist the Board in managing ASTRI. FAC oversees ASTRI's financial and administrative matters; TC oversees research initiatives; and AC ensures both internal and external audit processes are properly carried out. Below are the committee memberships:

Finance and Administration Committee

Mr. Wong Ming-yam, BBS, JP (Chairman)
Mr. Anthony Au Wai-hung, BBS
Mr. Ha Yung-kuen, BBS
Ms. Agnes Nardi Kar-wai
Dr. Frank Tong Fuk-kay
Mr. Denis Tse Tik-yang
Mr. Luther Wong Lok-tak
Miss Janet Wong Wing-chen, JP

Technology Committee

Prof. Philip Chan Ching-ho, BBS (Chairman)
Mr. Anthony Au Wai-hung, BBS
Mr. Christopher William Britton
Mr. Chuck Cheng Cheuk-wing
Prof. Roland Chin Tai-hong, BBS, JP
Prof. Ching Pak-chung, BBS
Mr. Ha Yung-kuen, BBS
Mr. Sunny Lee Wai-kwong, JP
Dr. Tiger Lin Zhenhui
Ms. Agnes Nardi Kar-wai
Mr. Victor Ng Kwok-ho
Dr. Frank Tong Fuk-kay
Mr. Denis Tse Tik-yang
Mr. Wong Ming-yam, BBS, JP
Miss Janet Wong Wing-chen, JP

Audit Committee

Mr. Humphrey Choi Chor-ching, JP (Chairman)
Mr. Christopher William Britton
Prof. Ching Pak-chung, BBS
Mr. Victor Ng Kwok-ho
Miss Janet Wong Wing-chen, JP

功能委員會

董事也出任三個功能委員會，即財務與行政委員會、科技委員會及審計委員會的成員，以協助董事局管治應科院。財務與行政委員會監督應科院財務及行政事宜；科技委員會監督應科院的研究項目；審計委員會則確保適當執行內部及外部審計程序。以下是委員會的成員名單：

財務與行政委員會

王明鑫先生，BBS，JP（主席）
區煒洪先生，BBS
夏勇權先生，BBS
李家慧女士
湯復基博士
謝迪洋先生
王樂得先生
王榮珍女士，JP

科技委員會

陳正豪教授，BBS(主席)
區煒洪先生，BBS
貝敦先生
鄭灼榮先生
錢大康教授，BBS，JP
程伯中教授，BBS
夏勇權先生，BBS
李惠光先生，JP
林振輝博士
李家慧女士
吳國豪先生
湯復基博士
謝迪洋先生
王明鑫先生，BBS，JP
王榮珍女士，JP

審計委員會

蔡楚清先生，JP（主席）
貝敦先生
程伯中教授，BBS
吳國豪先生
王榮珍女士，JP

Movements of Directors

董事局成員變動

New Director 新委任董事	Appointed Date 委任日期
Mr. Ha Yung-kuen, BBS 夏勇權先生，BBS	1 March, 2014 二零一四年三月一日

Retired Directors 退任董事	Date of Retirement 退任日期
Mr. George Hongchoy Kwok-lung 王國龍先生	2 July, 2013 二零一三年七月二日
Dr. Patrick Wang Shui-chung, SBS, JP 汪穗中博士，SBS，JP	21 October, 2013 二零一三年十月二十一日

Meetings and Attendance

會議及出席率

The Board and the Functional Committees convene meetings on a regular basis. Special meetings will be held as and when necessary.

董事局及功能委員會定期舉行會議，並於有需要時召開特別會議。

The following are attendance records of ASTRI Board and Functional Committee meetings held during the year:

以下是董事局會議及各功能委員會會議的出席紀錄：

Board Meetings	董事局會議	11/04/2013	10/07/2013	07/10/2013	13/12/2013	28/03/2014
Total no. of directors during the period	期內董事局成員人數	20	19	19	18	19
Total no. of directors present at meeting	董事出席人數	19	14	15	15	17
Total no. of apologies	缺席人數	1	5	4	3	2
Group attendance in percentage	出席率	95%	74%	79%	83%	89%

FAC Meetings	財務與行政委員會會議	25/06/2013	27/08/2013	12/11/2013	25/02/2014
Total no. of directors during the period	期內委員會成員人數	7	7	7	7
Total no. of directors present at meeting	董事出席人數	4	6	5	5
Total no. of apologies	缺席人數	3	1	2	2
Group attendance in percentage	出席率	57%	86%	71%	71%

TC Meetings	科技委員會會議	20/06/2013	13/09/2013	29/11/2013	13/03/2014
Total no. of directors during the period	期內委員會成員人數	14	14	14	15
Total no. of directors present at meeting	董事出席人數	7	8	10	9
Total no. of apologies	缺席人數	7	6	4	6
Group attendance in percentage	出席率	50%	57%	71%	60%

AC Meetings	審計委員會會議	27/06/2013	12/09/2013	19/11/2013	12/03/2014
Total no. of directors during the period	期內委員會成員人數	5	5	5	5
Total no. of directors present at meeting	董事出席人數	4	3	4	5
Total no. of apologies	缺席人數	1	2	1	0
Group attendance in percentage	出席率	80%	60%	80%	100%

Corporate Governance Manual

ASTRI has adopted a Corporate Governance Manual to clearly state its policies and principles in achieving good governance. The Manual has facilitated the Board and Management to operate and oversee ASTRI's business in a transparent and accountable manner.

In past years, sections of the Manual were updated and modified, taking into account changes and developments required for improving ASTRI's operation, as well as responding flexibly to, and reflecting on, the changing terms and conditions of the business environment in which ASTRI operates.

Reiterating the total commitment of both the Board and Management in upholding the highest level of integrity in ASTRI business practices and staff ethical standards, a special section in the latest version was dedicated to "Code of Ethical and Professional Conduct".

The Manual also clearly defined policies and guidelines regarding "Financial Management of ASTRI's Recurrent Subvention" and "Procurement of Goods and Services". The guidelines spelt out the latest revisions on delegating authority to senior management regarding financial matters such as approving expenditures and purchase orders, signing cheques, and writing off bad debts, inventory and other valuables, etc.

In addition, the Manual included sections on "IP Portfolio Management", "Technology Transfer" and "R&D Project Management and Process", providing the latest policies and guidelines in these important areas.

企業管治手冊

應科院已制定企業管治手冊，清楚列明達致優良管治的政策和原則，以協助董事局和管理層以高透明度和負責任地經營及監督應科院的業務。

過去數年間，企業管治手冊中多個段落已有所更新，把對改善應科院運作所必要的轉變和發展涵蓋在內，及對應科院所處的營運環境的轉變作靈活的應對和考量。

董事局及管理層要求應科院的商業操作廉正不阿，員工恪守最高的道德操守，為重申這不二承諾，最新修訂版中特闢一欄「道德及專業行為守則」。

有關「應科院經常性撥款的財務管理」以及「貨品與服務購置」的政策和指引亦清楚寫明於手冊內；此兩段下各欄目闡述了在諸如批核支出和訂購、簽發支票，及報廢呆帳、存貨及其他貴重物品等財政事務上，授權予高層管理人員的最新修訂。

此外，手冊也加入了「知識產權組合管理」、「技術轉移」以及「研發項目管理及流程」等欄目，提供這些重要範疇的最新政策和指引。

Internal Audit

To efficiently exercise good corporate governance, an Internal Audit Department (IAD) under the Audit Committee was set up in 2003 to assist the Board by providing it with information and assurance on internal management controls.

In April 2007, the Board appointed the Head of Internal Audit as Compliance Officer to assist its governance by providing timely information to the Audit Committee on the compliance status of ASTRI regarding policy and procedures of project management, finance, human resources and administrative management.

To ensure continuous compliance with the Guide to Information and Technology Support Programme, ASTRI's corporate governance policy, operational procedures and other relevant guidelines, the Compliance Officer is required to submit quarterly reports to the Audit Committee.

In July 2013, an Internal Audit Charter was introduced into the Corporate Governance Manual, enhancing and consolidating existing provisions. Among other things, the Charter sets out more clearly the responsibilities, independence, authority, planning and reporting processes of the IAD. For example, the department would report half-yearly to the Audit Committee on progress of its different assigned tasks.

During the year, the Audit Committee endorsed a three-year plan and an annual internal audit plan. The risk-based element in the planning process has been enhanced by a more systematic approach to take into account various risks identified in the ASTRI Risk Register. The Audit Committee received updates from IAD on the progress of the annual plan through two half-yearly progress reports in August 2013 and March 2014. Among other things, the progress reports included audit reports on the following auditable areas:

a) Project control (Part 1) – project report submission
b) Human resources administration
c) Staff recruitment management
d) Remuneration and staff benefits management
e) Overseas duty travel
f) Cash disbursement and accounts payable management
g) Allegations on Pirated EDA Software (ad hoc)

Auditable areas (c) to (f) are recurring audits generally compliance-based. For these areas, it is noted that the relevant processes examined had been complied within all material aspects. Nevertheless, IAD identified a number of enhancement recommendations for some of the above auditable areas. The relevant process owners have in principle agreed with the recommendations and provided management responses with ensuing actions and timelines. IAD will follow up on actions at suitable intervals and report back to the Audit Committee accordingly.

