Annual Report
2024/25
年報

ASTRI

TECH FOR EVERYONE
科技惠民

TECH FOR EVERYONE

科技惠民

In today's increasingly digital world, making technological advancements accessible and beneficial to all in the society is of utmost importance. Much like a fission process that rapidly multiplies and spreads, technology has the power to break down barriers and create opportunities on a wide scale. This dynamic growth lays a solid foundation for a more inclusive future — one where everyone has the opportunity to participate, innovate, and thrive through the transformative potential of technology.

在當今日益數碼化的世界中，讓科技進步惠及所有人並為社會帶來裨益至關重要。正如裂變過程能迅速增量和傳播，科技具備衝破障礙以至大規模創造機遇的力量。這種動態增長為更共融的未來奠下基礎，創造一個讓每個人都有機會藉科技變革潛力而參與其中、創新發展並茁壯成長的未來。

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EXECUTIVE SUMMARY 行政摘要

10 Key Achievements 大成就

The Hong Kong Applied Science and Technology Research Institute (ASTRI) had a highly productive year in 2024/25, marked by groundbreaking technological advancements, strengthened industry collaborations, and notable contributions to Hong Kong's smart city development. Below are the key highlights:

香港應用科技研究院（應科院）於2024/25年度積極進取，成果豐碩，不僅開展多項重要合作計劃，還在不同的科技領域取得突破，為香港智慧城市的發展作出貢獻。主要成就包括：

01 Significant Project Growth 項目大幅增長

The number of new projects initiated increased by 23% year-on-year, extending the reach and impact of innovation and technology to a broader community.

新開展項目數量按年增長23%，將創新科技的覆蓋範圍和影響力擴展至更廣泛的社群。

02 Enhanced Commercialisation 商品化成效提升

Industry and commercialisation income grew by 13% and 5% year-on-year, respectively, underscoring robust market demand and affirming the readiness of ASTRI's technologies and solutions.

來自業界收入和商品化收入分別按年增長13%和5%，突顯了強勁的市場需求，並印證了應科院的技術和解決方案發展成熟，已準備好推出市場。

03 Integration into Public Services 融入公共服務

ASTRI deepened partnerships with government departments and public organisations, applying technologies across diverse areas such as utilities, smart mobility, construction safety, and healthcare. These initiatives improved operational efficiency and enhanced the user experience in public services.

應科院深化與政府部門和公營機構的合作夥伴關係，將技術應用於公用事務、智慧出行、建築安全和醫療保健等多個領域。這些舉措提升了營運效率，改善了公共服務的用戶體驗。

04 Recognition for Innovation 創新獲得肯定

ASTRI secured 27 US patents in 2024, ranking 42nd amongst the National Academy of Inventors' "Top 60 non-profit institutions and government agencies granted US utility patents" — the only Hong Kong R&D institute featured on this prestigious list.

應科院在2024年取得27項美國專利，在美國發明家學會「獲授美國實用專利的60大非牟利機構和政府機關」排名中位列第42位，是香港唯一上榜的研發機構。

05 Ecosystem Development 生態系統發展

The establishment of our fourth technology alliance, the ConTech & PropTech Alliance (CPTA) in July 2024, strengthened cross-sector collaboration and accelerated technology commercialisation through enhanced stakeholder engagement.

應科院於2024年7月成立第四個科技聯盟—「建築及房地產科技聯盟」(CPTA)，加強跨界別合作，並透過提升持份者參與度來加速技術商品化。

06 Mainland Expansion 加快內地發展

ASTRI's office at the Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone was officially opened in October 2024, marking ASTRI's further expansion into the Greater Bay Area. In addition, the Technology Transfer and Commercialisation centres in Suzhou and Beijing have strengthened industry collaboration between Hong Kong and Chinese Mainland, facilitating the transformation of laboratory innovations into market-ready solutions.

應科院位於河套深港科技創新合作區的辦事處於2024年10月正式揭幕，標誌着應科院進一步拓展大灣區市場。此外，應科院在北京及蘇州設立的成果轉化中心，有助加強香港與內地的產業合作，促進實驗室創新成果轉化為市場可用的解決方案。

07 Global Recognition 廣獲國際認可

ASTRI received 52 local and international awards, affirming our research excellence and practical solutions that address real-world challenges across diverse industries. Our technologies, developed in collaboration with our partners, achieved commendable results in several prestigious competitions.

應科院榮獲52項本地及國際獎項，肯定我們卓越的研究成果和能夠解決不同行業實際挑戰的實用方案。應科院與合作夥伴共同研發的創新科技亦在多項比賽中取得佳績。

08 International Partnerships 擴展國際合作

ASTRI has signed Memoranda of Understanding (MoUs) with government bodies, public organisations, and private enterprises across Hong Kong, Chinese Mainland, France, Malaysia, Korea, and Spain. These partnerships have enabled the gradual realisation of collaborative projects, demonstrating ASTRI's capability to bring homegrown technologies to the global stage.

應科院與香港、中國內地、法國、馬來西亞、韓國和西班牙的政府機構、公營機構和私營企業簽署合作備忘錄。這些夥伴關係有助逐步落實合作項目，展現應科院將本地研發技術推向國際舞台的能力。

09 Talent Development 加強人才培育

In addition to collaborating with The Hong Kong University of Science and Technology and The University of Hong Kong, ASTRI has partnered with City University of Hong Kong and The Hong Kong Polytechnic University to further expand the ASTRI Work-Study Programme (PhD). This initiative empowers full-time staff to stay at the forefront of technological advancements and apply cutting-edge theories in practice.

除了香港科技大學與香港大學，應科院新增與香港城市大學和香港理工大學合作，進一步擴展「應科院兼讀博士生工作計劃」。此項計劃讓參加的全職員工緊貼科技發展，並將尖端科技理論應用於不同研發項目。

10 ESG Commitment 兌現ESG承諾

ASTRI has strengthened its commitment to sustainability, social responsibility, and corporate governance through the launch of various ESG initiatives, focusing on energy efficiency, employee wellbeing, and corporate best practices. In addition to these internal efforts, ASTRI has advanced research projects that harness innovation to tackle global challenges, delivering sustainable solutions that benefit society as a whole.

應科院推出多項環境、社會及管治(ESG)措施，聚焦改善能源效益、員工福祉和企業最佳實踐，兌現應科院推動可持續發展、加強社會責任和卓越企業管治的承諾。除了內部推行ESG外，應科院還開展相關研究項目，利用創新技術應對全球挑戰，為整個社會提供可持續的解決方案。

FAST FACT
數字概覽

As of 31 March 2025, ASTRI:
截至2025年3月31日，應科院：

carried out
已開展

1,201

research projects
個研發項目

completed
已完成

1,587

technology transfers
項技術轉移

was granted
已獲

1,155

patents
項專利

In fiscal year 2024/25, ASTRI:
在2024/25財政年度，應科院：

Level of industry income
來自業界收入水平達

59.2%

Industry and other income
來自業界及其他收入按年

+12.8%

y-o-y

hired
聘用

684

employees in Hong Kong and Chinese Mainland
名員工，分佈香港及中國內地辦事處

received
榮獲

52

local and international awards
個本地及國際獎項

commenced
開展

49

new projects
個新項目

signed
簽訂

32

licensing agreements
份授權協議

A YEAR AT A GLANCE
年內盛事

ASTRI is at the forefront of the Business of Innovation and Technology Week, a flagship event hosted by the Innovation, Technology and Industry Bureau of the HKSAR Government. ASTRI's involvement was marked by its prominent presence at both the Digital Economy Summit (DES) and the InnoEX. At InnoEX, ASTRI was showcasing a range of attention-grabbing innovative technologies that promise to translate the smart city vision into reality. Professor Sun Dong (left, front row), Secretary of Innovation, Technology and Industry of the HKSAR Government and Ir Tony Wong (left, back row), Commissioner for Digital Policy of the HKSAR Government showed their support at our booth.

應科院積極參與香港特區政府創新科技及工業局舉辦的旗艦活動「國際創科營商周」，包括「數字經濟峰會」和「香港國際創科展」(InnoEX)。應科院於InnoEX展出多項備受矚目的創新科技，讓未來智慧城市活現眼前。香港特區政府創新科技及工業局局長孫東教授（前排左）及香港特區政府數字政策專員黃志光工程師（後排左）親臨支持。

ASTRI celebrated the first anniversary of the Smart Mobility Technology (C-V2X) Alliance (SMTA) and unveiled Hong Kong's first in-depth study on the development of connected and autonomous vehicles.

應科院舉行「智慧出行車聯網技術聯盟」成立一週年慶典，並發表香港首份有關聯網自動駕駛汽車發展的研究報告。

ASTRI signed a Memorandum of Understanding with the Immigration Department of the HKSAR Government to promote the utilisation of innovative technologies aimed at providing top quality and efficient public services. Picture shows Mr Benson Kwok, Director of Immigration of the HKSAR Government delivering a speech at the ceremony.

應科院與香港特區政府入境事務處簽署合作備忘錄，攜手推動各種適用於出入境服務的創新科技應用，以進一步提供更高效優質的公共服務。圖為入境事務處處長郭俊峰先生於會上致辭。

ASTRI further expanded its "Summer Internship Programme" and "FinTech Future Leader Academy". With a record of 3,000+ applications, 110 students from renowned universities in Hong Kong and abroad have been selected for an eight-week innovation and technology experience.

應科院繼續擴展「暑期實習計劃」及「金融科技未來領袖學院」實習計劃，實習生人數再創新高。從逾3,000多份申請中獲選的110名來自香港和海外知名大學的實習生，順利參與為期八週的創科工作體驗。

For eight consecutive years, ASTRI has participated in Mobile World Congress Shanghai and presented a range of advanced technologies in 5G and beyond, as well as award-winning smart mobility solutions to industry leaders and stakeholders.

應科院連續八年參與「上海世界移動通訊大會」，於展會中展出一系列先進技術，向行業領袖和各持份者展示5G及相關領域的技術創新，以及屢獲殊榮的智慧出行解決方案。

2024

April 4月

June 6月

ASTRI set up the ConTech & PropTech Alliance (CPTA) in July 2024 to facilitate a profound and positive transformation in the real estate and construction industries, accomplished by incorporating cutting-edge technology, fostering innovation and collaboration among government, industry, academia and research institutions, with a view to propelling sustainable and efficient practices. Picture shows Ir Prof Sunny Lee, Board Chairman of ASTRI, speaking at the launch ceremony.

應科院於2024年7月成立「建築及房地產科技聯盟」，透過融合前沿技術，推動建築及房地產行業積極升級轉型，促進「政產學研」的創新與合作，推動永續及高效的實踐方式。圖為應科院董事局主席李惠光教授工程師於啟動禮上致辭。

July 7月

ASTRI and Citybus Limited signed a key Memorandum of Understanding (MoU) to collaborate on research and development projects related to autonomous driving and Cellular Vehicle-to-Everything (C-V2X) technology, aiming at establishing a cost-effective and world-leading smart mobility solution, further enhancing Hong Kong's long-established and well-regarded public transportation system.

應科院與城巴有限公司簽署一份關鍵的合作備忘錄，共同開展有關自動駕駛及車聯網系統的研發工作，以建立具成本效益及全球領先的智慧出行應用方案，並進一步提升香港由來已久及廣受讚譽的公共交通系統。

August 8月

ASTRI relocated its operations in Shenzhen to the Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone. This move aims to enhance collaborative innovation among industry, academia, and research institutes in the region. Mr Zeng Jian-peng, then Director-General of the Hetao Development Authority in Shenzhen (fourth from left) and Ms Lillian Cheong, Under Secretary for Innovation, Technology and Industry of the HKSAR Government (fourth from right) were among the officiating guests of the opening ceremony.

應科院深圳辦事處遷往河套深港科技創新合作區，標誌着應科院進一步拓展中國內地業務，加快與大灣區在創科技領域上的合作。時任深圳市河套深港科技創新合作區深圳園區發展署署長曾堅朗先生（左四）及香港特區政府創新科技及工業局副局長張曼莉女士（右四）等應邀擔任開幕禮主禮嘉賓。

October 10月

ASTRI showcased smart mobility technologies, including cutting-edge Cellular Vehicle-to-Everything (C-V2X) technologies aim at enhancing autonomous driving safety, at the 44th HKTDC Hong Kong Electronics Fair.

應科院於第44屆「香港秋季電子產品展」上展示智慧出行科技，包括其尖端的車聯網(C-V2X)技術，旨在提升自動駕駛安全。

ASTRI showcased a range of its pioneering technologies at InnoCarnival, organised by the Innovation and Technology Commission of the HKSAR Government, enhancing public awareness on innovation and technology.

應科院於香港特區政府創新科技署主辦的「創新科技嘉年華」上展示多項尖端技術，冀加深大眾對創科的認識。

ASTRI signed a Memorandum of Understanding (MoU) with the Federation of Malaysian Manufacturers (FMM) to support the digital transformation of Malaysia's diversified industries. The MoU aims to leverage ASTRI's homegrown smart manufacturing technologies to help modernise FMM members' operations.

應科院與馬來西亞廠商聯合會簽署合作備忘錄，善用應科院於本地研發的智能製造科技，協助大馬不同產業數碼轉型和優化業務流程。

ASTRI presented its pioneering low-altitude economy technologies at the GBA (Shenzhen) iForum cum Dinner 2025, hosted by the Federation of Hong Kong Industries (FHKI) and co-organised by ASTRI. The Hon John Lee, Chief Executive of the Hong Kong Special Administrative Region, and Mr Meng Fanli, Deputy Secretary of the Communist Party of China (CPC) Guangdong Provincial Committee and the Secretary of the CPC Shenzhen Municipal Committee, accompanied by Ir Prof Sunny Lee, Board Chairman of ASTRI and Board Members, to explore our advancements in drone technology, communications positioning modules, silicon carbide (SiC) power modules, next-generation 5G antennas for drone detection and tracking.