內部審計

為有效進行良好的企業管治，應科院於二零零三年成立內部審計部門，隸屬於審計委員會，協助董事局，向其提供有關內部管理控制的資訊及保證。

二零零七年四月，董事局委任內部審計主管擔任合規主任，協助進行企業管治，適時向審計委員會提供有關應科院遵守項目管理、財務、人力資源及行政管理政策和程序的情況。

為確保應科院持續遵守《資訊及科技支援計劃指引》、企業管治手冊、運作程序及其他相關指引，合規主任必須每季度向審計委員會提交報告。

二零一三年七月，為加強現有規範，企業管治手冊加入內部審計章程，對內部審計部門的職責、獨立性、職權範圍、規劃及滙報等事項作出更明確的列明。例如，內部審計部門會每半年就其計劃的進度向審計委員會提交報告。

是年內，內部審計部門的年度計劃及為期三年的計劃得到審計委員會的批准。在計劃過程中，一個更有系統的方法已被採用來考慮應科院風險登記冊內的各種風險。內部審計部門分別於二零一三年八月和二零一四年三月向審計委員會遞交半年度進度報告，以匯報年度計劃的進度。該進度報告包括以下可審計範圍的審計報告：

a) 項目管理(第一部分) – 項目報告提交
b) 人力資源管理
c) 員工招聘管理
d) 薪酬及員工福利管理
e) 海外公幹
f) 現金支出和應付賬款管理
g) 盜版EDA軟件的指控(突發)

可審計範圍(c)至(f)是經常性審計項目，焦點在合規方面。就這些項目而言，被檢查的相關流程在主要方面是合規的。然而，內部審計部對上列其中的可審計範圍提出了優化的建議。相關流程負責人原則上同意這些建議，並已提出應對行動及時間表。內部審計部會在適當時間作出跟進並向審計委員會匯報進度。

Target Setting, Risk Management and Control

The Board in 2011 adopted new measures to further upgrade management quality in planning and control. The Balanced Scorecard was introduced to provide a framework for different functional units to operate towards comprehensible targets.

Furthermore, under the direction and guidance of the Board via the Audit Committee, management and the Internal Audit Department conducted a company-wide Risk Profiling and Assessment exercise in 2010. As a result, several high risk areas were identified prompting management to take action ensuring preventive controls were in place to manage them. A Risk Register has been formulated and would be updated when necessary to further enhance effective governance of ASTRI.

ISO-based Quality Management System

With total commitment from management and collective effort from staff, re-certification of ISO 9001:2008, which covers both its administrative and R&D operations, was granted to ASTRI in July 2013.

Following the Board's decision to seek re-certification of ISO 9001 in 2013/14, a quality management system aimed at increasing customer satisfaction and work efficiency was developed. Five stages for achieving ISO 9001 certification were also identified. They are: (1) Awareness and Planning; (2) Review and Assessment; (3) Development; (4) Implementation and Verification; and (5) Certification.

目標訂定、風險管理和控制

在二零一一年，董事局實施了新措施，以進一步提升應科院在策劃和控制等方面的管理質素。平衡計分卡為不同職能部門提供了框架，讓它們朝著清晰明確的目標運作。

此外，管理層和內部審計部門在董事局通過審計委員會指導下，於二零一零年進行了一項全公司的風險描述與評估的工作，辨別出幾個高風險範疇，管理層也採取了行動確保防範性的控制措施已準備就緒，以應付該些風險。「風險登記冊」已經制定，並會按需要作出更新，以進一步加強應科院的有效管治。

以ISO為基礎的品質管理系統

在高級管理人員的支持和全體員工的共同努力下，應科院在二零一三年七月再度獲得ISO 9001:2008認證，其範圍覆蓋行政及研發方面的運作。

隨著董事局決定在二零一三／一四年更新ISO 9001認證，應科院確立了一套品質管理系統，務求提升顧客滿意度和工作效率。為取得ISO 9001認證而訂立的五個步驟為：(一)意識及計劃；(二)審查及評核；(三)發展；(四)實行及鑑定；(五)認證。

Five Stages for Achieving ISO 9001 Certification
取得ISO 9001認證的五個步驟

After successfully completing the first four stages in the re-certification process, the ISO certification body, Bureau Veritas Certification Hong Kong Limited, completed its final audit in June 2013 and concluded that no non-conformities were identified in relation to ISO 9001 requirements. Formal certification was granted to ASTRI in the ensuing month.

Looking forward, ASTRI will continue maintaining ISO 9001 quality management and reap the benefits from ISO 9001 implementation under the four essential objectives of Transparency, Speed, User-friendliness and Governance.

在完成首四個認證步驟後，ISO認證機構立德國際公證香港有限公司在二零一三年六月完成最後階段審計，確認應科院的品質管理系統符合ISO 9001的要求。應科院在隨後的一個月內正式獲得認證。

展望未來，應科院會繼續在透明度、效率、切合需要和管治四大主要管理原則下，實施ISO 9001品質管理，從中獲益。

ISO 9001 Certification
ISO 9001認證


BUREAU VERITAS
Certification

HONG KONG APPLIED SCIENCE AND TECHNOLOGY RESEARCH INSTITUTE COMPANY LIMITED

3RD FLOOR, BIO-INFORMATICS CENTRE, 2 SCIENCE PARK WEST AVENUE, HONG KONG SCIENCE PARK, SHATIN, HONG KONG

Bureau Veritas Certification certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standard

ISO 9001:2008

Scope of certification

PROVISION OF RESEARCH, DEVELOPMENT AND COMMERCIALIZATION IN THE AREA OF INFORMATION AND COMMUNICATIONS TECHNOLOGIES.

Certification cycle start date: 22 JULY, 2013

Subject to the continued satisfactory operation of the organisation's Management System, this certificate expires on: 21 JULY, 2016

Original certification date: 22 JULY, 2013

Certificate No. 195436-UK

Version, Revision date: 22 JULY 2013

Certification Authority

UKAS

008

Certification body address: Brandon House, 180 Borough High Street, London SE1 1LB, United Kingdom

Local office: Room 23-25, 10/F, Pacific Trade Centre, 2 Kai Hing Road, Kowloon Bay, Kowloon, H.K.

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

To check this certificate validity please call: 852-2918 2052

Safeguard Against Conflicts of Interest

As a public organization, it is important to have an effective mechanism to safeguard against conflicts of interest. In October 2013, the Chief Corruption Prevention Officer of ICAC was invited to deliver a seminar to our senior staff on corruption prevention and managing conflicts of interest concerning commercialization of our technologies to industry.

ASTRI is also in the process of reviewing the Code of Conduct for Employees and the Declaration of Interest Process with an aim to provide necessary guidelines for establishing a system to detect potential conflicts, manage declared conflicts, including actions taken to mitigate conflicts.

防範利益衝突

作為一所公營機構，應科院須要一個有效的機制來防範利益衝突。廉政公署總防貪主任於二零一三年十月應邀為應科院管理人員舉行講座，闡述如何在將技術市場化過程中，預防貪污和處理利益衝突。

應科院現正檢討和修訂員工行為守則和利益申報程式，務求可以為員工提供指引，並建立一個完善的制度來檢查潛在的利益衝突和處理已申報的衝突，包括減低衝突所須要採取的行動。

People
人才匯聚

One Heart • One Goal
目標一致 • 盡展所能

We team up to excel and harness staff talents
to build a growth and performance culture.
員工各展所長，互相配合；齊心向目標邁進，建立追求卓越的文化。

38-39 Management 高級行政人員
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44-50 Honours for Staff 員工的榮譽
51-53 External Appointments 外界任命

Management 高級行政人員

ASTRI is headed by a Chief Executive Officer who is responsible to the Board of Directors for the company's overall management. He is assisted by the R&D vice presidents, as well as senior executives at headquarters who are responsible for administrative, financial, commercial and other supporting functions.

應科院由行政總裁負責整體管理工作，並向董事局負責。行政總裁旗下有副總裁及研發群組總監，負責領導研究工作；以及總部高級管理人員，負責行政管理、財務、商務及其他支援性職責。

As at 31 March, 2014, senior management includes the following executives:
截至二零一四年三月三十一日，高級行政人員包括：

Chief Executive Officer 行政總裁

Dr. Cheung Nim-kwan
張念坤博士

Headquarters 總部

Prof. Peter Yum
任德盛教授

Chief Technology Officer (Resigned on 1 June, 2013)
首席科技總監(二零一三年六月一日退任)

Ms. Betty Law
羅翠萍女士

Chief Financial Officer
首席財務總監

Mr. David Poon
潘占達先生

Vice President, Corporate Communications and Company Secretary
副總裁(傳訊)及公司秘書

Mr. Keith Poon
潘志明先生

Vice President
Marketing and Commercialization
(Resigned on 25 October, 2013)
副總裁，市場及商務
(二零一三年十月二十五日退任)

Ms. Ivy Leung
梁穎莊女士

Human Resources Director
人力資源總監

R&D Groups and Teams 研發群組及小組

Dr. Chao Shen-chang
趙盛章博士

Vice President and Group Director
Enterprise & Consumer Electronics Group
(Resigned on 1 January, 2014)
企業與消費電子群組 副總裁及研發群組總監
(二零一四年一月一日退任)

Dr. Justin Chuang
莊哲義博士

Vice President and Group Director
Communications Technologies Group
通訊技術群組 副總裁及研發群組總監

Dr. Wang Keh-chung
王克中博士

Vice President and Group Director
IC Design Group
集成電路設計群組 副總裁及研發群組總監

Dr. Enboa Wu
吳恩柏博士

Vice President and Group Director
Material & Packaging Technologies Group
材料與構裝技術群組 副總裁及研發群組總監

Dr. Francis Lee
李致淳博士

Vice President and R&D Director
Bio-Medical Electronics Team
(Resigned on 30 November, 2013)
生物醫學電子組 副總裁及研發總監
(二零一三年十一月三十日退任)

Dr. Lo Tak-sing
盧德星博士

Director, Exploratory Research Laboratory
(Resigned on 8 August, 2013)
信息研究室 總監
(二零一三年八月八日退任)

Annual Remuneration of Senior Executives 高級行政人員薪酬

Number of Senior Executives by Grade Level 各級別高級行政人員數目	Annual Remuneration 1 April, 2013–31 March, 2014 (HK$M) 由二零一三年四月一日至 二零一四年三月三十一日 全年薪酬(百萬港元)
Chief Executive Officer 行政總裁	3.7
Four Grade Level One Executives 四名一級員工	9.6
13 Grade Level Two Executives 十三名二級員工	19

Annual Remuneration 全年薪酬 1 April, 2013–31 March, 2014 (HK$) 由二零一三年四月一日至 二零一四年三月三十一日(港元)	Number of Senior Executives 高級行政人員數目
1,000,000 or below 或以下	0
1,000,001 – 1,500,000	8
1,500,001 – 2,000,000	4
2,000,001 – 2,500,000	4
2,500,001 – 3,000,000	1
3,000,001 – 3,500,000	0
3,500,001 – 4,000,000	1

A Professional Team 專業團隊

ASTRI builds its strengths on people. ASTRI's personnel comprise teams of dedicated professionals with good academic background and exposure in Hong Kong, Taiwan, the Mainland and the world. The majority of staff, over 80 per cent, is responsible for R&D work with expertise and experience covering broad technological areas. The following is the profile of the personnel in the year under review.

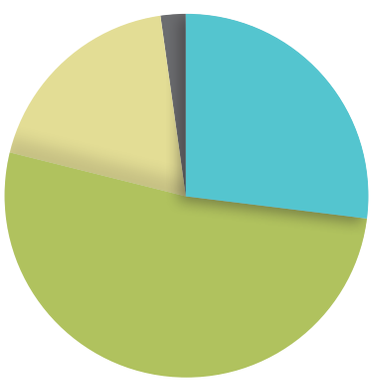
人才是應科院的重要發展支柱。本院的人力資源主要由擁有良好教育背景及豐富工作經驗的專業人士組成，包括來自香港、台灣、中國內地及世界各地的人才。科技人員佔整體員工百份之八十以上，他們的科技知識領域十分廣泛，肩負研發創新科技的工作。以下是本院過去一年有關人力資源的概況。

Headcount Status 員工人數

		As at 31 March, 2014 截至二零一四年三月三十一日
Headquarters	**總部**	**83**
R&D Group	**研發群組**	
Communications Technologies	通訊技術	102
Enterprise & Consumer Electronics	企業與消費電子	85
IC Design	集成電路設計	106
Material & Packaging Technologies	材料與構裝技術	87
Bio-Medical Electronics (Team)	生物醫學電子(組)	12
Exploratory Research Laboratory (Team)	信息研究室(組)	6
Interns	實習研究員	18
Sub-total	**小計**	**416**
Total	**總數**	**499**

Remarks: ASTRI has 65 vacant positions as at 31 March, 2014. 備註：截至二零一四年三月三十一日，應科院共有六十五個職位空缺。

R&D Personnel Academic Qualifications 研發人員學歷



As at 31 March, 2014
Including personnel under R&D Groups & Teams, excluding headquarters staff and interns.
截至二零一四年三月三十一日
包括研發群組及小組轄下員工，不包括總部員工及實習研究員

Internship

Nurturing new talent for the industry and cultivating the younger generation's interests in R&D are ASTRI's priorities in people management. ASTRI has been offering internship opportunities for students and young graduates every year. So far, more than 170 people have completed training in ASTRI's internship programmes.

Happy students with their certificates after completing internship
完成實習後獲頒授證書，眾人展露燦爛笑容

In the 2013 summer internship programme, 18 science and engineering students from local and overseas universities were recruited to spend six to eight weeks working at ASTRI. These young people who came from Hong Kong, the Mainland, England and United States included undergraduates from Cambridge University, Imperial College London and Princeton University. The five students from Princeton were selected by a joint internship programme between Hong Kong University of Science and Technology (HKUST) and ASTRI. Another five top-notch students were selected from local universities through the Excellence in Technology Innovation and Commercialization Scholarship Award Scheme (ETHICS), hosted by a charitable organization, the Virtus Foundation Ltd.

ASTRI will again organize internship programme in 2014. Students will be recruited from local and overseas universities. ASTRI will collaborate with The HK Federation of Youth Groups and through the HKFYG InnoTech Scholarship Award Scheme offer internship opportunities to outstanding local students. As in previous years, ASTRI will again select candidates for summer internship from Princeton University through joint internship programme with HKUST.

A cooperative educational programme will also be organized between ASTRI and City University of Hong Kong for Master of Science students. They will be assigned to take part in high-level research projects within ASTRI for a four-month period.

實習研究員計劃

為業界培育新一代人才及培養年青人對科研的興趣，是應科院人力資源管理的首要目的之一。應科院每年為大學生及年輕畢業生提供實習機會。直到目前為止，超過一百七十人已完成在應科院的實習訓練。

來自本地及海外大學共十八位理科及工程系學生參加二零一三年的暑期實習，在應科院接受為期六至八星期的工作培訓。這群年青人部分是本地大學生，也有來自中國內地、英國和美國等著名學府，例如劍橋大學、倫敦帝國學院和普林斯頓大學。當中五名來自普林斯頓大學的學生，是透過參加由香港科技大學及應科院聯合舉辦的實習研究員計劃獲取錄加入應科院。此外，應科院與一所慈善機構明德基金有限公司合作，透過他們主辦的「卓越科技創新應用獎學金」，挑選了五名本地傑出大學生加入實習研究員行列。

應科院在二零一四年將再次舉辦實習研究員計劃，招聘來自本地及海外大學學生。應科院亦將會與香港青年協會合作，通過他們的「創新科技獎學金計劃」，提供實習機會予本地傑出學生。與往年一樣，應科院會繼續透過與香港科技大學合作，甄選普林斯頓大學學生為實習研究員。

此外，應科院將與香港城市大學合作，為該大學修讀理科碩士學位課程的學生提供實習機會，他們會被分派到本院各研發群組參予為期四個月的科研工作。

Corporate Culture 企業文化

Performance-linked Reward System

To serve as a major key driver of technology development in Hong Kong, human resources is the most important factor in ASTRI's success in performing relevant and high quality R&D for transfer to industry. The Board and management believe that pay for performance, when well executed, can motivate individual staff to perform well. Hence, ASTRI is in the process of implementing a performance-linked reward system.

In 2013, ASTRI revised the annual goal-setting and performance appraisal timeline from February to April to allow sufficient time for staff appraisals. The change is considered a critical success factor in building a performance culture. As performance ratings are the major data source for reward decisions and objective performance evaluation relies on the quality of goal-setting and performance appraisal review, the revised timeline is therefore considered a key factor of quality goal-setting and performance appraisal reviews.

To drive a performance culture, clear differentiation in reward based on performance is necessary. With strong support from the Board, the difference in variable payments between staff of different performance ratings was widened.

The management has developed a holistic plan to build a performance culture and enhance ASTRI's performance. A number of enhancement measures, such as an award programme recognizing outstanding performance and innovation, will be implemented in the coming years. Moreover, an enhanced grading structure and managerial training programmes will be introduced.

It is acknowledged the culture-building process and the drive for good performance will involve long-term and continuous effort before sustainable success can be achieved.

Health and Safety

ASTRI manages occupational health and safety (OHS) by implementing a safety management system with proactive and preventive measures. The Health and Safety Committee, established four years ago, has built a platform for management and staff to share views and communicate regarding health and safety at work, as well as for promoting a safety culture to nurture staff in safety awareness. An Occupational Safety and Health Manual, introduced in 2011, focuses on controlling risks and hazards associated with office and laboratory environments.

根據績效實行獎勵制度

作為推動香港科技發展的一個主要機構，人力資源是應科院成功的關鍵因素，藉著優秀的人才，應科院才可以進行高質素的研發工作，將創新科技成果轉移給業界。董事局及管理層相信以績效來衡量報酬，如能妥善執行，可以激勵員工有更卓越的表現。因此，應科院已計劃實施與績效掛鉤的獎勵制度。

在二零一三年，應科院將年度工作目標設定和績效考核時間表由二月推遲至四月，目的是給予員工足夠時間準備。這個改變對於建立一個績效文化起著關鍵作用。由於績效評級是決定獎勵的主要根據，客觀的績效評級建基於有質素的工作目標設定和績效考核，故此修訂時間表對建立一個以績效來決定獎勵的制度極為重要。

為推動績效文化，以績效來衡量的報酬須要有明顯的分別。在董事局的大力支持下，應科院擴大了不定額薪酬的差異化，令不同績效評級的員工所得到的報酬有明顯分別，優秀的員工將得到更高的獎勵。

管理層為建立績效文化和提升員工表現，已制定了一個全面的計劃，包括在未來數年實施獎勵計劃，表彰員工的傑出表現和創新精神，重新規劃職級和為員工提供適當的培訓課程。

管理層深信要建立一個鼓勵優秀表現的企業文化，須要持久和長時間經營，應科院會在這方面繼續努力直至達成目標。

健康與安全

在職業安全與健康（職安健）管理方面，應科院透過實施安全管理體系採取積極的預防措施。已成立超過四年的健康和安全委員會為員工及管理層提供一個平台，就職安健課題交換意見和溝通，同時也推廣注意安全文化和提高員工安全意識。職業安全及健康手冊也於二零一一年推出，內容主要針對辦公室和實驗室環境的潛在危險和傷害作出預防和控制。

To ensure staff would understand work-related hazards and procedures, ASTRI organized safety orientation training for new staff, briefing them on key work safety. During the year, ASTRI equipped staff with relevant OHS skills and knowledge concerning daily operations by providing training on risk assessment and lazer safety, 5S workshops and a first aid certificate course, which in total accumulated more than 1,000 man-hours.

Moreover, a convenient e-learning platform was set up enabling staff easy access to updated information and refresh their knowledge on safety procedures.

Workplace hygiene and health is an important topic nowadays. To prevent H7N9 influenza from going viral, ASTRI has set up a crisis management team with a response plan involving a reporting hotline and stock up of hygiene materials in case of emergency.

OHS is a continuous process aimed at protecting the well-being of ASTRI employees, ensuring they work in a safe and hygienic environment.

Workplace Free of Discrimination and Harassment

ASTRI encourages staff to give due respect to self and others with an aim to establish and support an environment of teamwork and growth, a workplace free of discrimination and harassment is therefore essential.