在應科院董事局主席李惠光教授工程師和多位董事局成員陪同下，香港特別行政區行政長官李家超先生及廣東省委副書記、深圳市委書記孟凡利先生在香港工業總會主辦、應科院協辦的「大灣區（深圳）工商界高峰論壇及交流會2025」上，了解應科院研發的嶄新低空經濟科技，包括無人機技術、無人機通訊定位模組、碳化矽功率模組以及用於無人機檢測與追蹤的新一代5G天線等。

ASTRI organised Tech Applied Summit, Hong Kong's first premier innovation and technology event in 2025. With the theme "Leading Tech Forward", the summit has brought together over 40 global leaders from government, industry, academia, research, and investment sectors. More than 1,500 attendees, including technologists, startups, business leaders, and innovation and technology enthusiasts, were engaging in discussions on cutting-edge topics such as generative AI, the low-altitude economy, and smart cities. (From left to right) Officiating guests were Mr Ivan Lee, Commissioner for Innovation and Technology, HKSAR Government; Ir Prof Sunny Lee, Board Chairman of ASTRI; Prof Sun Dong, Secretary for Innovation, Technology and Industry, HKSAR Government and Mr Ye Shuiqiu, Deputy Director-General of the Department of Educational, Scientific and Technological Affairs of the Liaison Office of the Central People's Government in the HKSAR.

由應科院主辦2025年香港首項創科盛事「應用科技高峰會」，活動以「引領創科 砥礪前行」為主題，邀請了全球40多位「政產學研投」領袖開講，熱議生成式人工智能、低空經濟、智慧城市等創新科技的現狀與未來，吸引逾1,500位科技精英、初創企業、工商界代表和關注創科發展人士參與。（圖左至右）香港特區政府創新科技署署長李國彬先生、應科院董事局主席李惠光教授工程師、香港特區政府創新科技及工業局局長孫東教授及中央人民政府駐香港特別行政區聯絡辦公室教育科技部副部長葉水球先生主持揭幕儀式。

November 11月 | December 12月 | 2025 | February 2月

AWARDS AND ACCOLADES
獎項與榮譽

Throughout the year, ASTRI received numerous prestigious honours and awards, showcasing our R&D capabilities and innovations, which are widely recognised by industry at home and abroad.

應科院於年內獲頒多個重要獎項與榮譽，充分顯示出我們的研發能力備受全球業界認同。

Full List
完整名單

ASTRI won 23 accolades at the 49th International Exhibition of Inventions Geneva, including one "Gold Medal with Congratulations of Jury", six Gold Medals, along with ten Silver Medals and six Bronze Medals.

應科院於第49屆「日內瓦國際發明展」中囊括23個獎項，包括一項「評審團嘉許金獎」、六項「金獎」、十項「銀獎」及六項「銅獎」，成績備受肯定。

The "Smart Entity Extraction Platform for Automated Form and Document Processing" has bought ASTRI the "Excellence Award – Tech Company of the Year (Large Corporate) – Innovative Technology Application" at the 2024 BUSINESS GOVirtual Tech Awards.

應科院憑「智能資料及文件擷取平台」於2024 BUSINESS GOVirtual Tech Awards榮獲「領軍科技獎（大型企業）－創新應用方案－卓越獎」。

With our "Smart Entity Extraction Platform for Automated Form and Document Processing", ASTRI won the "Banking Tech of the Year" at the Asia FinTech Awards 2024.

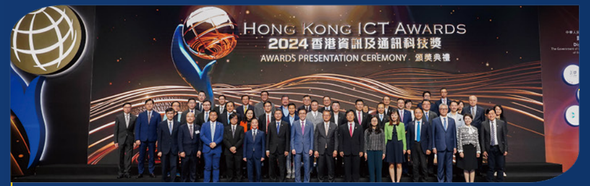
應科院憑藉「智能資料及文件擷取平台」獲頒發2024亞洲金融科技大獎「Banking Tech of the Year」。

Our "Coaxial Confocal 3D Sensing for 3D Semiconductor Wafer Inspection" won the "Category Award – Equipment and Machinery Design" at the Hong Kong Awards for Industries.

應科院憑藉「應用於3D半導體晶圓檢測的同軸光譜共聚焦3D感測技術」在「香港工商業獎」中獲頒發「組別獎－設備及機械設計」。

ASTRI achieved impressive results at the 2024 CAHK STAR Awards, where it was honoured with the "Silver Award – Best AI Application", "Silver Award – Best 5G Application", "Silver Award – Best Green ICT" and "Bronze Award – Best Cloud Solution".

應科院在「香港通訊業聯會非凡年獎2024」中取得佳績，分別獲得「人工智能應用卓越獎」銀獎、「5G應用方案卓越獎」銀獎、「綠色ICT方案卓越獎」銀獎以及「雲端方案卓越獎」銅獎。



ASTRI was awarded Bronze Award in "Smart Transport" and "Smart Living Award/Smart Healthcare", and Certificate of Merit in "Smart Living Award/Smart Healthcare" and "FinTech Award Emerging Solutions: Virtual Assets, Payment, Blockchain and AI applications" respectively at the 2024 Hong Kong ICT Awards.

應科院於「香港資訊及通訊科技獎2024」中獲頒「智慧出行（智慧交通）獎」銅獎、「智慧生活（智慧醫療）獎」銅獎，以及分別在「智慧生活（智慧醫療）獎」和「金融科技（新興解決方案：虛擬資產、支付、區塊鏈及人工智能應用）獎」獲得優異證書。

ASTRI secured four accolades at the 4th Asia Exhibition of Innovations & Inventions Hong Kong, including three Gold and one Bronze medals.

應科院於第四屆「亞洲創新發明展覽會」中榮獲四項殊榮，包括三項「金獎」及一項「銅獎」。

ASTRI's Federation Learning technology was awarded the "Bronze Award – Innovation Organisations – Large" at the HKMA Global Innovation Award.

應科院於「HKMA/HKT環球創新獎」中獲頒「創新機構獎（大型機構）」銅獎。

By establishing a fair and positive working environment, ASTRI enables our talent to fully unlock their potential and strive for excellence.

應科院致力營造公平且正面積極的工作環境，讓員工發揮潛能，建立追求卓越的機構文化。

JobMarket Employer of Choice Award
JobMarket「卓越僱主大獎」

This award affirms ASTRI's achievements in pursuing HR excellence and cultivating collaborative development as a caring employer.

應科院作為關懷員工的僱主，這個獎項肯定了我們在追求卓越人力資源管理以及共融發展方面的成就。

Good Employer Charter 2024
好僱主約章

ASTRI has been accredited as the signatories of the "Good Employer Charter" by Labour Department of the HKSAR Government, demonstrating our commitment to be an employee-oriented employer and adopting the good human resource management practices over the years.

應科院獲香港特區政府勞工處認可為「好僱主約章」的簽署機構，這展現了我們多年來致力成為以員工為本的僱主，並實踐良好的人力資源管理的承諾。

ESG Pledge
ESG 約章

Since 2023, ASTRI has been accredited under the "ESG Pledge Scheme", demonstrating our commitment to implementing and promoting sustainable development.

自2023年，應科院獲「ESG約章」行動的認證，確認我們在履行和促進可持續發展的決心。

Happy Organisation
開心機構

ASTRI has been honoured with the "Happy Organisation" citation for 2024, recognising ASTRI's effort in cultivating a joyful working culture and promoting a pleasant work environment.

應科院獲選為2024開心機構之一，表彰應科院在營造快樂工作文化及推動愉快工作環境方面的努力。

HR Distinction Awards 2024

ASTRI has been awarded two bronze medals for "Excellence in Gen Z Attraction Strategy" and "Excellence in Internal Communication Strategy", in recognition of ASTRI's effort to develop a comprehensive talent pipeline and provide effective communication avenues to connect employees.

應科院獲頒兩項銅獎，分別是「Excellence in Gen Z Attraction Strategy」及「Excellence in Internal Communication Strategy」，以表彰應科院在建立全面機制培育人才及為員工提供有效的溝通渠道方面的優秀表現。

LinkedIn Talent Awards 2023-2024 Hong Kong

ASTRI was awarded the "Gold Award – Best Talent Acquisition Team" (Public Sector), recognising its excellence in talent acquisition.

應科院獲頒「最佳人才招募團隊金獎」(公營機構)，肯定了應科院在人才招募方面的卓越表現。

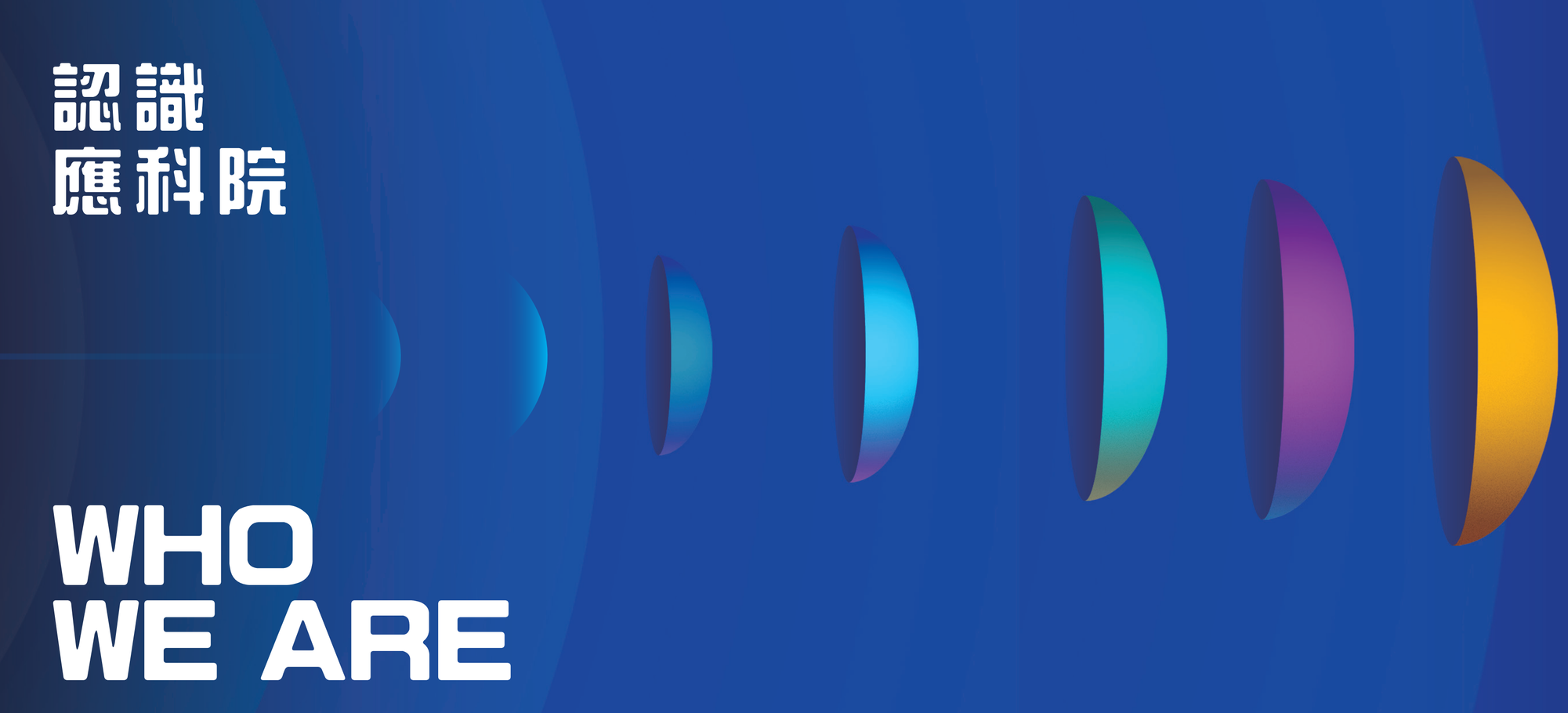
Jobsdb by SEEK – The Hong Kong HR Awards

ASTRI has been awarded the "HR Management Award" and "Experiential Hiring Experience Award". These accolades emphasise ASTRI's HR teams' dedication to providing an exceptional hiring experience and commitment to excellence in implementing innovative HR recruitment and management practices.

應科院榮獲「HR Management Award」及「Experiential Hiring Experience Award」。這兩個獎項肯定了應科院人力資源團隊致力於提供卓越招聘體驗的努力，並展現我們在實踐創新的優秀表現。

認識應科院

WHO WE ARE



The Hong Kong Applied Science and Technology Research Institute (ASTRI) was founded by the Government of the Hong Kong Special Administrative Region (HKSAR) in 2000. Our vision is to enhance Hong Kong's competitiveness through applied research. Over the years, ASTRI has nurtured a pool of research and innovation and technology (I&T) talents, generating I&T benefits for the community. We have earned numerous international accolades for our pioneering innovations as well as exemplary contributions to both business and society.

ASTRI's core R&D competence is grouped under five Technology Divisions: Advanced Electronic Components and Systems; Artificial Intelligence and Trust Technologies; Communications Technologies; IoT Sensing and AI Technologies; and Intelligent Perception and Control Technologies. These are applied across six core areas, which are Smart City, Financial Technologies, New Industrialisation and Intelligent Manufacturing, Digital Health, Application-Specific Integrated Circuits and Metaverse.

香港應用科技研究院（應科院）由香港特別行政區政府於2000年成立，其願景是透過應用科技研究提升香港的競爭力。多年來，應科院致力培育研究及創科人才，為廣大社群提供創科效益，通過其技術創新及對工商業界和社區的傑出貢獻，屢獲國際殊榮。

應科院的主要科技研發領域可歸納於五個技術部門，包括：先進電子元件及系統、人工智能及可信技術、通訊技術、物聯網感測與人工智能技術，以及智能感知與控制技術。技術研發主要應用在六項重點範疇：智慧城市、金融科技、新型工業化及智能製造、數碼健康科技、專用集成電路及元宇宙。

OUR VISION
我們的願景

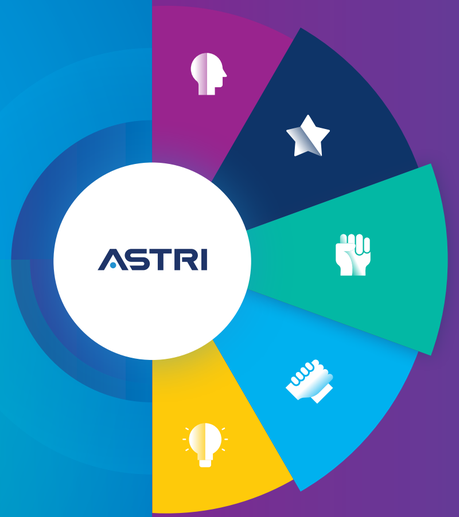
Enhance Hong Kong's competitiveness in the technology-based industries through applied research.

透過應用科技研究，協助發展以科技為基礎的產業，藉此提升香港的競爭力。

OUR MISSION
我們的使命

- Conduct relevant and high-quality research and development for transfer to industry;
- Encourage collaboration among government, industry, academia and research;
- Foster wider adoption of innovation and technology (I&T);
- Nurture Hong Kong's I&T talents; and
- Promote Hong Kong's I&T advantages.

- 進行相關及高質素的科技研發工作，並把科研成果轉移給不同產業應用；
- 鼓勵「政產學研」合作；
- 推動更廣泛應用創新科技；
- 培育香港創科人才；以及
- 推廣香港創科優勢。



OUR CORE VALUES
我們的核心價值

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平的服務。

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 others and ourselves, to establish and support an environment of teamwork and growth.

我們律己敬人，以建立團體精神，促進個人成長。

Innovation 創新

We innovate to achieve betterment for Hong Kong, our country and the world.

我們致力創新，造福香港、國家和世界。

BUSINESS SCOPE 業務範圍

ASTRI aspires to be one of the most influential and impactful research institutes in the region by successfully delivering world-class innovation and transferring new technologies to different industries. We have reaped fruits for both ASTRI and our customers with a host of commercially viable technologies readily available for industry deployment, creating many business opportunities.

應科院致力成為區內最具影響力和最重要的科研機構，不斷為業界帶來世界級創新技術。我們研發了大量可以商業化的技術，可隨時被業界應用，由此創造大量商機，為應科院和我們的客戶帶來了豐碩成果。

R&D Professionals
研發專才

ASTRI has teams of brilliant researchers, led by competent professionals, many of whom are prominent technologists in their respective fields. Among our R&D staff, 22% holding doctoral degree and 55% holding Master's degree.

應科院聘用的科研人員中，22%已取得博士學位，55%擁有碩士學位。團隊領導都是來自不同技術領域的傑出專家，研究員在他們的帶領下，進行卓越的科技研究。

Intellectual Properties
知識產權

Patents are important assets for ASTRI because they represent the originality and value of our innovation, and serve as a foundation for technology transfers to the industry. Since its inception, ASTRI has been granted close to 1,200 patents in the Chinese Mainland, the United States, and other countries.

專利是應科院的重要資產，它們顯示我們創新研發的原創性和價值，並作為技術轉移予業界的基礎。應科院自成立以來，於中國內地、美國及其他國家獲授接近1,200項專利。

Technology Transfer
技術轉移

ASTRI focused on developing innovative and commercially viable technologies readily available for market deployment. There were close to 1,600 cases of technology transfers conducted through research contract, technology licensing and other forms of partnership.

應科院聚焦研發嶄新且適合商業化的科技，我們透過研發合約、授權及其他合作模式將近1,600項技術轉移給產業界。

ASTRI's Licensing and R&D Projects
應科院的授權及研發項目

WAYS OF COLLABORATION
合作模式

ITF-funded Platform Project
創新及科技基金資助的平台項目

業界投資
Industry Contribution

10%

Projects that are mainly funded by Innovation and Technology Fund (ITF) with industry contribution of at least 10% of the total project costs. ASTRI owns all IP rights but industry partners can license the IP non-exclusively.

項目主要由創新及科技基金資助，業界投入至少佔總成本一成資金。應科院擁有所有知識產權，但業界可以獲非獨家授權使用相關技術。

ITF-funded Seed Projects
創新及科技基金資助的種子項目

Projects that are forward-looking or exploratory work, providing foundation work for future projects.

前瞻性和探索性質的研發項目，為將來的項目奠下基礎。

Public Sector Trial Scheme (PSTS)
公營機構試用計劃

PSTS provides funding support for production of prototypes/samples and conduction of trial schemes in the public sector to facilitate and promote the realisation and commercialisation of R&D outcomes under ITF projects.

計劃資助製作原型/樣板並在公營機構內進行試用，以促進和推動基金項目，實現科研成果商業化。

Industry Collaborative Project
業界合作項目

Both ASTRI and partners contribute funds and other resources.
應科院及合作夥伴雙方均投入基金和其他資源。

業界投資
Industry Contribution

>30%

Industry partner can exclusively license the foreground IP for a period.

業界夥伴可獲獨家授權使用研發技術一段時間。

>50%

Industry partner can own the foreground IP.

業界夥伴可擁有其後開發項目的知識產權。

Contract Research
研發合約

業界投資
Industry Contribution

100%

Industry is responsible for 100% of R&D project costs. The R&D projects are customised according to industry partners' requests. Industry partner can own the foreground IP.

業界夥伴須負責所有科研項目成本，研發項目會按業界夥伴個別需要而制定，而業界夥伴則可擁有其後開發項目的知識產權。

BOARD OF DIRECTORS 董事局

ASTRI is governed by a Board of Directors comprising representatives from the industry, commercial and professional sectors, the academia and the HKSAR Government. Directors are appointed by the Government and have collective responsibility for overseeing ASTRI's operation and strategic directions. Three Functional Committees were formed to assist the Board in managing ASTRI:

- **The Finance and Administration Committee** is tasked with overseeing all aspects of ASTRI's finance and administration;
- **The Technology Committee** is responsible for guiding research initiatives at ASTRI; and
- **The Audit Committee** ensures both internal and external audit processes are executed properly.

董事局是應科院的管治組織，由香港特區政府委任的成員包括來自工業界、商界、專業界、學術界及香港特區政府的代表。董事局集體負責監督應科院的營運及發展方向，並下設三個功能委員會，包括：

- 財務及行政委員會負責監察應科院的財務及行政事宜；
- 科技委員會負責監察應科院的研究項目；以及
- 審計委員會負責確保內部和外部審計程序妥善執行。

ASTRI is mandated to prepare and submit detailed annual plans, quarterly and yearly operational reports, and annual audited accounts pertaining to its operation and projects. These documents require approval from both the Board of Directors and the Innovation and Technology Commission of the HKSAR Government. During the 2024/25 fiscal year, the Board convened a total of six meetings, with an average attendance rate of 81.6%. Please read pages 90 to 93 for more details.

應科院須提交年度計劃、載述營運情況的季度及年度報告，以及有關營運和研發項目的年度經審核帳目，供董事局和香港特區政府創新科技署批核。於2024/25財政年度，董事局召開了六次會議，平均出席率為81.6%。詳情請翻閱90至93頁。

Board Chairman 董事局主席

1 Ir Prof Sunny Lee 李惠光教授工程師

Official Members 官守董事

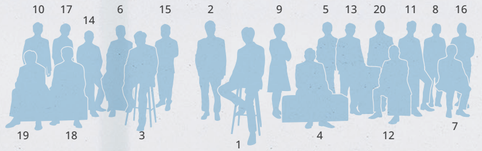
2 Mr Eddie Mak 麥德偉先生
3 Mr Ivan Lee 李國彬先生

Chairman of Functional Committees 功能委員會主席

4 Prof Chan Chun-kwong 陳俊光教授
5 Mr Peter Ng 吳漢瑜先生
6 Mr Dennis Ho 何超平先生

Members 董事 (Listed in alphabetical order in surname 按英文姓氏排序)

7 Prof Christopher Chao 趙汝恒教授
8 Mr Stephen Chau 鄒金根先生
9 Prof Cheng Shuk-han 鄭淑嫻教授
10 Mr Jason Chiu 趙子翹先生
11 Dr Felix Chow 周博軒博士
12 Mr William Ho 何鏞先生
13 Ir Arthur Lee 李錦雄工程師
14 Mr Theodore Ma 馬衛先生
15 Dr Alfred Ng 吳民卓博士
16 Mr Jack Ng 伍煥杰先生
17 Ir Dr Samson Tai 戴劍寒博士工程師
18 Mr Anthony Tong 湯達熙先生
19 Prof Martin Wong 黃定發教授
20 Mr Wilfred Wong 黃錦沛先生



CHAIRMAN'S MESSAGE
主席的話

The year 2025 marks a significant milestone for ASTRI as we celebrate 25 years of driving innovation and technology excellence. Over the past quarter-century, the Innovation and Technology (I&T) sector has evolved from an emerging field into a cornerstone of economic growth and societal advancement. Today, I&T leads the way in addressing critical global challenges, including climate change, societal progress, sustainable development and economic growth.

2025年為應科院迎來25週年的重要時刻，成為香港創新及科技卓越發展歷程中新的里程碑。回顧過去四分一世紀，創科產業已從昔日的新興領域，演變為推動經濟發展及社會進步的重要基石。時至今日，創科更肩負重任，在應對氣候變化、促進社會進步和可持續發展，以及拉動經濟增長等重大全球議題上發揮領導作用。

Ir Prof Sunny Lee
BBS, JP
李惠光教授工程師
銅紫荊星章，太平紳士

Board Chairman 董事局主席

As one of the technical partners of the Low-altitude Economy (LAE) Regulatory Sandbox project, Ir Prof Sunny Lee (third from right, back row), Board Chairman of ASTRI attended the launch ceremony and took photo with the officiating guests, including the Hon John Lee, Chief Executive of the Hong Kong Special Administrative Region and Ms Mable Chan, Secretary for Transport and Logistics of the HKSAR Government.
應科院是低空經濟「監管沙盒」試點項目的支持單位之一。應科院董事局主席李惠光教授工程師（後排右三）出席啟動禮，並與主禮嘉賓香港特別行政區行政長官李家超先生、香港特區政府運輸及物流局局長陳美寶女士及一眾嘉賓合照。

Since its establishment in 2000, ASTRI has played an instrumental role in positioning Hong Kong as a leading I&T hub in the region. Aligned with the strategic priorities of the Central Government and the HKSAR Government, we have leveraged policy support and industry partnerships to advance our mission. More than merely a research institute, ASTRI serves as a super-connector and value-adder for innovation and technology. It plays a key role in "bringing in" and "go global" by attracting I&T talent and investment, while promoting homegrown technologies to the international market. This transforms R&D outcomes into real-world application, delivering tangible economic and societal value.

自2000年成立以來，應科院在推動香港成為區內領先的創新科技中心方面發揮了重要作用。我們配合中央政府及香港特區政府的創科策略重點，充份把握政策支持，並與業界攜手合作，切實踐行使命。應科院不僅是一家科研機構，更是創新科技的超級聯繫人和增值者，發揮「引進來、走出去」作用，吸引創科人才和資金，並推廣區內科技至國際市場，讓科研成果落地應用，為經濟及社會帶來實質效益。

Delivering Measurable Impact
締造實質影響

ASTRI's achievements in 2024/25 reflect the strength of our strategic execution. New project initiations grew by 23%, significantly expanding our innovation footprint across industries. Robust growth in industry engagement and commercialisation revenues further underscores the strong demand for our solutions in the market. These metrics highlight our ability to translate research excellence into impactful, market-ready technologies that drive economic value.

Through close collaboration with government departments and public organisations, we have delivered transformative solutions across sectors such as smart mobility, transportation, FinTech, construction, healthcare and more.

應科院於2024/25年取得豐碩成果，充份展現我們的科研實力。我們新開展的項目增加23%，大幅拓展創新足跡至不同行業領域。業界及商業化收入顯著增長，進一步印證市場對我們的解決方案需求殷切，彰顯我們具備能力把卓越科研成果轉化為具影響力、可落地應用的技術，從而推動經濟價值增長。

我們亦與政府部門及公營機構緊密合作，提供智慧出行、建築安全及醫療健康等多個領域的革新解決方案。

The CAV Tech Forum brought together over 300 industry professionals.
逾300名業界代表參與網聯自動駕駛汽車技術論壇。

Ir Prof Sunny Lee (second left), Board Chairman of ASTRI, alongside Dr Ying Huang (right), Chief Technology Officer of ASTRI, and Ir Chris Chong (left), Chief Operating Officer of ASTRI, presented our LAE technologies to Mr Chan Kwok Ki (second right), Chief Secretary of the HKSAR Government at the Exhibition of Guangdong-Hong Kong Technology Cooperation Achievements.
應科院董事局主席李惠光教授工程師（左二）聯同應科院首席科技官黃瑩博士（右）及首席營運官莊偉泉工程師（左），於粵港科技合作成果展上向香港特區政府政務司司長陳國基先生（右二）介紹應科院的低空經濟技術。

ASTRI exhibited a range of innovative technologies at the Hong Kong Tech Pavilion at Mobile World Congress in Barcelona, Spain.
應科院於西班牙巴塞羅那參與世界流動通訊大會，並於「香港科技館」展出各項嶄新科技解決方案。

Global Recognition and Strategic Expansion
全球認可與策略拓展

ASTRI's innovation leadership continues to earn global recognition. In 2024, we were ranked 42nd globally in intellectual property filings among non-profit R&D institutions by the National Academy of Inventors (NAI) in the US. We remain the only Hong Kong-based entity within this prestigious category. Our achievements also include receiving 52 local and international awards, further affirming the quality and impact of our research.

應科院的創新領導地位廣獲國際肯定。2024年於美國國家發明家學院(NAI)的非牟利研發機構知識產權申請排名中，穩居全球第42位，更是唯一入選的香港機構。年內更榮膺52項本地及國際獎項，足證科研質量與影響力。

Strategic expansion has been key to our sustained growth. This year, we launched our fourth technology alliance, focusing on construction and property technology, which has fostered cross-sector collaboration and accelerated commercialisation pathways. The establishment of our Beijing Centre for Technology Transfer and Commercialisation has further strengthened innovation exchange between Beijing and Hong Kong, enabling laboratory breakthroughs to be transformed into market-ready solutions.

策略拓展是應科院持續發展的關鍵。我們在本年度成立了第四個科技聯盟，主力推動建築和房地產科技的跨界合作及加快商業化進程。另外，我們成立了北京成果轉化中心，進一步加強京港兩地的創新交流，推動突破性技術轉化為市場可用的解決方案。

Our strategic partnerships spanning Hong Kong, Chinese Mainland, and international markets such as Korea, Malaysia, France and Spain, ASTRI continues to bring homegrown technologies to the global stage, demonstrating our capacity to deliver impactful innovation on an international scale.

我們建立的策略夥伴合作關係橫跨香港、中國內地，以及韓國、馬來西亞、法國及西班牙等國際市場，不斷把自主研發技術推廣至全球舞台，展現在國際層面推動具影響力創新技術的實力。

Contributing to 15th Five-Year Plan
為「十五五」規劃作出貢獻

Aligned with the 14th Five-Year Plan and positioned to play a crucial role in the forthcoming 15th Five-Year Plan, ASTRI is deeply committed to advancing national priorities that will shape China's innovation-driven future. Central among these is the development of New Quality Productive Forces – emphasising breakthrough innovations, strategic emerging industries, and advanced technology integration to drive high-quality economic development.