The Equal Opportunities Commission held a seminar on Anti-Discrimination Laws for ASTRI staff in early 2014. Respecting each other's differences, giving every employee a fair chance to prove their capabilities, and not letting irrelevant factors affect decision making have become the principles ASTRI upholds.

為確保員工理解在工作環境中可能遇上的危險和傷害及有關程序，應科院為新入職員工舉辦入職安全訓練，向他們講解重要的安全知識。應科院也為員工提供連串訓練課程，包括風險評估訓練、激光安全訓練、5S實用工作坊和急救證書課程，為員工於日常工作中應具備的職安健知識和技能提供裝備。年內應科院舉辦上述安全訓練課程，累計超過一千個小時。

此外，為方便員工獲取有關職業安全的最新資訊和不時溫故知新，一個電子學習平台已投入服務。

工作環境的衛生和健康是現今一個重要課題。為預防H7N9禽流感的傳播，應科院已組織危機處理小組，應付可能在工作場所出現的新型流感疾病。應變計劃和報告熱線已經設立並配備充足的衛生物料以應付緊急情況。

應科院須要持續改善和執行職安健措施，才可以保障員工的安全和健康，讓員工可以在一個衛生妥善的環境下安心工作。

沒有歧視和騷擾的工作環境

應科院強調員工必須尊重自己和他人，讓大家可以在一個沒有歧視和騷擾的良好工作環境下，發揮團隊精神並茁壯成長。

二零一四年初，平等機會委員會為應科院全體員工舉辦了講座，詳細介紹香港的反歧視法例。鼓勵員工彼此尊重、給予每一位員工平等機會來發揮所長，以及在作出決定時不受無關的因素所影響，已成為應科院堅守的原則。

Honours for Staff 員工的榮譽

At ASTRI, we take immense pride in our staff's successes and achievements. ASTRI won a number of prestigious accolades and awards both locally and internationally during the year, reflecting our staff's capabilities in conveying state-of-the-art technologies to industry and the community.

應科院以員工的成功為驕傲。本院在是年內贏得多項本地及國際榮譽和獎項，足以證明應科院員工的能力及其為業界及社會所創的先進科技，已獲外界肯定。

2013 LED Industry Billboard Awards "Person with Special Contribution to the LED Industry"

Dr. Enboa Wu, Vice President and Group Director, Material & Packaging Technologies Group, was named "Person with Special Contribution to the LED Industry" in the 2013 LED Industry Billboard Awards for his achievements and the influence he brought to the LED industry. Themed "Competition and Collaboration in the Global LED Industry", the Billboard Awards was organized by China Shenzhen LED Industry Association, Guangdong Light Emitting Diode Industry Association and Guangdong LED Magazine. LED experts from research institutes, academia, enterprises and industry associations formed the judging panel.

二零一三年 LED 行業風雲榜 LED 行業特別貢獻人物

應科院材料與構裝技術群組副總裁及研發群組總監吳恩柏博士，於半導體照明產業聯合創新中心、廣東省半導體光源產業協會及《廣東LED》雜誌社聯合舉辦的「LED行業風雲榜」中，憑著其在LED產業界的影響力和成就，榮膺「二零一三年LED行業特別貢獻人物」。此獎項今年以「全球LED產業鏈下的競合發展」為主題，由業內的科研院所、高校、知名企業、行業協會等知名專家組成評選委員會。

Dr. Wu (first from left) with other title winners at the award presentation ceremony
吳博士(左一)於頒獎禮上與其他得獎者合攝

The Hong Kong ICT Awards 2014 Gold Award, Best Lifestyle (Learning & Living)

The portable interactive surface developed by ASTRI can instantly turn an ordinary flat surface into an interactive touch screen with multi-touch function for gaming and entertainment purposes. ASTRI made use of its patented depth sensing technology and short-throw offset projector to achieve fast and accurate sensing for this product. It is portable and can project 20-inch high-quality image from PC, smartphone, tablet or built-in Android system.

二零一四年香港資訊及通訊科技獎最佳生活時尚獎(學習．生活)金獎

獲獎的便攜式互動桌面可以即時將普通的平面變成多點觸控的互動顯示平面，可供遊戲和其他娛樂使用。應科院利用已擁有專利的深度檢測技術和短焦偏置投影光機研發此產品，令感測速度快而且準確。除體積輕巧及便於携帶，此產品可從電腦、智能手機、平板電腦或內置的安卓系統投影二十寸大小的高畫質內容。

Dr. Tsai Chen-jung (first from right) and team members
蔡振榮博士(右一)與團隊於頒獎禮上合攝

Winning Team	獲獎團隊
Dr. Tsai Chen-jung, R&D Director	蔡振榮博士，研發總監
Mr. Kenny Chan Kin-lung, Senior Manager	陳建龍先生，高級經理
Mr. Calvin Chan Kwok-chung, Senior Engineer	陳國頌先生，高級工程師
Mr. Dennis Chau Chak-wai, Senior Engineer	鄒澤偉先生，高級工程師
Ms. Wendy Zhang Wei, Senior Engineer	張瑋女士，高級工程師
Dr. Wang Yan, Senior Engineer	王彥博士，高級工程師
Mr. Tang Weiping, Senior Engineer	湯偉平先生，高級工程師
Mr. Derek Liu Dehua, Senior Engineer	劉德華先生，高級工程師
Dr. Chi Yong, Senior Engineer	池勇博士，高級工程師
Mr. He Deyu, Project Intern	何德裕先生，項目實習員

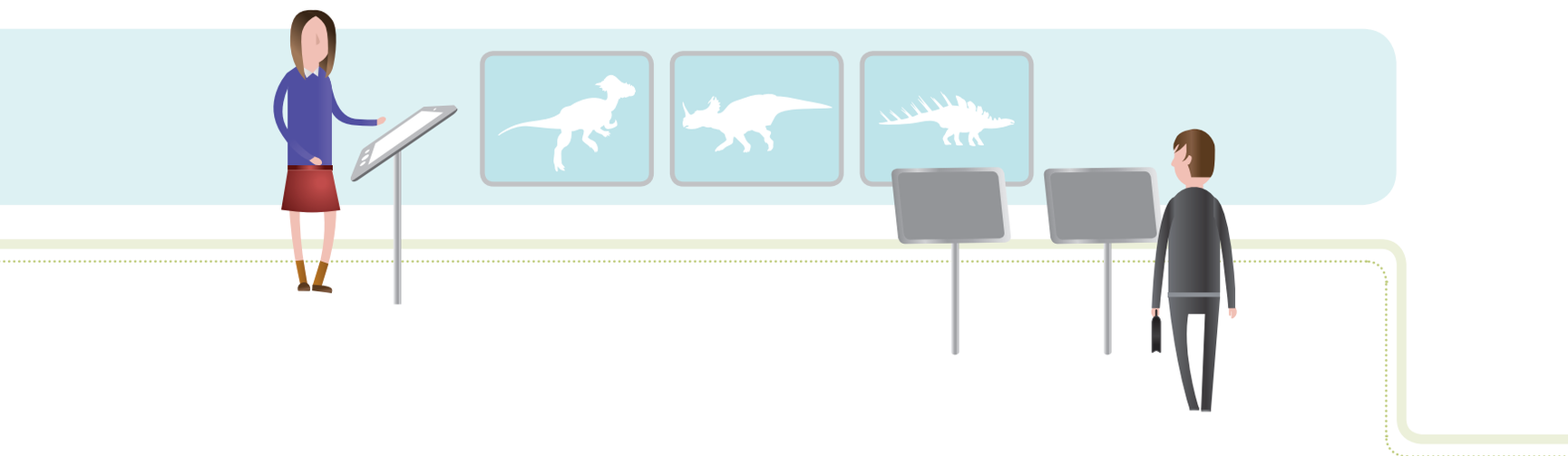
The Hong Kong ICT Awards 2014 Gold Award, Best Mobile Apps (Mobile Information)

Sengital Ltd made use of ASTRI's augmented reality technology to design an App for the "Legends of the Giant Dinosaurs" staged at the Hong Kong Science Museum and won this award. Gigantic dinosaurs were reconstructed and leaped to life through the App. This technology is based on an arbitrary user defined marker and can be applied on deformed surfaces. It is widely used for virtual shopping, product design, advertising, movie making, gaming and education.

二零一四年香港資訊及通訊科技獎最佳流動應用程式獎(流動資訊)金獎

Sengital公司利用應科院的擴增實境技術，為香港科學館舉行的大型展覽「巨龍傳奇」特別設計了應用程式，可重塑史前巨型恐龍真貌而獲得此獎項。此技術可以讓用家自行設計編碼，甚至在非平面物件上加入編碼。其應用範圍甚廣，包括虛擬購物、產品設計、廣告、電影製作、遊戲和教育等。

Research Team	研發團隊
Mr. Felix Chow, Director	周正華先生，總監
Mr. Ng Chiu-wa, Senior Engineer	吳潮華先生，高級工程師
Mr. Joni Laitinen, Senior Engineer	Joni Laitinen先生，高級工程師
Ms. Sharon Zheng Shanshan, Engineer	鄭珊珊女士，工程師



The Hong Kong ICT Awards 2014 Bronze Award, Best Lifestyle (Social, Communications and Media)

ASTRI's Visually Enhanced Ultra-HD Application Platform (VEUHD) won this award. This technology is used to convert commonly available full HD (1920x1080p) videos into UHD (3840x2160p) for 4K TVs or displays. With VEUHD, consumers can enjoy true visual quality upgrade with new 4K TVs.