應科院深入配合「十四五」規劃，並準備在將至的「十五五」規劃中擔當關鍵角色，全力推進國家創新驅動的優先議程。核心任務在於發展「新質生產力」，強調突破性創新、戰略性新興產業與先進技術融合，以驅動高質量經濟發展。

By concentrating our applied research on artificial intelligence, advanced communications, integrated circuits, intelligent manufacturing, and health technologies, we accelerate the transformation of scientific discoveries into productive applications, reducing time from laboratory to market and enhancing China's technological self-reliance in strategic sectors.

透過聚焦人工智能、先進通訊、集成電路、智能製造及健康科技的應用研究，我們加速創新科技轉化為生產力，縮短實驗室至市場週期，並增強國家在戰略產業的技術自主能力。

Investing in Talent and Sustainability
人才培育與可持續發展

Our commitment to nurturing the next generation of I&T talent remains unwavering. Through expanded collaborations with leading universities under our Work-Study Programme, we empower our staff to remain at the cutting edge of technological advancement while applying academic theories in practice.

我們致力培育新一代創科人才，透過「兼讀博士生工作計劃」與各大知名院校深化合作，讓團隊掌握最新尖端技術，同時靈活將學術理論靈活應用於工作實務，保持創新優勢。

In addition, ASTRI's comprehensive ESG initiatives reflect our dedication to sustainability and responsible growth. By enhancing energy efficiency, promoting employee wellbeing, and upholding corporate governance excellence, we continue to position ourselves as a forward-thinking and socially responsible institution.

此外，應科院加快推行ESG措施，展現對可持續發展及「負責任增長」的決心。我們致力提升能源效益、關注員工福祉，並堅守卓越企業管治，繼續擔當具備前瞻思維及肩負社會責任的業界典範。

Embracing Transformation
擁抱轉型

Looking ahead, the proposed merger with Nano and Advanced Materials Institute (NAMI), announced by the HKSAR Government in November 2024, marks a transformative chapter for ASTRI. This integration will create synergies that enhance our research capabilities, expand our technology portfolio, and strengthen our position as the region's premier applied research institution.

展望未來，香港特區政府於2024年11月宣佈計劃合併應科院與納米及先進材料研發院，這將為應科院譜寫轉型新篇章。是次整合將發揮協同效益、提升科研實力、擴大技術領域，並鞏固應科院作為區內領先應用科研機構的地位。

Together, we will be better equipped to capture emerging opportunities in the Greater Bay Area and beyond, accelerating innovation cycles and delivering greater value to our stakeholders.

未來，讓我們攜手前行，把握大灣區及全國的發展新機遇，加速創新步伐，為持份者創造更多價值。

Vision for the Future
未來願景

ASTRI's achievements are a testament to the dedication of our talented team, the steadfast support of the HKSAR Government, and the trust of our industry partners. As we embark on the next phase of our journey, we remain committed to leveraging technology as a catalyst for inclusivity, better living, and sustainable development.

應科院的成就有賴優秀團隊的努力付出、香港特區政府的堅定支持以及業界合作夥伴的信任。在邁向下一個新階段之際，我們將繼續以科技作為促進共融、構建美好生活及推動可持續發展的原動力。

Building upon the solid foundation of the past 25 years, ASTRI is ready to play an even more pivotal role in shaping Hong Kong's innovation-driven future, contributing to Hong Kong and our country's development in New Quality Productive Forces.

憑藉過去25年的穩固根基，應科院未來將在驅動香港創新發展的道路上扮演更重要的角色，為香港及國家發展新質生產力作出貢獻。

Ir Prof Sunny Lee (third from left), Board Chairman of ASTRI attended the 2024 China International Fair for Trade in Services and officiated the plaque unveiling ceremony of the ASTRI - Beijing Centre for Technology Transfer and Commercialisation.
應科院董事局主席李惠光教授工程師（左三）出席了2024年中國國際服務貿易交易會，並為「應科院-北京成果轉化中心」揭牌儀式主禮。

ASTRI participated at The GBA (Shenzhen) iForum cum Dinner 2025 and showcased a range of LAE technologies.
應科院參與大灣區（深圳）工商界高峰論壇及交流會2025，並展出嶄新低空經濟科技。

CEO'S REPORT 行政總裁報告

Ir Dr Ted Suen
MH
孫耀達博士工程師
榮譽勳章

Chief Executive Officer
行政總裁

It is a privilege to assume leadership at ASTRI during this remarkable 25th anniversary year. In the past 25 years, ASTRI has built a distinguished legacy of innovation and technological achievement that has strengthened Hong Kong's position as a leading innovation and technology hub. Our ability to adapt and evolve in response to emerging challenges has been a hallmark of our success. I am excited to work with our talented team to forge new partnerships, drive technological breakthroughs, and deliver practical solutions that address challenges facing our city, nation, and global community.

今年時值應科院成立**25**週年，在如此非凡時刻，本人亦很榮幸能夠帶領應科院繼續前行。過去四分一個世紀，應科院在創新科技方面的成就薪火相傳，鞏固香港作為頂尖創科中心的地位。為應對新挑戰而適應及改進的能力，向來是應科院賴以成功的重要基石。本人期待與應科院的專業團隊攜手合作，建立更多新夥伴關係，共同推動科研突破，並為香港、國家以至全球社會所面對的挑戰提供切實可行的解決方案。

Driving Innovation for a Smarter Hong Kong
推動創新　建智慧香港

ASTRI is dedicated to strengthening Hong Kong's competitiveness through cutting-edge technology, ensuring that our research and development efforts deliver tangible benefits to industries, enhance operational efficiency, and contribute meaningfully to society at large. Backed by a robust technical foundation, our research teams excel at integrating diverse technologies with agility, crafting innovative solutions to tackle complex challenges.

Building on our expertise, ASTRI is committed to aligning with the "AI+" strategies outlined by both the national government and the HKSAR Government. Centred on artificial intelligence and bolstered by emerging technologies such as IoT, application-specific integrated circuits, robotics and more, we aim to drive digital transformation for diverse industries and sectors and accelerate Hong Kong's evolution into a global hub for innovation and technology.

應科院致力藉科技提升香港競爭力，將確保科研成果能夠協助業界營運效率、惠澤市民大眾、對社會整體有利。我們的科研團隊具備紮實的技術基礎，並擅長靈活組合運用多元科技，創造嶄新解決方案應對挑戰。

應科院將發揮所長，配合國家及香港特區政府的「AI+」策略，以人工智能為核心，輔以各種嶄新科技例如物聯網、專用集成電路、機器人等，推動產業升級轉型，並助力香港加快發展成為智慧城市，以及國際創新科技中心。

Driving IP Commercialisation
推動知識產權商業化

ASTRI's achievements in 2024/25 reflect our unwavering commitment to transforming research excellence into tangible societal and economic value. Through strategic collaborations with leading universities and research institutes, we have bridged the gap between laboratory innovation and commercial application.

Leveraging our robust technology ecosystems and industry networks, we have delivered practical solutions across diverse sectors, including public transport, public services, banking, and medical diagnostics. These efforts underscore ASTRI's ability to align innovation and technology with real-world needs, driving economic growth and improving quality of life.

應科院於2024/25年度的成就，正好彰顯我們堅守承諾，致力把卓越研發成果轉化為具體社會及經濟價值，加上頂尖大學及科研機構的策略合作，讓我們成功帶領創新科研成果由實驗室走向商業市場。

憑藉發展成熟的科技生態圈及廣泛的產業網絡，應科院已為公共交通、公共服務、銀行業及醫療診斷等行業提供切實可行的解決方案，充分反映應科院將創新科技與實際需求互相配合的能力，從而為經濟增長及市民生活質素提升作出貢獻。

Super-Connector for Innovation and Technology
創科「超級聯繫人」

ASTRI continues to reinforce Hong Kong's role as a global innovation nexus through a dual strategy of attracting and exporting technological expertise. We bring international innovations into Hong Kong to enhance local capabilities and maintain our city's competitive edge in emerging technologies. At the same time, we facilitate the global expansion of world-class solutions developed in Hong Kong and Chinese Mainland, showcasing their impact across industries.

Our growing presence in the Greater Bay Area and strengthened partnerships with Chinese Mainland universities, research institutes, and technology enterprises exemplify our commitment to cross-border collaboration. This strategic approach ensures that Hong Kong remains a vital conduit for innovation across the region and beyond.

為進一步鞏固香港作為全球創新樞紐的地位，應科院採用「引才集技」及「技術外拓」的雙重策略，既積極將國際創新技術引進香港，提升本地科研能力，確保香港在新興科技領域保有競爭優勢，同時亦促進由香港及中國內地研發的世界級解決方案走向全球，展現應科院橫跨各行各業的深遠影響力。

應科院積極拓展在大灣區的版圖，同時熱衷加強與中國內地大學、科研機構及科技企業的策略合作，反映我們對跨境合作的決心。這項策略性方針確保香港能一直擔當區內創新雙向交流的橋樑角色。

Developing the Talent Ecosystem
建立人才生態圈

Excellence in innovation is built on a foundation of exceptional talent. ASTRI remains deeply committed to attracting, developing, and retaining world-class professionals to sustain our competitive advantage.

Evidence of our success can be seen in the overwhelming response to our 2024 summer internship programme, which attracted nearly 3,000 applications from top global universities for just 110 intakes. This robust talent pipeline ensures that ASTRI remains a premier destination for emerging I&T talent and a leader in shaping the future of innovation.

創新成就建基於傑出人才的參與。應科院一直致力吸納、培育及留住世界級專才，藉以維持其一貫競爭優勢。

應科院的「2024年暑期實習計劃」反應熱烈，成效有目共睹。計劃吸引了近3,000名全球頂尖大學學生申請，競逐僅110個實習名額，確保人才儲備穩健，鞏固應科院作為新一代創科人才的首選平台，以及塑造創科未來趨勢的領導地位。

Lasting Impacts
長遠影響力

Building on these foundational priorities, ASTRI will continue strengthening its role as a catalyst for innovation and collaboration. The establishment of four major technology alliances in recent years exemplifies our ability to drive collective impact through strategic partnerships. By fostering closer collaboration among government, industry, academia, research and investment, we aim to accelerate the development of transformative technologies and maximise their global impact.

Our research on applied technologies will play a vital role in further enhancing Hong Kong's global competitiveness while improving the quality of life for its citizens. Our vision extends beyond technology for its own sake. We are committed to delivering solutions that address pressing societal challenges, promote sustainability, and secure prosperity for future generations.

應科院將以這些基礎優先事項為本，繼續強化其推動創新與合作的效能。近年應科院成立了四個大型科技聯盟，彰顯了我們如何善用策略夥伴關係，推動集體影響力。應科院亦致力促進「政產學研投」的緊密合作，旨在加快發展變革科技的步伐，大幅提升相關技術的全球影響力。

我們研發的應用科技將發揮關鍵作用，進一步提升香港競爭力，以及改善市民生活質素。我們的願景不僅在於追求科技本身，更着眼於提供切合社會迫切需求的解決方案，推動可持續發展，讓未來新世代得享繁榮昌盛。

MICROELECTRONICS TECHNOLOGY CONSORTIUM
微電子技術聯盟

SMART MOBILITY TECHNOLOGY (C-V2X) ALLIANCE
智慧出行車聯網技術聯盟

FinTech & ESG Alliance
金融科技與永續發展聯盟

CPTA
CONTECH & PROPTECH ALLIANCE
環保及建造產創技術聯盟

Build Smarter Future
共建智慧未來

As technological advancements continue to accelerate, ASTRI remains committed in its mission of enhancing Hong Kong's competitiveness through applied research. With abundant opportunities in Chinese Mainland and international markets, we are well-positioned to expand our technological achievements and deliver even greater value to our stakeholders.

We will embark on a new chapter after merging with NAMI in the coming year. I am deeply grateful for the continued support of the HKSAR Government, ASTRI's Board of Directors, and our industry partners. Together, we will push the boundaries of innovation and ensure that ASTRI continues to play a pivotal role in shaping a brighter, more sustainable future for Hong Kong and beyond.

隨着科技持續加快演進步伐，應科院將繼續堅守以應用科研提升香港競爭力的使命。中國內地及國際市場的機遇繁多，我們具備優秀條件爭取更多科技成果，為持份者創造更豐富的價值。

來年與納米及先進材料研發院合併後，應科院將開啟新篇章。本人謹此衷心感謝香港特區政府、應科院董事局及一眾業界夥伴的不懈支持。我們攜手同行，突破創新界限，確保應科院繼續肩負重大使命，盡力為香港、以至更廣泛地區締造更光明、更可持續的未來。

MANAGEMENT TEAM
管治團隊

ASTRI is headed by Chief Executive Officer who is responsible for the institute's overall management. He is assisted by the Chief Technology Officer, Chief Operating Offer and Chief Financial Officer as well as other senior executives, for overseeing research and development, business development, technology transfer, marketing and corporate communications, human resources, finance and administration.