二零一四年香港資訊及通訊科技獎最佳生活時尚獎(社交．傳訊．媒體)銅獎

應科院開發的視覺提升超高清顯示平台(高清－4K轉換技術)獲得此獎項。此技術可將一般的全高清(1920x1080p)視頻轉換為超高清(3840x2160p)視頻，使之能夠在4K電視機或其它4K顯示設備上播放，藉此滿足4K電視用戶的需求，提升視覺體驗。

Mr. Li Yiu-kei (centre) and team members at the award presentation ceremony
李耀基先生(中)率領隊員領獎

Winning Team	獲獎團隊
Mr. Li Yiu-kei, Director, Project Coordinator	李耀基先生，總監，負責項目籌劃
Mr. Chiu King-hung, Senior Manager, Technical Leader	趙京雄先生，高級經理，負責技術領導
Mr. Kenneth Lo Chun-keung, Manager, IC Designer	盧振強先生，經理，負責集成電路設計
Dr. Liang Luhong, Principal Engineer, Algorithm Design	梁路宏博士，主任工程師，負責算法設計
Mr. Tim Wong Ka-lung, Senior Engineer	黃嘉隆先生，高級工程師
Mr. Peter Cheng Ka-tsun, Senior Engineer	鄭嘉駿先生，高級工程師
Mr. Luo Peng, Engineer	羅鵬先生，工程師
Ms. Liu Xuejiao, Engineer	劉雪嬌女士，工程師

Hong Kong International Medical Devices and Supplies Fair 2013 The Most Appealing Product Award

The award-winning smart reflective pulse oximeter for ubiquitous health monitoring is a portable health device for measuring blood oxygen content, heart rate and breathing rate with the simple method of a finger sensor. It supports continuous measurement for analysing sleeping quality and risk assessment of sleep apnea. With Bluetooth connectivity and small form factor, it can be easily integrated into any portable consumer electronics to provide health monitoring solution anytime, anywhere.

二零一三年香港國際醫療器材及用品展最受買家歡迎產品

獲獎的智慧型反射式脈搏血氧測量儀是一款便攜式醫療設備，只須把手指輕放在感測器上，便能準確量度血氧飽和度、心率和呼吸率，所得數據可用來分析睡眠質素和評估睡眠窒息症風險。此測量儀配備藍牙傳輸技術，而且體積細小，可整合至任何便携式消費性電子產品，以便使用者隨時隨地測量身體狀況，確保健康。

Winning Team	獲獎團隊
Dr. Lydia Leung Lap-wai, Director	梁立慧博士，總監
Mr. Luk Chi-tin, Project Manager	陸志天先生，項目經理
Mr. Arsenic Sze Ngok-man, Senior Engineer	施岳文先生，高級工程師
Mr. Raymond To Kwan-wai, Engineer	陶筠威先生，工程師
Mr. Luis Ng, Engineer	吳兆楠先生，工程師
Mr. Morton Mo Kwai-hung, Engineer	巫桂洪先生，工程師
Mr. Sunny Chen Hung-tat, Engineer	陳鴻達先生，工程師

Dr. Lydia Leung (left) receiving the award on behalf of ASTRI
梁立慧博士(左)代表應科院領獎

The Shanghai Education Expo 2013 The Ten Best IT in Education Products

ALS System is an in-class management system jointly developed by ASTRI and Active Learning Solutions Ltd. Built on top of ASTRI's Mobile Collaborative e-Learning Platform, the system provides a one-stop solution for teacher-student interaction, content distribution and classroom management, enhancing student interest as well as teaching efficiency and effectiveness. The system will also facilitate paradigm shift from the traditional teacher-centric learning to student-centric learning.

二零一三年第十屆上海教育博覽會十佳信息化產品獎

由應科院與Active Learning Solutions公司合作開發的ALS系統，是基於本院的移動協作電子學習平台而開發的一套課堂管理系統。ALS系統能促進師生之間的互動，為教學內容分發和課堂管理提供一站式解決方案，並且可以提高學生的學習興趣和促進教與學的成效。此系統亦有助改變傳統的教學模式，從以老師為中心轉變為以學生為中心的互動學習。

CEO of Active Learning Solutions Ltd Mr. Howard Wong (second from right) with other award winners
Active Learning Solutions 公司行政總裁黃慶凱先生（右二）與其他得獎者合攝

Winning Team	獲獎團隊
Dr. Edward Lor Kar-wing, Acting R&D Director, Project Coordination	羅家泳博士，署理研發總監，負責項目統籌
Mr. Andrew Sze Ho-pong, Senior Engineer, Project Management and Feature Requirement	時浩邦先生，高級工程師，負責項目管理及產品需求
Mr. Fang Laifa, Principal Engineer, Software Architecture and Development Lead	方來發先生，主任工程師，負責軟體架構及開發領導
Ms. Kam Yuk-ching, Principal Researcher, Customer Interface and Education Adviser	甘玉貞女士，主任研究員，負責用户接口及教育顧問
Mr. Zou Qiangqi, Senior Engineer, Client Application Software Development	鄒戧祁先生，高級工程師，負責客户端應用軟件開發
Mr. Au Wing-hei, Senior Engineer, Client Platform Software Development	歐穎僖先生，高級工程師，負責客户端平台軟件開發
Ms. Vivian Wang Yuanyuan, Senior Engineer, Server Platform Software Development	王媛媛女士，高級工程師，負責伺服器平台軟件開發
Mr. Ken Yau Man-yiu, Engineer, Quality Assurance	游文耀先生，工程師，負責質量保證

RFID Standards Alliance of Shenzhen 2013 The Most Innovative Product Award

ASTRI developed the miniaturized high frequency/ultra-high frequency (HF/UHF) RFID in response to market demands for low-cost miniaturized reader solutions. It can operate with only a power supply and an external antenna. The technology is widely used in various industries including logistics, transportation, anti-counterfeit and supply chain tracing for improving efficiency and accuracy.

二零一三年深圳市 RFID 產業標準聯盟產品交流會最具創新產品獎

應科院因應市場需要價廉的微型讀寫器方案而開發的HF／UHF RFID雙頻讀寫器獲得此獎項。該讀寫器只須要電源和外部天線即可運作，它已被廣泛應用於各個行業，包括物流、交通運輸、產品防偽及供應鏈跟蹤，以提高工作效率和準確性。

Mr. Michael Ren (left) flashes a big smile on receiving the award
任宇行先生(左)接過獎狀，喜形於色

Winning Team 獲獎團隊

Mr. Steve He Song, Senior Manager
何松先生，高級經理

Mr. Peter Wan Tak-ki, Principal Engineer
尹德奇先生，主任工程師

Mr. Michael Ren Yuxing, Senior Engineer
任宇行先生，高級工程師

Dr. Chen Jun, Senior Engineer
陳軍博士，高級工程師

Hong Kong RFID Awards 2013 Certificate of Merit

ASTRI's anti-counterfeit identification microsystem by SiP technology won this award. In contrast to traditional large and unwieldy RFID readers, this innovation allows an ordinary smartphone to be transformed into a portable RFID reader with the insertion of a tiny SIM card. As a result, consumers can on the spot authenticate products they intend to purchase by just scanning the RFID tags with a mobile device.

二零一三年「香港無線射頻識別大獎」優異獎

應科院研發的「基於系統級封裝技術的防偽認証微系統」榮獲此獎項。有別於較為笨重的傳統RFID閱讀器，此系統包含在一張細小的SIM卡內，只要將SIM卡插入手機，手機便即時變為便攜式RFID閱讀器。消費者在購物時只須用手機輕輕掃描RFID標籤，便可隨時隨地驗證貨品之真偽。

Winning Team 獲獎團隊

Mr. Steve He Song, Senior Manager
何松先生，高級經理

Mr. Peter Wan Tak-ki, Principal Engineer
尹德奇先生，主任工程師

Mr. Michael Ren Yuxing, Senior Engineer
任宇行先生，高級工程師

Dr. Chen Jun, Senior Engineer
陳軍博士，高級工程師

Mr. Steve He (right) receiving the certificate at the presentation ceremony
何松先生(右)於頒獎禮上接受獎座

External Appointments 外界任命

The following are external appointments held by senior ASTRI staff for the period 1 April, 2013 to 31 March, 2014.

下列為高級員工於二零一三年四月一日至二零一四年三月三十一日期間擔任的外界職務。

Dr. Cheung Nim-kwan, Chief Executive Officer

張念坤博士 行政總裁

- Chair of Institute of Electrical and Electronics Engineers (IEEE) Fellow Committee 2013
- Member, Research Grants Council, Education Bureau of HKSAR
- Member, Award Scheme Administration Committee, Innovation and Technology Scholarship Award Scheme, HKSAR
- Honorary Professor, Faculty of Engineering, The Chinese University of Hong Kong
- Member, Management Board of the Institute of Network Coding, The Chinese University of Hong Kong
- Member, Innovation and Technology Advisory Committee and Information and Communications Technology Services Advisory Committee, Hong Kong Trade Development Council
- Member, Research Grants Council Editorial Sub-group, Research Grants Council, Education Bureau of HKSAR

- 2013年國際電機電子工程師學會院士委員會主席
- 香港特區政府教育局研究資助局委員
- 香港特區政府創新科技獎學金計劃獎學金管理委員會委員
- 香港中文大學工程學院榮譽教授
- 香港中文大學網絡編碼研究所管理委員會委員
- 香港貿易發展局創新及科技諮詢委員會、及資訊及通訊技術服務諮詢委員會委員
- 香港特區政府教育局研究資助局編輯小組委員

Prof. Peter Yum, Chief Technology Officer

任德盛教授 首席科技總監

- Member, Appeal Tribunal Panel, Building Ordinance (Cap.123), Planning and Lands Branch, Development Bureau, Government Secretariat, HKSAR
- Member, Disciplinary Tribunal Panel, Electricity Ordinance (Cap.406), Environment Bureau, Government Secretariat, HKSAR
- Senior Technical Editor, Institute of Electrical and Electronics Engineers Communications Magazine
- Professor of Information Engineering, The Chinese University of Hong Kong
- Vice Editor-in-chief, Chinese Journal of Electronics
- Adviser, Hong Kong Federation of Education Workers
- Member, Technical Committee of Information Technology Standardization, Guangdong Province

- 香港特區政府總部發展局規劃地政科建築物條例(第123章)上訴審裁小組委員
- 香港特區政府總部環境局電力條例(第406章)紀律審裁小組委員
- 國際電機電子工程師學會通訊雜誌高級技術編輯
- 香港中文大學信息工程學教授
- 中國電子學報副主編
- 香港教育工作者聯會顧問
- 中國廣東省信息技術標準化技術委員會委員

Dr. Chao Shen-chang, Vice President and Group Director

- Member of Advisory committee, Department of Information Engineering, The Chinese University of Hong Kong
- Member of the Assessment Panel, Small Entrepreneur Research Assistance Programme, Innovation And Technology Commission
- Member of the Industrial Advisory Board of the Department of Electronic and Computer Engineering, The Hong Kong University of Science and Technology
- Honorary Adviser of IT Department at United Christian Hospital
- Co-opted Member of the Admission Panel, Incu-App Technology Incubation Programme, Hong Kong Science and Technology Parks Corporation

趙盛章博士 副總裁及研發群組總監

- 香港中文大學信息工程學系諮詢委員會委員
- 創新科技署小型企業研究資助計劃評審委員會評審委員
- 香港科技大學電子和計算機工程學系工業諮詢委員會委員
- 基督教聯合醫院信息技術部榮譽顧問
- 香港科技園公司網動科技創業培育計畫審批委員會外部評審員

Dr. Justin Chuang, Vice President and Group Director

- Editorial Board Member, China Communications Magazine, China Institute of Communications and the IEEE Communications Society
- Adjunct Professor, Electronic and Computer Engineering, The Hong Kong University of Science and Technology

莊哲義博士 副總裁及研發群組總監

- 中國通訊學會和國際電機電子工程師通訊學會中國通訊雜誌編輯委員
- 香港科技大學電子及計算機工程學系兼任教授

Dr. Wang Keh-chung, Vice President and Group Director

- Member, IEEE, MTT-9 Technical Coordinating Committee, "Digital Signal Processing" 2014
- Reviewer, IEEE Communication Magazine, 2014
- Co-chair of Industry Forum, International Wireless Symposium 2014
- Member, Advisory Board, Electronic and Computer Engineering, The Hong Kong University of Science and Technology

王克中博士 副總裁及研發群組總監

- 國際電機電子工程師學會2014年微波理論及技術分會聯絡委員會MTT-9委員
- 2014年國際電機電子工程師學會通訊雜誌論文評審委員
- 2014年國際無線研討會產業論壇聯席主席
- 香港科技大學電子及計算機工程學系諮詢委員會委員

Dr. Enboa Wu, Vice President and Group Director

- Board Member, China Solid State Lighting Alliance
- Specialist, Bureau of Information and Technology, Fujian Province
- Member, Centre Advisory Committee, The Hong Kong University of Science and Technology R&D Centre, Foshan
- Adviser, Xiamen Optoelectronics Industry Association

吳恩柏博士 副總裁及研發群組總監

- 中國固態照明聯盟董事會成員
- 中國福建省信息化局專家
- 中國佛山香港科技大學研發中心中央咨詢委員會委員
- 廈門市光電子行業協會顧問

Dr. Francis Lee, Vice President and R&D Director

- Member, Potential Employers, BSc (Hons) in Green Energy Science of The Hong Kong Baptist University Accreditation
- Guest Lecturer, Physics Department, The Hong Kong Baptist University

李致淳博士 副總裁及研發總監

- 香港浸會大學綠能科學學士班確認程序可能僱主團成員
- 香港浸會大學物理系客座講師

Dr. James Lei, Director

- Reviewer, Institute of Electrical and Electronics Engineers Communications Magazine
- External Reviewer, Research Grants Council of the University Grants Committee, Hong Kong

雷志斌博士 總監

- 國際電機電子工程師學會通訊雜誌評審員
- 香港大學教育資助委員會研究資助局外部評審員

Dr. Jay Liou, Programme Director

- Co-opted Member of the Admission Panel, Incu-App Technology Incubation Programme, Hong Kong Science and Technology Parks Corporation

劉遠昭博士 項目總監

- 香港科技園公司網動科技創業培育計劃審批委員會外部評審員

Dr. Tsai Chen-jung, R&D Director

- Member, Forum Committee, China International Optoelectronic Expo

蔡振榮博士 研發總監

- 中國國際光電高峰論壇專家委員會委員

A Year in Capsule 大事紀要

2013

17. 4. 2013

More than 300 technology experts and practitioners attended a technology forum hosted by ASTRI at the IoT Symposium held in the Hong Kong Science Park. Dr. Justin Chuang (top), Vice President and Group Director of Communications Technologies Group, gave a keynote speech "LTE and Beyond 4G Technology for Internet-of-Things" at the opening ceremony of the symposium.

應科院參與在香港科學園舉行的香港物聯網論壇並舉辦科技研討會，吸引超過300名科技專家及業內人士參加。應科院通訊技術群組副總裁及研發群組總監莊哲義博士(上圖)於論壇開幕禮上以「LTE和超越4G物聯網技術」為題發表演講。

22. 4. 2013

ASTRI signed a Memorandum of Understanding with the Institute of Advanced Technology, University of Science and Technology of China, whereby both parties agreed to forge collaboration in technology development and transfer and render support to industry.

應科院與中國科學技術大學先進技術研究院簽訂了合作意向書，雙方同意在技術研發、先進技術成果轉化和產業培育等多方面加強合作。

5 – 6. 2013

ASTRI and the Hong Kong Trade Development Council jointly participated in the Expo Central China 2013 and the China (Beijing) International Fair for Trade in Services, held respectively in Zhengzhou from 18 to 20 May and Beijing from 28 May to 1 June, attracting thousands of visitors. Mr. Gregory So, Secretary for Commerce and Economic Development, showed off ASTRI's immersive distraction goggle displayed at the Zhengzhou show.

應科院與香港貿易發展局合作，參展於 5 月 18 至 20 日在鄭州舉行的「第八屆中國中部投資貿易博覽會」及5月28至6月1日在北京舉行的「第二屆中國（北京）國際服務貿易交易會」，吸引數以千計人士入場參觀。商務及經濟發展局局長蘇錦樑先生在鄭州的博覽會上向觀眾展示本院的沉浸式分散注意力醫療目鏡。

17 – 21. 6. 2013

ASTRI took part in "The Eleventh China Cross-Straits Technology and Projects Fair" at the Industry and Information Technology Pavilion of the Fuzhou International Cross-Straits Convention and Exhibition Centre to showcase its latest technologies. Memorandums of Understanding were signed between ASTRI and several Fujian partners to foster technology transfers, enhance industry competitiveness and create economic impacts.

應科院參展「第十一屆中國海峽項目成果交易會」，在福州海峽國際會展中心工業和信息化館展示最新科研成果。本院與數家當地公司簽署合作備忘錄，協商共同促進技術轉移，為企業提升競爭力，並創造經濟效益。

23 – 30. 8. 2013

ASTRI sponsored the Joint School Science Exhibition for the fifth consecutive year, showing support for young scientists and encouraging them to apply their innovations to daily life.

應科院連續第五年贊助聯校科學展覽，以表示對青年科學家的支持並鼓勵他們將創意融入生活。

4. 9. & 8. 10. 2013

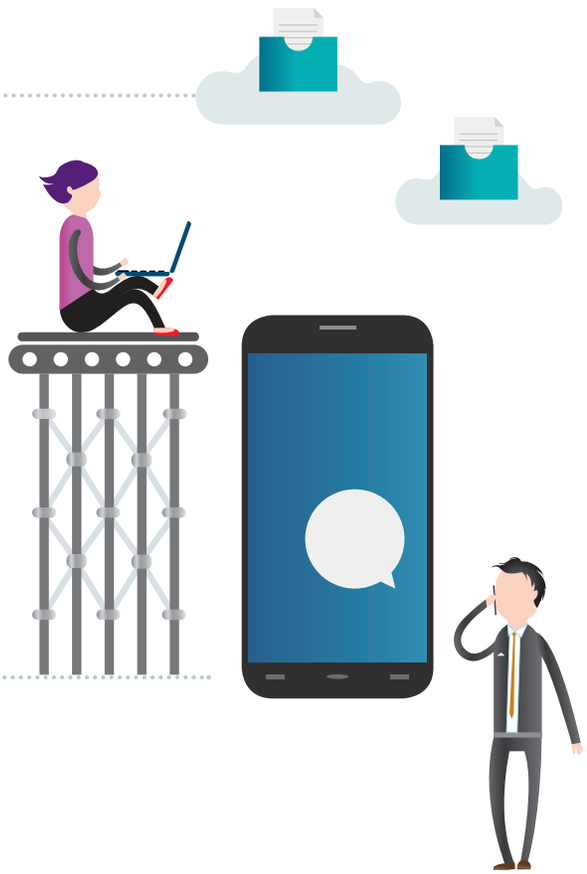
ASTRI's annual flagship event "ASTRI Industry and University Consultation Forum" was successfully held in Shenzhen and Hong Kong, offering platforms for nearly 600 participants from industry and academia to learn more about ASTRI's technologies and explore collaboration opportunities.

應科院每年一度的大型活動「應科院科技項目推介會」分別於深圳和香港成功舉行。近 600 名學術界和工業界人士出席了推介會，以了解應科院最新技術並探討合作機會。

21. 10. 2013

Veteran industrialist Mr. Wong Ming-yam (left) took over from Dr. Patrick Wang as the new Board Chairman. Dr. Wang had been at the helm of the ASTRI Board since 2007.