應科院由行政總裁領導，負責整體管理工作，並在首席科技官、首席營運官、首席財務官和其他高級行政人員協助下監督科技研發工作，以及管理業務發展、技術轉移、推廣傳訊、人事、財務、行政等事宜。

From left to right 從左至右：
Mr James Fan, Dr Alan Cheung, Dr Daniel Shi, Dr Ying Huang, Ir Chris Chong, Ir Dr Ted Suen, Dr Cheng Jung Tsai, Ms Cammy Yung, Ms Jennifer Wang, Mr Kenny Chan, Ms Iris Chan, Mr Michael Poon
范世君先生、張偉倫博士、史訓清博士、黃瑩博士、莊偉泉工程師、孫耀達博士工程師、蔡振榮博士、容慧琪女士、王璋女士、陳建龍先生、陳穎女士、潘自翹先生

C-Suite 領導層

Ir Dr Ted Suen*
孫耀達博士工程師*
Chief Executive Officer 行政總裁

Ir Chris Chong
莊偉泉工程師
Chief Operating Officer 首席營運官

Dr Ying Huang
黃瑩博士
Chief Technology Officer 首席科技官

Ms Cammy Yung
容慧琪女士
Chief Financial Officer 首席財務官

* Assumed duties on 2 July 2025
於2025年7月2日履新

Technology Division Heads 研發部門領導

Dr Daniel Shi 史訓清博士
Vice President, Advanced Electronic Components and Systems
先進電子元件及系統副總裁

Dr Chen Jung Tsai 蔡振榮博士
Chief Director, IoT Sensing and AI Technologies
物聯網感測與人工智能技術首席總監

Dr Alan Cheung 張偉倫博士
Chief Director, Artificial Intelligence and Trust Technologies
人工智能及可信技術首席總監

Mr Kenny Chan 陳建龍先生
Chief Director, Intelligent Perception and Control Technologies
智能感知與控制技術首席總監

Mr James Fan 范世君先生
Acting Head, Communications Technologies
署理通訊技術主管

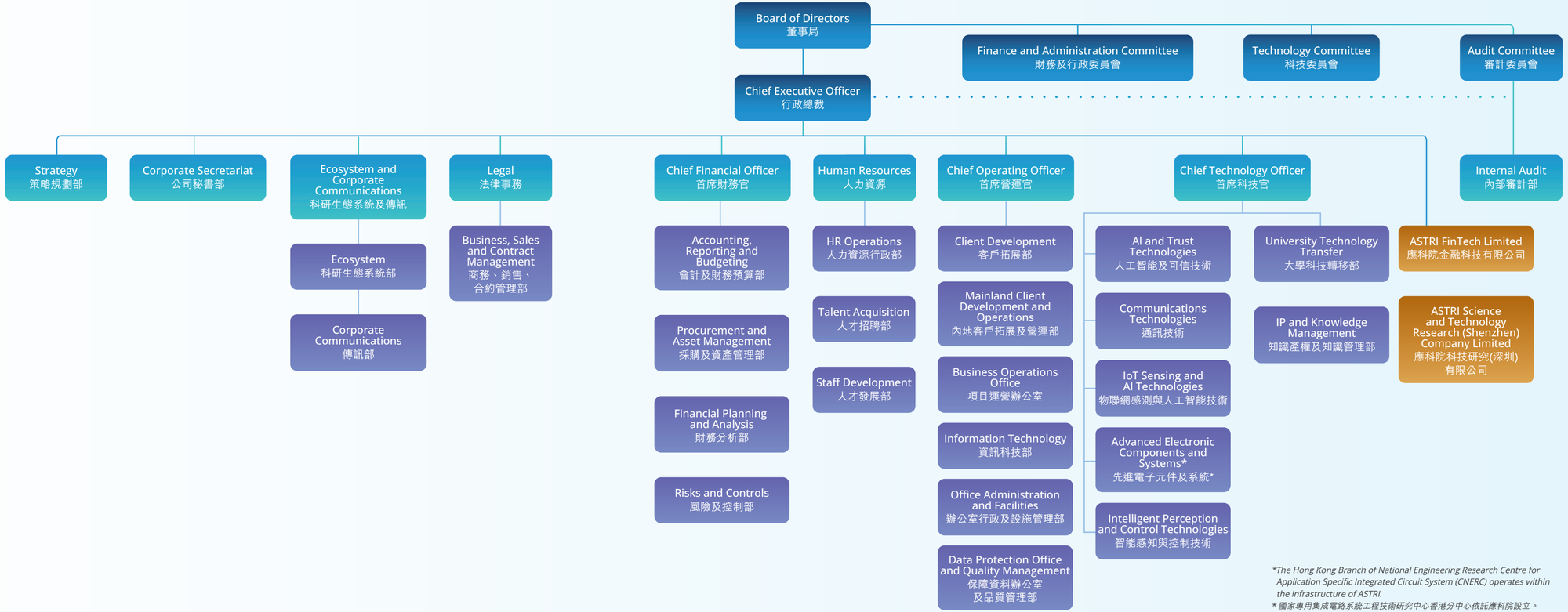
Senior Executives 高級行政人員

Mr Michael Poon 潘自翹先生
Senior Director, Internal Audit
內部審計高級總監

Ms Jennifer Wang 王璋女士
Chief Legal Counsel
首席法律顧問

Ms Iris Chan 陳穎女士
Senior Director, Human Resources
人力資源部高級總監

ORGANISATION STRUCTURE 應科院架構



**The Hong Kong Branch of National Engineering Research Centre for Application Specific Integrated Circuit System (CNERC) operates within the infrastructure of ASTRI.*

** 國家專用集成電路系統工程技術研究中心香港分中心依託應科院設立。*

SILVER JUBILEE CELEBRATION 銀禧慶典

Over the past 25 years, ASTRI played a special role in the global technology ecosystem, earning international recognition through its extensive patent portfolio and numerous prestigious accolades.

To commemorate ASTRI's silver jubilee, a diverse range of events and campaigns have been meticulously planned, reflecting on its milestone achievements while paving the way for future success. These initiatives also aimed to inspire young people to explore careers in research and development, promoting ASTRI's mission and work among the next generation.

The celebrations encompassed a summit, exhibition, commemorative booklet, media campaign, as well as long-service awards and CSR volunteering activities — all thoughtfully designed under the theme **"Tech for Everyone"**.

過去25年來，應科院憑藉廣泛的專利組合及眾多著名獎項贏得國際認可，並在全球創科生態圈中扮演獨特角色。

為紀念應科院銀禧誌慶，我們精心策劃了多元化的活動及宣傳項目，既回顧重要成就里程碑，亦為未來的成功奠下基石。這些項目同時致力向新一代推廣應科院的使命及工作，啟發更多年輕人探索研發事業。

慶祝活動涵蓋高峰會、展覽、紀念特刊、媒體推廣、長期服務獎、以及企業社會責任義工服務，全部圍繞**「科技惠民」**主題精心設計。

Tech Applied Summit
應用科技高峰會

Tech Applied Summit was held at the Hong Kong Convention and Exhibition Centre on 10 February 2025. With the theme "Leading Tech Forward", the summit brought together over 40 global leaders from government, industry, academia, research, and investment sectors. More than 1,500 attendees, including technologists, startups, business leaders, and innovation and technology (I&T) enthusiasts, were engaging in discussions on cutting-edge topics such as generative AI, the low-altitude economy, and smart cities.

The summit was organised by ASTRI as the inaugural event of its silver jubilee year. Funded by the Innovation and Technology Commission of the HKSAR Government, the summit garnered support from 70 organisations. The event kicked off with a video address by Chief Executive of the Hong Kong Special Administrative Region, The Hon John Lee, followed by keynote speeches from senior government officials, including Professor Sun Dong, Secretary for Innovation, Technology and Industry, who shared his insights on the importance of technology and collaboration in driving Hong Kong's growth and positioning it as a global innovation hub, and Ms Mable Chan, Secretary for Transport and Logistics, who unveiled I&T related policies such as the low-altitude economy development blueprint.

The summit featured a Technovation Zone, spotlighting 20 local technology enterprises, including startups, corporations, universities and research institutions. Participants such as The Hong Kong Polytechnic University, The Hong Kong Research Institute of Textiles and Apparel, and the Nano and Advanced Materials Institute, were showcasing the latest R&D achievements.

「應用科技高峰會」(高峰會) 於2025年2月10日假香港會議展覽中心舉行，以「引領創科　砥礪前行」為主題，邀請了全球40多位「政產學研投」領袖開講，熱議生成式人工智能、低空經濟、智慧城市等創新科技的現狀與未來，吸引逾1,500位科技精英、初創企業、工商界代表和創新科技愛好者參與。

高峰會由應科院主辦，是其踏入銀禧的首個活動。是次高峰會由香港特區政府創新科技署資助，並獲70家機構支持。香港特別行政區行政長官李家超先生應邀發表視像演說，創新科技及工業局局長孫東教授、運輸及物流局局長陳美寶女士等多位政府官員亦親臨現場，分別分享科技合作在推動香港發展和定位為全球創新中心方面的重要性，以及講解低空經濟發展藍圖等最新創科政策。

此外，現場設有「創新科技展區」，匯聚應科院以及20家本地科技初創、企業、大學及研發機構，包括香港理工大學、香港紡織及成衣研發中心，以及納米及先進材料研發院等，展示最新研發成果。

Technovation Week
創新科技週

Technovation Week was held from 17-21 February 2025 at the Atrium Link of Hong Kong Science Park, highlighting the achievements of 20 local technology enterprises. On display were the latest R&D breakthroughs across artificial intelligent, digital health, new industrialisation and smart city solutions sectors.

「創新科研週」於2025年2月17至21日在香港科學園中庭長廊舉行，匯聚應科院及20家本地科技初創企業、企業、大學與研發機構。會上展示各式最新科研成果，涵蓋人工智能、數碼健康、新型工業化和智慧城市等不同領域。

Commemorative Booklet
紀念特刊

The commemorative booklet celebrated ASTRI's 25 years of contributions to applied technology while bolstering public awareness of the ASTRI brand and its mission. It highlighted ASTRI's dedication to making technology accessible and inclusive, showcased key milestones and achievements over the past quarter-century, and positioned ASTRI as a leader in innovation and research. It also sought to engage younger generations, spotlighting career opportunities in applied technology.

The booklet featured congratulatory messages from senior government officials and quango leaders; highlights of ASTRI's key technological breakthroughs and their impact; interviews with former chairpersons, detailing the organisation's founding story and early years; testimonials from industry partners and collaborators; and inspiring success stories of ASTRIANs. This carefully curated publication symbolised ASTRI's enduring commitment to innovation and its vision for a future where technology benefits everyone.

本紀念特刊旨在慶祝應科院25年來對應用科技的卓越貢獻，並加深公眾對應科院及其使命的認識。特刊彰顯應科院致力推動科技普及共融的精神，展示過去四分之一世紀的重要里程碑及成就，確立應科院作為創新及研究領導者的地位。特刊亦銳意吸引年輕一代投身科研，聚焦應用科技領域的豐盛事業機遇。

特刊內容包括涵蓋政府官員及法定機構領袖的賀辭；精選應科院重要科技突破及其影響的案例；歷任主席專訪，詳述機構創立緣起及早期發展歷程；業界夥伴及合作者的嘉許與推薦；以及應科院員工的勵志成功故事。這本精心編撰的特刊，象徵應科院對創新科技的不變承諾，以及對科技惠民的未來願景。

我們的工作

HOW WE SERVE

INNOVATION IN ACTION 實踐創新

In 2024/25, the Hong Kong Applied Science and Technology Research Institute (ASTRI) has powered on with vital work of research, innovation and commercialisation across six key aspects:

2024/25年度，應科院的科研和商品化工作聚焦六大領域：

- Smart City
- Financial Technologies
- New Industrialisation and Intelligent Manufacturing
- Digital Health
- Application-Specific Integrated Circuits
- Metaverse

- 智慧城市
- 金融科技
- 新型工業化及智能製造
- 數碼健康科技
- 專用集成電路
- 元宇宙

In each of these areas, ASTRI has pioneered new discoveries and new partnerships that are transforming our city, recharging our economy, and building a better collective future for everyone.

應科院於上述各範疇帶領創新突破，建立新夥伴關係，從而推動香港城市轉型，振興經濟，為各階層創建更美好的未來。

SMART CITY
智慧城市

ASTRI's cutting-edge research and state-of-the-art technologies are driving the implementation of Hong Kong's Smart City Blueprint 2.0 — a Government-led initiative positioning the city as a global leader in smart city innovation. Through significant advancements in Smart Connectivity, Smart Mobility, and Smart Living, ASTRI is playing a pivotal role in realising the vision of this pioneering blueprint.

應科院憑藉尖端研究及先進科技，在香港特區政府帶領下，致力推動落實《香港智慧城市藍圖2.0》，助推香港成為全球智慧城市創新的領導者。透過「智慧網絡」、「智慧出行」及「智慧生活」三大層面的重大突破，應科院在這創新藍圖的願景中扮演重要角色。

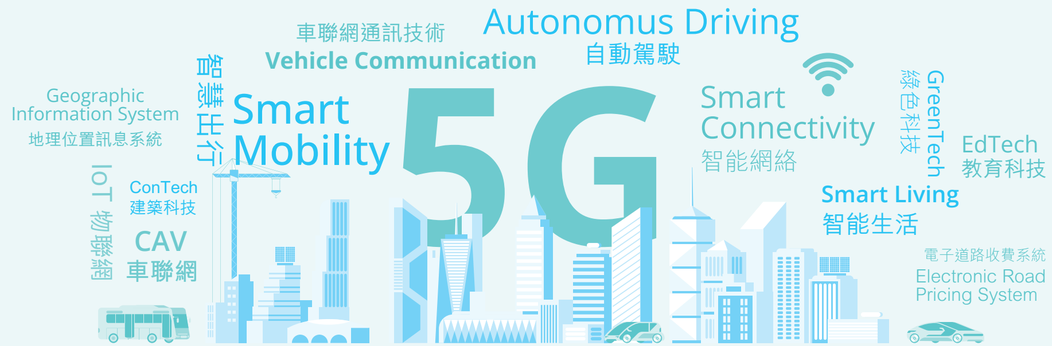
Advanced technologies are transforming city management, and ASTRI is spearheading groundbreaking initiatives, including C-V2X communication trials, Connected Autonomous Vehicle (CAV) research and development, and real-time intrusion alert systems to enhance public transport safety.

As Hong Kong advances towards becoming a leader in 5G adoption, the interconnectedness of people, devices, data, and knowledge will grow exponentially. ASTRI's research into cutting-edge communication technologies for pre-5G and 5G wireless systems is set to revolutionise connectivity, unlocking unprecedented potential for the city's smart future.

城市管理的轉型有賴先進技術，為此應科院正積極帶領進行多項突破性項目，包括車聯網通訊測試、聯網自動駕駛研發、實時入侵警報系統等，以提升公共交通安全。

隨着香港邁向採用5G技術的領導地位，用戶、設備、數據與知識的互聯互通程度亦隨之倍增。應科院在尖端無線通訊技術方面的研究聚焦前5G及5G，將大大革新連接方式，釋放前所未有的潛力，推進香港邁向智慧未來。

Research Areas & Focus
研究領域與重點

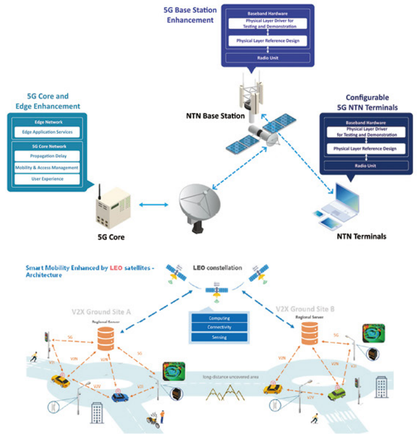


Technologies Breakthrough 技術突破

ASTRI's research and development in smart connectivity, smart mobility and smart living supports Hong Kong's Smart City Blueprint vision.

應科院在智能網絡、智慧出行及智能生活方面的研發工作，支持踐行香港智慧城市藍圖的願景。

Smart Connectivity 智慧網絡



Advancing 5G Core Network and Base Station Technologies for Satellite Communications

ASTRI completed a groundbreaking research project evaluating 5G core network and base station enhancements for non-terrestrial networks (NTN). The initiative successfully tackled key technical challenges unique to satellite communications, such as long-distance signal delays, mobile cell management, and quality of service optimisation. This research has attracted considerable attention from satellite operators across Hong Kong and Chinese Mainland, who are now exploring infrastructure upgrades to integrate advanced satellite communication capabilities into their networks.

推進衛星通訊5G核心網絡和基站技術

應科院完成了一項突破性研究項目，評估非地面網絡（NTN）的5G核心網絡和基站增強技術。該項目成功應對了衛星通訊特有的關鍵技術挑戰，包括長距離訊號延遲、移動小區管理，以及服務質量優化。這項研究吸引了香港及中國內地衛星營運商的高度關注，他們現正探索基礎設施升級方案，以將先進的衛星通訊能力整合到其網絡中。

Low Earth Orbit (LEO) Satellite-Enabled V2X and CAV Technologies

ASTRI explored the use of LEO satellites to address connectivity challenges in densely built urban environments, particularly for Vehicle-to-Everything (V2X) and Connected Autonomous Vehicle (CAV) technologies. Key developments included linking satellite movements to smart mobility applications, designing a satellite simulator, and creating a feasibility plan for smart mobility satellites. Successful trials at Hong Kong Science Park demonstrated the potential of LEO satellites to provide flexible, cost-effective, and scalable connectivity solutions, garnering significant media attention.

低軌衛星賦能的車聯網與網聯自動駕駛汽車技術

應科院探索利用低軌衛星解決高密度城市環境中的通訊挑戰，重點聚焦車聯網和網聯自動駕駛汽車領域的應用。關鍵技術進展包括將衛星運行與智慧出行應用進行聯動、設計衛星運行仿真系統，以及探索智慧出行衛星的可行性方案。應科院在香港科學園的成功試驗證明了低軌衛星具備提供靈活、經濟、高效且可擴展通信解決方案的潛力，並獲得媒體的廣泛關注。

Smart Living 智慧生活

Efficient Hybrid System for DC Grid Applications (EHS)

ASTRI developed a US-patented cooling system featuring magnetic components enhanced with graphite laminate layers to improve thermal performance. By bridging air gaps and reducing thermal resistance, the system increases heat dissipation efficiency and lowers the cooling system's power requirements. This innovation not only reduces energy costs but also extends the service life of components by preventing overheating during operation. The EHS is suitable for a wide range of applications, including power converters for renewable energy, data centres, uninterruptible power supplies (UPS), switch-mode power supplies (SMPS), automotive systems, and electric vehicle (EV) charging infrastructure.

用於直流電網應用的高效混合系統

應科院研發了已取得美國專利的冷卻系統，採用磁性元件並加入石墨層壓板以提高散熱性能。通過彌合氣隙和降低熱阻，該系統提高了散熱效率並降低了冷卻系統的功率需求。這項創新不僅降低了能源成本，還通過防止部件在運行過程中過熱來延長其使用壽命。這套系統用途廣泛，包括可再生能源、數據中心、不斷電系統、開關電源、汽車系統和電動汽車充電基礎設施。

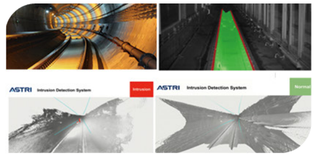
Smart Mobility 智慧出行

Advanced Air Mobility and Low-Altitude Economy

ASTRI serves as a technical partner to support the HKSAR Government's Low-altitude Economy Regulatory Sandbox. By providing technical reviews, identifying gaps, and engaging stakeholders, ASTRI supports data collection and the formulation of a roadmap for Low-Altitude Economy (LAE) development, along with legal, regulatory, and operational standards.

先進空中交通與低空經濟

應科院作為技術合作夥伴，積極支持香港特區政府「低空經濟監管沙盒」計劃。透過提供技術評估、找出發展缺口及推動持份者參與，本院協助收集關鍵數據，並共同制定低空經濟發展路線圖，以及相關的法律、監管與操作標準。



Dynamic Vision Sensor (DVS)-Based 3D Intrusion Detection System

In collaboration with MTR Corporation, ASTRI developed a DVS-based system combining edge processing and AI sensing technologies to detect unauthorised intrusions into trains. This platform enhances passenger safety and operational efficiency by enabling real-time detection with high accuracy. The project has laid the groundwork for further 3D sensing advancements, such as stereo event-based systems for autonomous vehicles and intelligent traffic management.

基於動態視覺感測器的3D入侵偵測系統

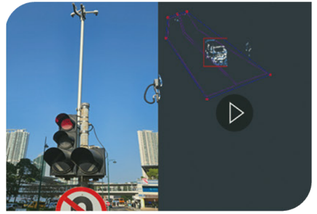
應科院與香港鐵路有限公司合作開發了一套基於DVS的系統，結合邊緣運算與AI感知技術，用以偵測列車前方入侵物體。此平台透過高精準度的即時偵測，提升乘客安全與營運效率。該項目亦為後續3D感知技術的進階發展奠定基礎，例如用於自動駕駛車輛的立體事件感測系統，以及智慧交通管理。

Autonomous Inspection Robotic System (AIRS) for Underground Drainage

ASTRI's AIRS uses advanced robotics to inspect underground stormwater drainage systems autonomously, enhancing safety, efficiency, and data accuracy. It navigates complex 3D environments, collects structural data, and reconstructs 3D maps for better maintenance planning. Developed with Model-based Systems Engineering, AIRS ensures reliability, reduces costs, and supports sustainable infrastructure management.

地下雨水排水系統自主檢測機械人系統(AIRS)

應科院研發的AIRS採用先進機械人技術，自主檢測地下雨水排水系統，提升安全性、效率及數據準確性。系統能於複雜的3D環境中導航、收集結構數據並重建3D地圖，優化維護規劃。透過開發基於模型的系統工程，AIRS確保可靠性、降低成本，並支持可持續基建管理。



Smart Traffic Control System

ASTRI deployed a Sensing Fusion System for real-time traffic monitoring. This system automates the detection and classification of vehicles and pedestrians, optimises traffic signal timings, and improves operational efficiency and road safety. Designed with privacy protection and energy efficiency in mind, the system contributes to Hong Kong's vision for a sustainable and smart urban transport network.

智能交通控制系統

應科院於實時交通監控中應用了感測融合系統，以自動檢測和分辨車輛及行人，優化交通訊號燈時間，並提升運作效率和道路安全。系統設計考慮了隱私保護和能源效率，有助香港實現可持續且智能的城市交通網絡願景。

These innovative solutions showcase ASTRI's dedication in advancing smart city development through technologies.

這些創新解決方案彰顯了應科院藉科技促進智慧城市發展的決心。

Partnership and Commercialisation
合作夥伴及市場化項目

Smart Connectivity 智能網絡

5G Private Network for Construction Sites

ASTRI, with support from the Housing Authority, deployed an innovative 5G private network integrated with advanced IoT solutions at construction sites. This technology enables remote crane control, real-time safety monitoring, and mobile plant danger zone alerts, significantly improving worker safety, crane operation accuracy, and construction efficiency.

適用於建築工地的5G專用網絡

在香港房屋委員會的支持下，應科院整合先進的物聯網解決方案，成功於建築工地部署創新的5G專用網絡。此技術實現起重機遠程控制、即時安全監測及移動設備危險區域警示功能，顯著提升工人安全、起重機操作精準度與施工效率。

Multi-Band 5G Private Network for Public Safety

ASTRI successfully trialled a 5G standalone (SA) private network across multiple bands (700 MHz and 4.9 GHz) at Hong Kong Police Force headquarters. This trial serves as a replicable model for other locations, demonstrating optimised configurations for public safety applications.

適用於公共安全的多頻段5G專用網絡

應科院於香港警察總部成功完成多頻段（700 MHz及4.9 GHz）5G獨立組網專用網絡的測試驗證。此試驗成果建立了可複製的部署模式，為公共安全應用場景展示出經過優化的網絡配置方案。

Smart Mobility 智慧出行

LEO Satellite Collaboration for Smart Mobility

ASTRI successfully delivered a Low Earth Orbit (LEO) satellite project in collaboration with the satellite industry, enabling advanced connectivity to support smart mobility applications.

低軌衛星助力智慧出行

應科院與衛星產業合作夥伴成功完成了一個低軌衛星項目，旨在提供先進的網絡連接，支援智慧出行應用。

C-V2X and CAV Development

Collaborations with the Transport Department, Hong Kong International Airport (HKIA), and Chinese Mainland partners have advanced C-V2X and Connected Autonomous Vehicle (CAV) technologies. Projects include a C-V2X trial site at HKIA, smart port and highway systems, and a Green Transit System for newly developed areas.

蜂窩車聯網通訊系統

應科院正為香港國際機場指定道路的路側準備一套車聯網試點系統。該系統配備車聯網通訊、路側感知功能及實時數據交換能力，旨在提升路口、環島等複雜交通場景下，具備車聯網功能的車輛的通行能力。這一舉措是推動機場實現常態化載客自動駕駛運營的關鍵一步。

Smart Living 智能生活

Energy Storage Systems

ASTRI implemented six 125kW energy storage systems in Zhongshan Industrial Park, resulting in an estimated annual savings of RMB1.06M through reduced electricity costs.

儲能系統

應科院在中山工業園區安裝了六套125kW儲能系統，協助園區降低電費，預計每年可節省人民幣106萬元。

AI and Smart Construction Solutions

In collaboration with the Housing Authority and Housing Society, ASTRI is advancing projects such as AI-based crane structural health monitoring and Modular Integrated Construction (MiC) precision positioning systems.

人工智能與智慧建造解決方案

應科院與香港房屋署及房屋協會合作，推動以人工智能為基礎的塔式起重機結構健康監測系統和智能光學精準定位系統。

Smart Caring Solutions

ASTRI collaborated with the Neighbourhood Advice-Action Council to pilot a sensing fusion event-based system, with plans to expand to the Hospital Authority and Pok Oi Hospital. In partnership with Sony, ASTRI is promoting Dynamic Vision Sensor solutions for elderly care.

智能護理解決方案

應科院與鄰舍輔導會合作，試驗開發基於事件感知融合的系統，並計劃將其擴展至醫院管理局和博愛醫院。同時亦與索尼合作，推廣用於老人護理的動態視覺感測器解決方案。

Smart Government 智慧政府

Automated On-Board Private Car Clearance

ASTRI developed an innovative immigration clearance system for the Immigration Department, leveraging facial recognition, real-time image enhancement, and anti-spoofing algorithms. This system enables seamless clearance for pre-registered passengers without requiring them to stop, enhancing both efficiency and security.

自動化私人車輛入境清關系統

應科院為入境事務處開發了一個利用面部識別、實時圖像增強和防欺騙算法的創新入境清關系統。預先登記的乘客能毋需停車即可順利通過清關，提升清關效率和安全性。

Smart Government 智慧政府

AI-Assisted E-Discovery and Data Analytics Platform

ASTRI developed an AI-driven data analytics platform for risk management, including a Customs Crime Analytics System (CCAS) for the Hong Kong Customs and Excise Department. Building on these achievements, the platform was customised for the Independent Commission Against Corruption (ICAC) to handle dynamic case data, such as instant messages, emails, and notes. UI/UX designs and initial event extraction results have been delivered, enhancing the efficiency and effectiveness of ICAC investigations.

人工智能輔助電子證據及數據分析平台

應科院開發以人工智能驅動的數據分析風險管理平台，其中包括供香港海關用作其「海關犯罪分析系統」。本院更以此為基礎，為廉政公署度身設計另一平台，以處理即時訊息、電郵及備忘等動態案件數據。其用戶介面／用戶體驗已完成設計，亦已取得初步事件抽取成果，可進一步提升廉署調查的效率及成效。

Project commenced in 2024/25*
2024/25年度開展的研發項目*

Efficient Hybrid System for DC Grid Applications	應用於直流電網的高效混合系統
V2G VPP for Hybrid Grids System from Residential to Commercial Applications (VVH)	用於住宅至商業等級的混合電網虛擬發電廠V2G電動車充電系統
Transformer-based Semantic Malware Analysis Framework	基於變換器的惡意軟體語意分析框架
Private Conversational AI Platform with Copyright Protection	具有版權保護機制的私有化可對話AI平台
AI Programmatic Advertising for Real-time Intelligence	基於人工智能的實時程序化廣告平台
Trial: AI Assisted E-Discovery and Data Analytic Platform	試驗計劃：人工智能輔助電子發現與數據分析平台
Software Supply Chain Vulnerability Identification Platform with Binary Disassembly and Hybrid Analysis	軟件供應鏈漏洞識別平台，具有二進制反匯編和混合分析功能
Collaborative Multi-Agent Systems Pose-Graph Optimisation For Digital Twins	對於數字孿生的協作多智能體系統位置圖優化
Low Earth Orbit (LEO) Satellite Enabled V2X and CAV Technologies	低地球軌道(LEO)衛星支持的V2X和CAV技術
Base Station for Spectrum Sharing	共享頻譜基站
Architecture Design and Profiling for 5G Base Station Using Next Generation Chipset Platforms	新一代晶片組平台的5G基站架構設計與剖析
AI Infrastructure for 5G and Beyond Core Network	5G及未來核心網的AI基礎設施
Trial: Enhanced 5G Coverage for Remotely Controlled Tower Crane	試驗計劃：增強5G覆蓋以用於塔式起重機的遠程控制
Detection of Human Interaction for Visually Impaired People	以人際互動辨識作視障輔助的主要手段
Non-Destructive Critical Dimension Inspection System for Flat Optics	平面光學元件無損關鍵尺寸檢測系統
High-speed 3D Sensing System for Transportation Infrastructure Inspection	用於交通基礎設施檢測的高速三維感測系統
E-nose for Food Waste Management	用於廚餘垃圾管理的電子鼻
Smart Tactile Sensor for Food Quality Control	應用於食品質量控制的智能觸覺傳感器系統
Photonics Enabled AI Crane Structural Health Monitoring System	光電子支援的人工智能起重機結構健康監測系統
Semi-Auto AI with Procedural Generation	基於程序化生成的半自動人工智能
Deep learning based real time Computer-Generated Holograms (CGH) for SLM projection	基於深度學習的即時計算全息投影
Smart Optics for Modular Integrated Construction (MiC) Precision Positioning	組裝合成建築法的智能光學定位系統

* Funded by the Innovation and Technology Fund
* 創新及科技基金資助

FINANCIAL TECHNOLOGIES
金融科技

ASTRI stands at the forefront of this financial transformation, harnessing its expertise in AI, blockchain, cybersecurity, and data analytics to drive innovation and reinforce Hong Kong's position as a leading international financial hub.