工業家王明鑫先生(左)接替由2007年起執掌應科院董事局的汪穗中博士，成為應科院新一任主席。



21. 10. 2013

TCL Communication entered into strategic partnership with ASTRI to apply ASTRI's communications technologies to TCL's existing and future wireless products. ASTRI CEO Dr. Cheung Nim-kwan (right) and TCL Communication CEO Dr. George Guo exchange a warm handshake after the signing ceremony.

TCL通訊與應科院建立長期策略合作夥伴關係，協議將本院研發的通訊技術應用於TCL現有及未來的無線產品。應科院行政總裁張念坤博士(右)與TCL通訊科技控股有限公司首席執行官郭愛平博士於簽約儀式上握手互賀。

11. 2013 – 4. 2014

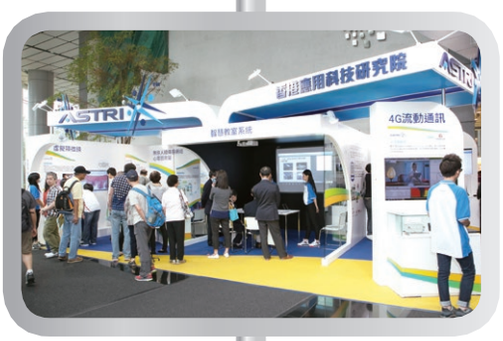
The augmented reality (AR) technology developed by ASTRI was used in "Legends of the Giant Dinosaurs" exhibition staged at the Hong Kong Science Museum. Dinosaurs popped out live in mobile phones and tablets through Apps using AR, wowing visitors.

於香港科學館舉行的「巨龍傳奇」展覽，透過結合了應科院擴增實境技術的應用程式，令恐龍在手機和平板電腦上活現眼前，為入場參觀市民製造驚喜。

2 – 10. 11. 2013

With the theme "Innovative Technologies for Smart Living", ASTRI showcased new applications for enhancing lifestyle during InnoCarnival 2013 featuring games, live demonstrations, talks and workshops. This annual mega show was organized by the Innovation and Technology Commission in Hong Kong Science Park.

應科院以「智能生活新體驗」為主題，於香港科學園舉行的「創新科技嘉年華 2013」展示如何利用嶄新科技提升生活，節目內容包括遊戲、技術演示、演講及工作坊。此每年一度的大型嘉年華會由創新科技署主辦。



16. 12. 2013

ASTRI and HP Hong Kong established the "ASTRI-HP Information Technology Research Centre" to foster the adoption of information technology by Hong Kong business enterprises. The collaboration kicked off with an Industry Collaborative Project covering applied research on big data analytics and cloud computing.

應科院與 HP 香港合作成立「應科院 • HP 資訊科技研究中心」，目標是推進資訊科技在本地企業的應用和發展。一個「業界合作項目」隨即展開，集中研發大數據分析和雲端運算相關應用技術。

2014

7 – 10. 1. 2014

ASTRI made its debut at the 2014 International Consumer Electronics Show (CES 2014) held in Las Vegas, exhibiting a selection of its home-grown innovative technologies which are already available for commercialization. Housed in the Hong Kong Pavilion, the ASTRI booth was visited by about 10,000 people resulting in many follow-up activities and enquiries for business transactions.

應科院首次參與在美國拉斯維加斯舉行的「2014 年國際消費電子展」，展示一系列香港研發及可以產業化的創新技術。本院展位設置於香港館內，共吸引了約10,000名與會者前來參觀，會後亦有不少查詢及跟進，有望達成商業協議。

21. 1. 2014

ASTRI's optical multi-touch technology was deployed by a company in its interactive advertising truck and was launched in the market. The technology, which can transform ordinary glass into an interactive touch screen, is highly flexible in terms of display space required and is particularly effective in presenting a new shopping experience to consumers.

一家本地公司推出利用應科院光學多點觸控技術驅動的互動展覽車。該技術可以將一塊普通玻璃變成一個互動顯示屏，令用家可以靈活運用空間作展示用途，其新穎的展示方式為消費者帶來全新購物體驗。

13. 2. 2014

Executive Councillor Mrs. Fanny Law visited ASTRI. Board Chairman Mr. Wong Ming-yam and CEO Dr. Cheung Nim-kwan received the guest, who also met senior management to learn about ASTRI's latest development.

行政會議成員羅范椒芬女士造訪應科院。應科院董事局主席王明鑫先生及行政總裁張念坤博士與一眾管理層接待來賓，並介紹應科院的最新發展。

5. 3. 2014

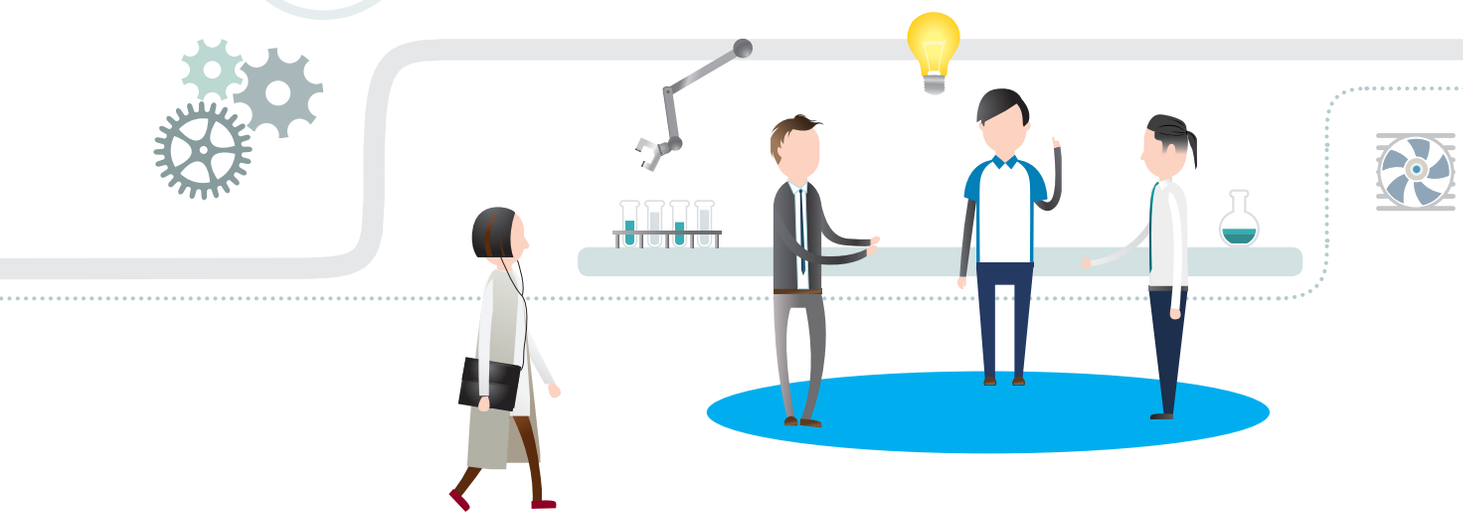
A delegation comprising representatives from the Ministry of Science and Technology and the Liaison Office of the Central People's Government visited ASTRI. Dr. Wang Keh-chung (left), Vice President and Group Director of IC Design Group, reported on the progress of the Hong Kong Branch of National Engineering Research Centre, as well as relating the latest technology accomplishments to the guests.

國家科技部代表團及中央人民政府駐香港特別行政區聯絡辦公室代表造訪應科院。本院集成電路設計群組副總裁及研發群組總監王克中博士(左)匯報國家工程中心香港分中心的工作進程，並為來賓展示最新的科研成果。

3. 2014

ASTRI and its partner won top honours in the Hong Kong ICT Awards including two gold and one bronze awards. The award winning technologies include portable interactive surface, augmented reality and visually enhanced ultra-HD application.

應科院及其合作夥伴在「香港資訊及通訊科技獎」中獲兩項金獎和一項銅獎。得獎技術包括便攜式互動桌面、擴增實境及視覺提升超高清顯示技術。



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Overview 概況

For FY2013/14, the income and expenditure of ASTRI amounted to HK$427,215,326 and HK$422,871,891 respectively, resulting in a surplus of HK$4,343,435.

The funds from the Government comprised HK$129,008,612 from recurrent subvention, HK$204,706,863 from ITF project funds, HK$341,209 from ITF General Support Programme, HK$1,162,279 from Public Sector Trial Scheme, HK$3,890,103 from ITF Internship and HK$4,892,303 from ITF for National Engineering Research Centre For Application Specific Integrated Circuit System (Hong Kong Branch). In FY2013/14, the income from the industry increased by 28% to HK$83,213,957, and the income to be ploughed back to the Government also increased from HK$9,120,079 in FY2012/13 to HK$22,192,895 in FY2013/14.

The total expenditure of recurrent subvention amounted to HK$130,299,645, which represented a decrease of HK$6,163,858 (4.5% decrease) compared with the previous year. The decrease was mainly due to savings in general operating expenditure. ASTRI's operation remained steady with prudent financial management throughout the year.

The total expenditure of the R&D projects amounted to HK$230,519,819, of which 74% of the expenditure was spent on manpower and 26% of the expenditure was spent on equipment and other direct costs. The total expenditure mainly represented the actual cash outflow incurred during the year for 60 full projects, 22 seed projects and 2 public sector trial scheme projects. Meanwhile, the internship expenditure amounted to HK$3,890,103, which represented the actual cash outflow of salary payment for interns engaged in 33 full projects.

The consolidated accounts for the year ended 31 March 2014 of ASTRI and its subsidiary, ASTRI Science and Technology Research (Shenzhen) Company Limited, have been audited by independent auditors with clean audit opinion, an extract of the Consolidated Statement of Comprehensive Income and Consolidated Statement of Financial Position are set out in the following pages.