憑藉穩健的監管框架、豐富的商業機遇、充足的資本支持以及優秀的人才庫，香港是發展金融科技的理想地點。應科院在人工智能、區塊鏈、網絡安全以及數據分析方面具備專業知識，積極以創新科技推動金融業轉型，進一步鞏固香港作為國際金融中心的領先地位。

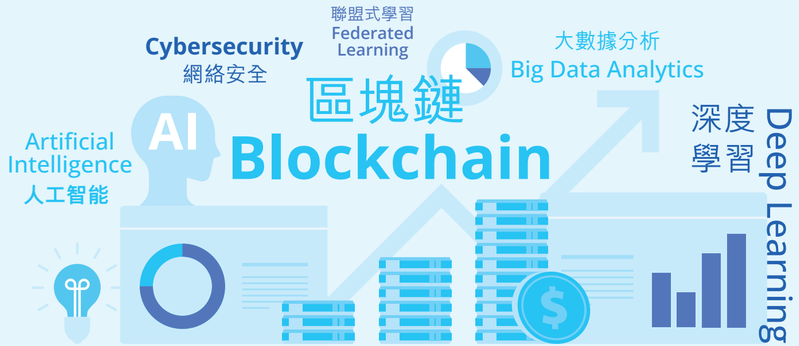
FinTech is transforming financial services, making them faster, more secure, and highly reliable. Advanced technologies are empowering banks, insurers, and other financial institutions to better serve their customers, while enabling users to access financial products in a seamless and intuitive manner.

As a leading R&D organisation in Hong Kong, ASTRI develops cutting-edge financial technologies to address key industry challenges. Focusing on blockchain, cybersecurity, big data while providing proofs-of-concept and scalable innovations, ASTRI is driving the financial sector towards a new era of growth and innovation, supporting the city's vision of a technology-driven future.

金融科技正徹底改變金融服務，令它更快速、更安全且高度可靠。先進技術賦能銀行、保險公司及其他金融服務機構提升客戶服務水平，同時讓用戶能夠以簡易便捷的方式接觸各類金融產品。

作為香港其中一家領先的研發機構，應科院致力開發尖端金融科技，以應對行業挑戰。我們聚焦區塊鏈、網絡安全和大數據，透過提供概念驗證和可擴展的創新解決方案，推動金融業邁向增長和創新的時代，並支援香港實現以科技驅動未來的願景。

Research Areas & Focus
研究領域與重點



Technologies Breakthrough
技術突破

In 2024/25, ASTRI demonstrated its commitment to technological excellence by developing several innovative solutions tailored to the financial industry. These advancements showcase how cutting-edge technologies can enhance efficiency, security, and operational effectiveness across various sectors.

於2024/25年度，應科院為金融業度身訂造多項創新解決方案，對科技卓越的追求有目共睹，亦展示了尖端科技如何提升各行各業的效率、安全性及營運效能。

AI Fraud Detection

ASTRI's specialised AI fraud detection technology represents a significant advancement in financial security, delivering measurable value to banking institutions whilst strengthening customer trust. The solution deploys sophisticated algorithms to scrutinise bank statements for fraudulent activity through multiple AI-driven image assessments, ensuring detection evasion is virtually impossible. Core features encompass AI-generated image detection, manipulated image inspection, relative layout scale comparison, and GREEN technology for cross-field validation. Compatible with statements from leading institutions, the technology detects inconsistencies and alterations with exceptional accuracy, enhancing transaction security and building confidence in digital banking services.

人工智能防欺詐偵測技術

應科院研發的專業人工智能防欺詐偵測技術，標誌着金融安全領域的重要突破，為銀行機構帶來實質價值，並顯著提升客戶信任度。此解決方案採用先進演算法，通過多層次人工智能圖像評估技術，深入審查銀行結單中的欺詐行為，確保欺騙行為無所遁形。核心功能涵蓋人工智能生成圖像偵測、篡改圖像偵測、相對版面比例比較，以及使用GREEN技術進行交叉驗證。此技術支援主要金融機構的月結單格式，能以極高準確度識別異常及竄改痕跡，有效強化交易安全，並增進客戶對數碼銀行服務的信心。

Semantic Matching for Loan document Review

ASTRI, in collaboration with a Hong Kong bank, has developed an AI-powered automated loan document review system that leverages advanced natural language processing and deep learning technologies. This system is designed to automatically extract and compare relevant content between the term sheet and the loan agreement to ensure semantic consistency. The system has been successfully deployed by the bank across various loan types, achieving an accuracy rate exceeding 90%. By significantly improving the speed of document review, it reduces operational risks, minimises human errors, and alleviates the workload of frontline staff.

貸款文件審查的語義比對

應科院與香港一家銀行合作，研發了一套人工智能銀行貸款文件自動審核系統。該系統採用先進的自然語言處理和深度學習技術，能夠自動提取相關內容，並與條款說明書與貸款協議作比對，以確保語義描述的一致性。該系統已成功在銀行應用，涵蓋多種貸款類型。系統準確率超過九成，顯著提升審核速度外，更大幅降低操作風險和人為錯誤，並減輕前線員工工作量。

These innovative solutions and collaborative partnerships demonstrate ASTRI's continued leadership in developing transformative technologies that solve critical industry challenges.

透過創新方案與協作夥伴關係，應科院持續引領變革科技的發展，解決業界挑戰。

Partnership and Commercialisation
合作夥伴及市場化項目

Network Visualisation Solution 網絡可視化解決方案	ASTRI designed and implemented a comprehensive data analytics system for the Hong Kong Monetary Authority. This system consolidates data from multiple sources to construct a corporate knowledge graph for supervisory purposes. Features include data ingestion, cleansing, text mining, entity resolution, graph analytics, and visualisation, all supported by thorough documentation and skill transfer.	應科院為香港金融管理局設計並推行一項全面數據分析系統，透過整合多來源數據構建企業知識圖譜，有助於監管工作。其主要功能包括數據擷取、清理、文本挖掘、實體解析、圖表分析及視覺化，並以詳細文檔及技能轉移作支援。
Cheque OCR (Optical Character Recognition) 支票光學字符識別技術	ASTRI partnered with a multinational bank to develop advanced recognition engines that streamline cheque processing operations. The trial software successfully recognises critical fields including payer and payee names, cheque amounts, dates and other magnetic ink character recognition (MICR) information across multiple languages—English, Traditional Chinese, and Simplified Chinese. This collaboration enhances cheque clearing efficiency and optimises operational workflows for the banking sector. The system continues to evolve through iterative updates that address processing errors and improve overall performance.	應科院與一家跨國銀行合作開發先進的識別引擎，以優化支票處理流程。試用軟件能成功識別不同欄目的英文、繁體中文及簡體中文資訊，包括付款人及收款人姓名、支票金額及日期，以及其他磁性墨水字符識別(MICR)資訊。此項合作提升了支票結算效率及銀行營運流程。系統將透過迭代更新修正錯誤並提升整體性能。
Software Supply Chain Vulnerability Identification Platform 軟件供應鏈漏洞識別平台	In collaboration with Sparkle In Technology Investment Limited, ASTRI developed a platform for identifying vulnerabilities in software supply chains. Using hybrid scanning mechanisms, including binary code dynamic scanning, the platform provides a robust solution to manage security risks across digital assets like servers, routers, and gateways.	應科院與耀通科技投資有限公司合作開發軟件供應鏈漏洞識別平台，以包括二進制動態掃描等混合掃描機制，為伺服器、路由器及閘道器等數碼資產帶來穩健的安全風險管理解決方案。

Project commenced in 2024/25*
2024/25年度開展的研發項目*

Fraud Detection using AI for Image-based Documents	基於人工智能的詐欺文件圖像檢測
A Programmable Automated Tabular-Data Generation method for Machine Learning	用於機器學習的可編程自動表格數據生成
LLM Access Shield against Data Leakage and Undesirable Response	用於防止資料洩露和不良回應的大語言模型訪問護盾
Valuation and Simulation for Trusted Data Exchanges	可信數據交易的評估和模擬

* Funded by the Innovation and Technology Fund
* 創新及科技基金資助

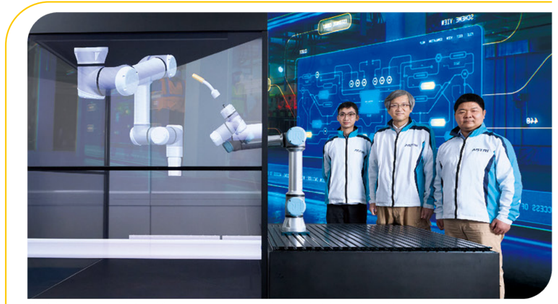
NEW INDUSTRIALISATION AND INTELLIGENT MANUFACTURING
新型工業化及智能製造

New industrialisation was a key initiative outlined in 2024 Policy Address, reflecting the HKSAR Government's commitment to driving advanced manufacturing through technology. ASTRI is at the forefront of developing and deploying cutting-edge technologies to help Hong Kong transform into a regional centre for intelligent manufacturing and industrial innovation.

新型工業化是香港特區政府《**2024**年施政報告》的重點政策，反映政府致力以科技驅動高效先進製造業的發展。應科院站在最前線開發和部署尖端技術，助力香港轉型發展為區內智能製造及工業創新中心。

We are enabling the creation of interconnected, fully digitalised smart factories that seamlessly integrate artificial intelligence and robotics to deliver highly efficient, reliable and sustainable operations. By driving industrial progress, ASTRI is supporting Hong Kong's emergence as a smart city, enhancing research and development capabilities, and improving production efficiency across the manufacturing sector.

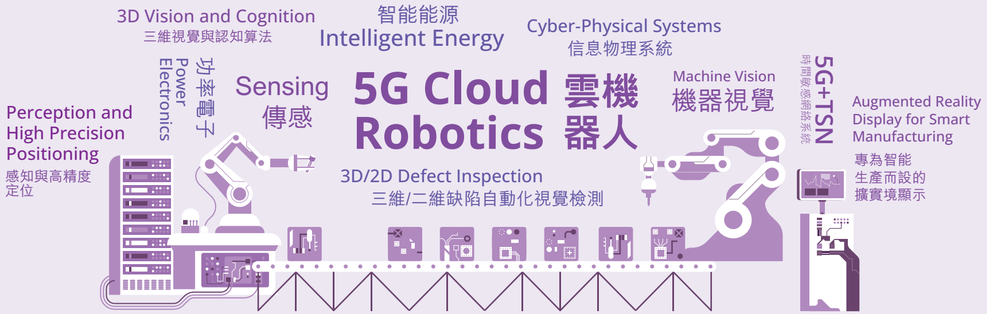
我們正推動建構互聯、全數碼化的智慧工廠科技，融合人工智能及機械人技術，以實現高效、可靠及可持續的營運。透過推動工業進步，應科院支持香港發展成為智慧城市，提升研發能力，並改善製造業整體的生產效率。



ASTRI leverages Model-Based Systems Engineering to develop digital and physical twins, revolutionising autonomous robotics with real-time risk prediction, adaptability, and operational integrity in dynamic, mission-critical environments.

應科院運用模型化系統工程開發數位孿生和實體孿生，革新自主機器人技術，具備即時風險預測、適應和完整操作的能力，能夠在動態且危險的環境中執行任務。

Research Areas & Focus
研究領域與重點



Technologies Breakthrough
技術突破

In 2024/25, ASTRI continued to drive innovation in smart connectivity, leveraging advanced technologies to enable intelligent networks and enhance operational efficiency across industries. By integrating cutting-edge solutions into smart manufacturing, logistics, and environmental monitoring, ASTRI remains at the forefront of efforts to build Hong Kong into a world-class smart city.

By advancing these technologies, ASTRI is driving the adoption of intelligent systems that enhance operational efficiency, environmental sustainability, and industrial innovation, strengthening Hong Kong's competitiveness in smart manufacturing.

透過推動這些技術發展，應科院促進智能系統的採用，以提升運作效率、促進環境可持續發展及推動產業創新，加強香港在智能製造方面的競爭力。

於2024/25年度，應科院持續推進智慧網絡不斷創新，更以先進技術實現智能網絡，及提升各行業的營運效率。應科院將創新解決方案整合至智能製造、物流及環境監測領域，繼續引領香港邁向世界級智慧城市。

Cloud-based Robot Management Platform

Just as factories rely on managers to oversee workers and allocate tasks, smart factories need a centralised system to manage robots and ensure efficient task execution. ASTRI's proprietary Cloud-based Robot Management Platform can coordinate and manage over 100 robots simultaneously. This advanced platform empowers robots to "execute, think, and adapt" in real-time, delivering unparalleled flexibility and efficiency for modern smart factories. It can also be applied in logistics warehouses, smart offices and other scenarios.

雲機器人管理調度平台

正如工廠需要廠長管理工人分配工作，智能工廠亦需要中央管理平台，確保機器人順利執行任務。應科院自主研發的「雲機器人管理調度平台」，能同時協同管理超過100台機器人，讓它們「邊執行、邊思考、邊適應」，令智能工廠更靈活高效。這個平台還可以在不同場景應用，例如物流倉儲和智能辦公室。

Automated Diamond Colour Grading

ASTRI developed a high-precision automated diamond colour grading machine utilises internal reference standards to eliminate environmental and human errors, achieving an accuracy of ±0.5 grade. This innovative technology enables continuous diamond colour evaluation on production lines, simplify workflows and address the inefficiencies of traditional grading methods, setting a new benchmark for the industry.

鑽石顏色自動分級

應科院研發了高精密自動化鑽石顏色分級機器，利用內部參照標準，消除環境和人工誤差，令準確率高達正負0.5級。這創新技術能夠在生產線上連續評估鑽石顏色，簡化生產線流程，解決傳統分級的低效問題，為行業樹立新基準。

Lifelong AI Learning for Smart Manufacturing and Logistics

To support dynamic industrial requirements, ASTRI developed lifelong AI technology capable of handling both data incremental and class incremental scenarios. Integrated into the ASTRI Machine Vision platform, this innovation enhances ASTRI's intellectual property in defect inspection, providing robust AI-driven solutions for smart manufacturing and logistics.