應科院在二零一三／一四年度的收入和支出分別為港幣427,215,326元及港幣422,871,891元，所得盈餘為港幣4,343,435元。

來自政府款項包括經常性撥款港幣129,008,612元；創新及科技基金的研發經費港幣204,706,863元；創新及科技基金的一般支援計劃資助港幣341,209元；公營機構試用計劃資助港幣1,162,279元；創新及科技基金的實習研究員計劃資助港幣3,890,103元及創新及科技基金向國家專用集成電路系統工程技術研究中心香港分中心提供的資助港幣4,892,303元。二零一三／一四年度從業界所得的總收入增加28%至港幣83,213,957元，而回饋給政府的收益由二零一二／一三年度的港幣9,120,079元增加至二零一三／一四年度的港幣22,192,895元。

經常性撥款的總支出為港幣130,299,645元，比去年同期減少港幣6,163,858元(4.5%)，主要是由於一般營運開支的節省。應科院全年保持穩定經營及繼續以審慎原則執行財務管理。

研發項目的總開支達港幣230,519,819元，當中74%用於人力資源，26%用於儀器及其他直接開支。總開支主要為六十個正式項目，二十二個種子項目和兩個公營機構試用計劃項目的實際現金支出。同時，實習研究員計劃支出為港幣3,890,103元，為實習研究員參與三十三個正式項目的實際薪酬支出。

應科院及其附屬機構應科院科技研究〈深圳〉有限公司全年截至二零一四年三月三十一日止的綜合賬目經由獨立核數師審計，並獲發無保留審計意見書。綜合全面收益表及綜合財務狀況表詳載於後頁。

Consolidated Statement of Comprehensive Income
綜合全面收益表

For the year ended 31 March, 2014 截至二零一四年三月三十一日止年度		2014(HK$) 二零一四年(港幣)	2013 (HK$) 二零一三年(港幣)
Subvention	**資助**		
Income from Government subvention	政府資助收入	129,008,612	133,273,305
Administrative expenses	行政支出	(130,299,645)	(136,463,503)
Deficit on subvention	資助虧損	(1,291,033)	(3,190,198)
Project Funding from Innovation and Technology Fund and Industry Contributions	**創新及科技基金及業界投入資金**		
Project fund income	項目收入		
– Innovation and Technology Fund	－創新及科技基金	204,706,863	243,442,610
– Industry contributions	－業界投入資金	24,650,677	22,679,258
Project expenditure	項目支出	(229,357,540)	(266,121,868)
Balance on project funding	項目資金餘額	–	–
Project Fund Income – General Support Programme	**項目資金收入－一般支援計劃**		
– Innovation and Technology Fund	－創新及科技基金	341,209	306,030
– Industry contributions	－業界投入資金	292,800	43,720
Project expenditure	項目支出	(634,009)	(349,750)
Balance on project funding	項目資金餘額	–	–
Project Fund Income – Public Sector Trial Scheme	**項目資金收入－公營機構試用計劃**		
Innovation and Technology Fund	創新及科技基金	1,162,279	1,251,404
Project expenditure	項目支出	(1,162,279)	(1,251,404)
Balance on project funding	項目資金餘額	–	–
Internship Funding from Innovation and Technology Fund	**創新及科技基金的實習研究員計劃基金**		
Internship fund income	實習研究員計劃資助收入	3,890,103	3,777,590
Internship expenditure	實習研究員計劃支出	(3,890,103)	(3,777,590)
Balance on internship funding	實習研究員計劃資助餘額	–	–
Funding Support from Innovation and Technology Fund for National Engineering Research Centre For Application Specific Integrated Circuit System (Hong Kong Branch)	**創新及科技基金給國家專用集成電路系統工程技術研究中心(香港分中心)的資助**		
Expenditure incurred in relation to Funding Support from Innovation and Technology Fund	由創新及科技基金資助的有關支出	(4,892,303)	–
Amount for reimbursement	發還款項	4,892,303	–
		–	–

For the year ended 31 March, 2014 截至二零一四年三月三十一日止年度		2014(HK$) 二零一四年(港幣)	2013 (HK$) 二零一三年(港幣)
Project Funding from The Hong Kong Jockey Club	**香港賽馬會項目基金**		
Project fund income	項目資助收入	–	362,447
Project expenditure	項目支出	–	(362,447)
Balance on project funding	項目資助餘額	–	–
Other Net Income	**其他淨收入**		
Other income	其他收入	58,270,480	42,127,367
Other expenses	其他支出	(29,651,497)	(25,852,157)
Other net income	其他淨收入	28,618,983	16,275,210
Amount Refund to the Government of The Hong Kong Special Administrative Region	**退還香港特別行政區政府款項**	(22,192,895)	(9,120,079)
Surplus Before Taxation	**稅前盈利**	5,135,055	3,964,933
Income Tax Credit/(Expense)	**稅收抵免／(支出)**	(791,620)	125,392
Surplus for the Year	**本年度盈利**	4,343,435	4,090,325
Other Comprehensive Income (Loss) to be re-classified to Profit or Loss in subsequent periods	**在以後會計期重新分類作收入或虧損的其他全面收入(虧損)**		
Exchange difference arising on translation of foreign operations	外幣報表換算差額	(10,063)	11,056
Total Comprehensive Income for the Year	**本年度全面總收入**	4,333,372	4,101,381
Surplus for the Year Attributable to:	**本年度盈利分配於：**		
Owners of the Company	公司擁有人	4,343,435	4,106,958
Non-controlling interests	非控股權益	–	(16,633)
		4,343,435	4,090,325
Total Comprehensive Income for the Year Attributable to:	**本年度全面總收入分配於：**		
Owners of the Company	公司擁有人	4,333,372	4,118,014
Non-controlling interests	非控股權益	–	(16,633)
		4,333,372	4,101,381

Consolidated Statement of Financial Position
綜合財務狀況表

At 31 March, 2014 於二零一四年三月三十一日		2014(HK$) 二零一四年(港幣)	2013(HK$) 二零一三年(港幣)
Non-current Assets	**非流動資產**		
Property, plant and equipment	物業，機器及設備	5,791,065	7,115,930
Current Assets	**流動資產**		
Accounts and other receivables	賬戶及其他應收款項	24,993,949	25,401,266
Amount due from the Government of the Hong Kong Special Administrative Region	應從香港特別行政區政府收回款項	4,892,303	–
Tax receivable	可退回稅項	188,333	–
Bank balances and cash	銀行結餘及現金	218,008,965	203,460,948
		248,083,550	228,862,214
Current Liabilities	**流動負債**		
Accounts and other payables	賬戶及其他應付款項	58,106,612	56,014,405
Receipts in advance	預收款項	102,763,139	104,817,484
Amount due to the Government of the Hong Kong Special Administrative Region	應付予香港特別行政區款項	22,202,916	9,138,977
		183,072,667	169,970,866
Net Current Assets	**流動資產淨值**	65,010,883	58,891,348
Total Assets Less Current Liabilities	**總資產減流動負債**	70,801,948	66,007,278
Non-current Liability	**非流動負債**		
Deferred tax liabilities	遞延稅項	(955,526)	(494,228)
Net Assets	**資產淨值**	69,846,422	65,513,050
Equity	**股權**		
Issued capital	股本	2	2
Accumulated surplus	累計盈餘	69,797,189	65,453,754
Translation reserve	折算儲備	49,231	59,294
Total Equity	**股權總值**	69,846,422	65,513,050

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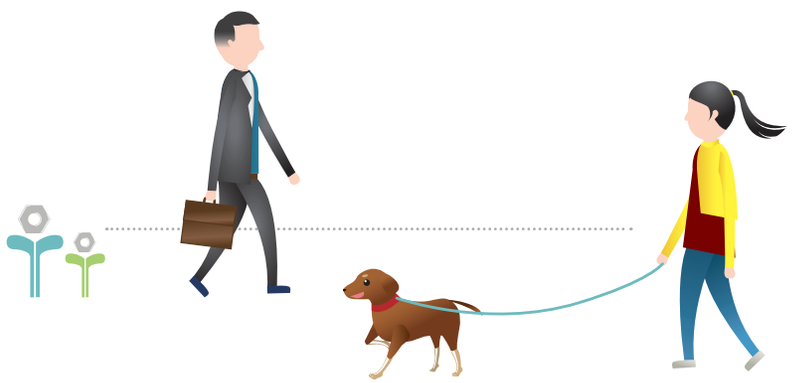

ASTRI Annual Report 2013/14 Feedback Form
應科院 2013/14 年報意見收集

The Annual Report is an important communication publication between ASTRI and its stakeholders. To enhance the quality of our reporting, please let us have your views by filling in the form and returning it to Corporate Communications Department by fax (852) 3406 2801 or email corporate@astri.org.

年報是應科院與客戶和大眾維持良好溝通的重要刊物。為提升報告的質量，我們誠邀閣下提供寶貴意見。請填妥此表格並傳真至 (852) 3406 2801 或電郵至 corporate@astri.org，傳訊部收。

Please circle the appropriate number.
請在適當數字上加圓圈。

		It is easy to understand 內容清楚明白					The information provided is helpful 提供有用資料				
		Strongly disagree 非常不同意				Strongly agree 非常同意	Strongly disagree 非常不同意				Strongly agree 非常同意
Chairman's Foreword	主席序言	1	2	3	4	5	1	2	3	4	5
CEO's Review	行政總裁回顧	1	2	3	4	5	1	2	3	4	5
Performance	業績	1	2	3	4	5	1	2	3	4	5
Corporate Governance	企業管治	1	2	3	4	5	1	2	3	4	5
People	人才匯聚	1	2	3	4	5	1	2	3	4	5
Reports of R&D Groups & Teams	研發群組及小組報告	1	2	3	4	5	1	2	3	4	5
A Year in Capsule	大事紀要	1	2	3	4	5	1	2	3	4	5
Financial Report	財務報告	1	2	3	4	5	1	2	3	4	5

Your overall rating of this Annual Report is (Please circle your answer) • 你給這份年報的總評分為(請在適當位置加上圓圈)：

Poor 差劣	Fair 尚可	Good 好	Very Good 非常好	Excellent 優異

Other comments/suggestions • 其他意見：

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