智能製造及物流的終身人工智能學習

為配合動態工業需求，應科院開發了支援數據增量及分類增量場景的終身人工智能技術，並已整合至應科院機器視覺平台，不僅可鞏固應科院在缺陷檢測領域之知識產權，亦為智能製造及物流領域提供更強大的人工智能解決方案。

Partnership and Commercialisation
合作夥伴及市場化項目

Collaboration in High-End Semiconductor Inspection Technology
高端半導體檢測技術合作

We partnered with leading companies in Hong Kong and Chinese Mainland, including Supergold, Vega, Motic, and i-Sense, to integrate our coaxial confocal line-scan technology into their existing semiconductor inspection and microscopy equipment. This technology has also been adopted as a standard sensor in some applications.

As part of the collaboration, we developed multiple models with varying specifications to address the diverse application needs of different customers and scenarios. Several manufacturers have already commenced small-scale production, demonstrating the adaptability and market readiness of this innovative technology.

我們與香港及中國內地多家領先企業合作，包括Supergold、Vega、Motic及中科慧儀（i-Sense），將應科院的同軸共焦線掃描技術整合至其現有半導體檢測及顯微鏡成像設備中，在部分應用中更成為標準傳感器。

合作期間，我們開發了多款規格各異的型號，以滿足不同客戶及場景的多元應用需求。部分製造商已展開小規模生產，足證此創新技術靈活多變並具備條件推出市場。

Project commenced in 2024/25*
2024/25年度開展的研發項目*

Enabling Intelligence and Autonomation for 5G and Beyond Private Networks Operations	實現5G及未來專用網絡運維自智化
Lifelong AI Learning for Smart Manufacturing and Logistics	用於智能製造和物流的終身人工智能學習
Design and Fabrication of Narrowband Metalens for Mobile 3D Sensing	移動3D感測超透鏡的設計與加工
Dynamic Hybrid-frequency Spatial-carrier Deflectometry Based 3D Inspection System	基於動態混合頻率空間載波偏折術的3D檢測系統
3D Metrology & Inspection System Generic for Industrial Verticals	用於工業場景的3D測量與檢測系統

* Funded by the Innovation and Technology Fund
* 創新及科技基金資助

DIGITAL HEALTH
數碼健康

The global ageing population, rising healthcare costs, and increasing prevalence of chronic diseases are creating challenges for healthcare systems worldwide. In Hong Kong, these pressures are compounded by demographic shifts and evolving patient expectations. To address these issues and support Hong Kong's ambition to become a global health innovation hub, ASTRI is advancing digital health technologies centred on non-invasive monitoring, early detection, and AI-driven diagnostics.

全球人口老化、醫療成本上升及慢性疾病日益普遍，為全球醫療體系帶來挑戰。香港同樣蒙受因人口結構轉變及患者對醫療服務的期望日益提升所帶來的壓力。為應對新趨勢，並支持香港升格為全球健康創新樞紐，應科院正積極推進以非侵入性監測、早期檢測及人工智能診斷為核心的數碼健康科技。

ASTRI's digital health technologies focus on improving healthcare efficiency, enhancing personalised medical care, and ultimately elevating the quality of life. Through inventions in preventative health monitoring, medical diagnosis, and medical computing, ASTRI is fostering growth in Hong Kong's healthcare industry while strengthening the city's technological capabilities.

Key breakthroughs include advanced biomedical imaging technologies that are opening new frontiers in medical science, improving patient care, and saving lives. Many of ASTRI's innovations, such as the telehealth technology platform, tracking and monitoring systems for the elderly, intelligent preventive healthcare system, and non-invasive health screening devices, have already been adopted by hospitals, care centres, and healthcare service providers.

By leveraging cutting-edge IoT sensing, AI, and advanced inspection technologies, ASTRI is improving healthcare accessibility, outcomes, and cost-efficiency while reinforcing Hong Kong's position as a global leader in health innovation.

應科院的數碼健康科技以提升醫療效率及加強個人化醫療服務為本，期望最終能改善市民生活質素。透過預防性健康監測、醫學診斷和醫療運算的創新技術，我們全力推動香港醫療行業的成長，並強化香港的科技實力。

當中的重點突破包括先進生物醫學影像技術，開拓醫學科學新領域，從而改善病人護理及挽救更多生命。應科院多項創新技術已獲一眾醫院、護理中心及醫療服務供應商採用，當中包括遙距健康照顧及護理平台、長者追蹤和監測系統、智能預防醫療系統及非入侵性健康檢查設備等。

憑藉先進的物聯網感測、人工智能及高端檢測技術，應科院持續提升醫療服務覆蓋率、治療成效及成本效益，鞏固香港作為全球健康創新領導者的地位。

Research Areas & Focus
研究領域與重點

Technologies Breakthrough
技術突破

In 2024/25, ASTRI made significant advancements in digital health technologies to address healthcare challenges, leveraging innovative solutions to enhance efficiency, improve patient outcomes, and position Hong Kong as a global leader in health innovation. These breakthroughs span areas such as early disease detection, patient monitoring, medication dispensing, and healthcare training, supporting smarter, more sustainable healthcare systems.

於2024/25年度，應科院在數碼健康技術方面取得重大突破，以應對醫療挑戰，並透過創新解決方案提升效率及改善病人治療成效，從而推動香港成為健康創新領域的全球領導者。這些技術突破涵蓋疾病早期檢測、病人監測、配藥及醫療培訓等範疇，推動醫療體系邁向更智能及可持續的方向發展。

System-on-Chip for Capsule Endoscopy

ASTRI has developed an advanced System-on-Chip for Capsule Endoscopy that significantly advances gastrointestinal diagnostic technology. The chip delivers ultra-high-speed data transmission at rates more than seven times faster than existing solutions, enabling substantially clearer images and enhanced diagnostic accuracy. Engineered with a 42% size reduction compared to conventional designs, the chip allows more comfortable patient examinations without anaesthesia whilst reducing infection risks associated with traditional endoscopic procedures. Our commercial partner is advancing towards market launch in 2026, aiming to make gastric cancer screening more accessible and reduce mortality rates through earlier detection and timely intervention.

膠囊內窺鏡專用晶片系統

應科院研發了膠囊內窺鏡專用系統晶片，優化消化道檢測及診斷，其超高速傳輸能力提升逾7倍，令畫質更加清晰，顯著提高診斷準確性；同時晶片體積較傳統設計縮小42%，確立其在膠囊內窺鏡領域的獨特優勢，讓患者在毋需麻醉、降低感染風險的情況下完成更舒適的檢查。合作夥伴現正籌備於2026年把產品推出市場，讓消化道篩查更普及，及早發現和治療有助減低胃癌死亡率。

Multi-Functional Eye Health Checkup Device

ASTRI has developed the world's first multi-functional eye Health Checkup Device capable of conducting comprehensive examinations of the entire eye, from cornea to retina. This groundbreaking technology significantly expands the scope of eye health monitoring, delivering a highly efficient and comprehensive solution for public eye care services.

多功能眼部健康檢查儀器

應科院研發了全球首創多功能眼部健康檢查儀器，可全面覆蓋角膜至視網膜的各部分檢查，大幅擴展眼健康監測的範疇，為公眾眼科護理提供高效而全面的解決方案。

Sensing Fusion for Event-Based Monitoring System

ASTRI has developed a privacy-preserving, event-based sensing system with applications spanning elder care, childcare, and behavioural analysis. The technology incorporates person re-identification capabilities for security and surveillance applications and has been successfully licensed to industry partners for further development and deployment. Integration efforts are currently underway to embed this platform into innovative applications across multiple sectors.

基於事件的傳感融合監控系統

應科院研發了一套注重隱私保護的事件傳感系統，適用於長者護理、兒童看顧及行為分析等多種場景。該技術具備人物再識別功能，可應用於保安監控，亦已授權業界夥伴進一步開發及應用。目前該平台正獲積極推動整合至各行各業嶄新應用上。

These solutions reflect ASTRI's commitment to enhancing healthcare accessibility, efficiency, and safety through innovation and technology, while strengthening Hong Kong's competitiveness in digital health.

這些解決方案體現了應科院致力藉創新科技提高醫療保健的普及性、效率及安全程度，並確保香港在數碼健康方面保持競爭優勢。

Partnership and Commercialisation
合作夥伴及市場化項目

CHIMP Chest Patch for Patient Monitoring **CHIMP胸貼式病人監測裝置**	We collaborated with the Hospital Authority and Tin Shui Wai Hospital to conduct a pilot trial of the CHIMP Chest Patch for Patient Monitoring, involving over 3,400 patient-days of observation. The trial, conducted across two hospital wards, received an 80% satisfaction rating from patients. During the collaboration, we gathered valuable professional feedback from medical experts to further refine the chest patch solution. With over 30,000 hospital beds in Hong Kong, there is significant potential for this technology to enhance patient observation and safety. Plans are underway to scale up the user trial to other hospitals in coming year.	我們與醫院管理局及天水圍醫院合作，開展CHIMP胸貼式病人監測裝置的試點項目，合共觀察超過3,400個病患日數。這次試驗涵蓋兩個病房，病人滿意度達到80%。合作期間，我們亦收集了專業醫護人員的寶貴意見，以進一步改善胸貼方案。香港現有逾30,000張病床，故相關技術在提升觀察病人安全方面具備巨大潛力，我們正計劃於來年將用戶試驗推展至其他醫院。
Cost-Effective SEN Training Platform **高成本效益特殊教育需要培訓平台**	We developed a cost-effective platform for Special Educational Needs (SEN) training that enables initial teachers to conduct one-to-many training sessions. The AI-based system was deployed in three learning centres in Hong Kong, with a successful user trial carried out by a local non-governmental organisation. This platform provides an innovative and scalable solution to improve SEN education and support.	我們研發了一個具成本效益的特殊教育需要訓練平台，讓初任教師亦能進行一對多訓練。這個人工智能系統已於香港三間學習中心應用，並由一家本地非政府組織成功進行用戶試驗。此平台為提升特殊需要教育及支援提供了創新而可擴展的解決方案。
Sensing Fusion Platform for Accurate and Smart Dispensing **用於精準智能配藥的融合感測平台**	The Sensing Fusion Platform for accurate and smart drug dispensing is currently under trial at Tin Shui Wai Hospital. This advanced system leverages AI to enhance medication safety and streamline dispensing processes, addressing unique challenges in Hong Kong's healthcare environment.	這套用於精準智能配藥的融合感測平台目前正於天水圍醫院試用。這套先進系統運用了人工智能提升用藥安全，並簡化配藥流程，以應對香港醫療環境的特殊挑戰。

Project commenced in 2024/25*
2024/25年度開展的研發項目*

Image Restoration and Synthesis for Medical Optical Imaging	醫用光學成像系統的圖像復原與合成
Feasibility Study on Registration of 2D and 3D Multimodal Images for Medical Applications	針對醫療應用的2D和3D多模態影像配準技術的可行性研究
Intelligent Screening for Heart Failure Based on Korotkoff Sounds	以柯氏音為本的智能心臟衰竭篩檢
Trial: AI-assisted Paediatric Occupational Therapy Service for Smart Hospitals	試驗計劃：為智慧醫院提供以人工智能協助兒童職業治療服務
Intelligent Specific Learning Difficulties Screening Approach for SEN Students	專為具特殊學習需要學生而設的智能學習障礙篩查

* Funded by the Innovation and Technology Fund
* 創新及科技基金資助

APPLICATION-SPECIFIC INTEGRATED CIRCUITS
專用集成電路

Integrated circuits are the backbone of advanced technologies, powering the development of electronics, telecommunications and smart city solutions. The Hong Kong Branch of National Engineering Research Centre for Application Specific Integrated Circuit System (CNERC) was set up in 2012 within the infrastructure of ASTRI, spearheading research and development in application-specific integrated circuits (ASICs) to support the national high-tech industrial growth.

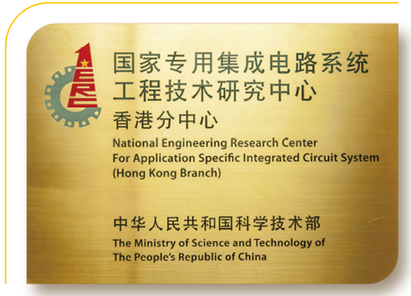
集成電路是多種先進技術的骨幹，支援電子、電訊及智慧城市解決方案的發展。**2012**年，國家專用集成電路系統工程技術研究中心香港分中心依託應科院成立，帶領專用集成電路研發工作，助力推動國家高科技產業發展。

As the first CNERC branch in Hong Kong, the centre plays a pivotal role in ASTRI's technology strategy, complementing its six core priority areas. The branch focuses on microelectronics and integrated circuits, driving innovations that enable advancements in new industrialisation, intelligent manufacturing, smart city development, financial technologies, and next-generation network solutions.

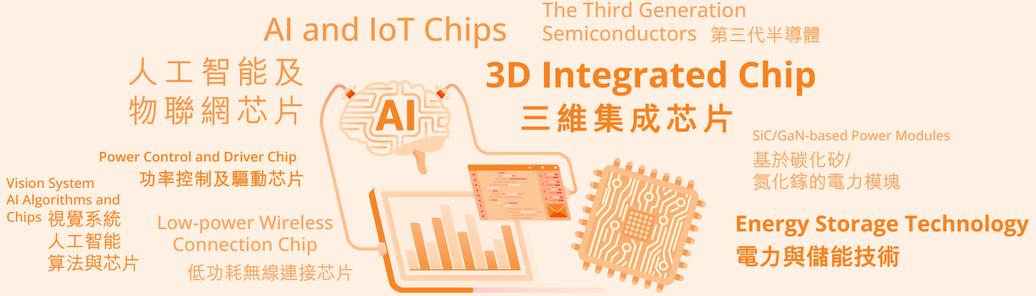
Through its leadership in research and development in ASIC, ASTRI continues to deliver cutting-edge solutions that empower industries and foster technological growth, reinforcing Hong Kong's position as a hub for innovation and technology.

國家專用集成電路系統工程技術研究中心在香港設立的首家分中心，在應科院的技術策略中扮演關鍵角色，並與其六大優先發展領域互補優勢，聚焦微電子及集成電路研發，藉此帶動新型工業化與智能製造、智慧城市、金融科技及新一代網絡解決方案等技術創新。

憑藉在專用集成電路研發上的領導角色，應科院不斷為業界提供尖端解決方案，驅動行業發展及技術進步，進一步強化香港作為創新科技中心的地位。



Research Areas & Focus
研究領域與重點



Technologies Breakthrough
技術突破

ASTRI continues to lead innovation in application-specific integrated circuits, developing advanced solutions that enhance performance, optimise efficiency, and address critical industry needs. These technologies are driving progress across sectors including artificial intelligence, automotive safety, sustainable energy, and semiconductor packaging, solidifying Hong Kong's role as a hub for cutting-edge R&D.

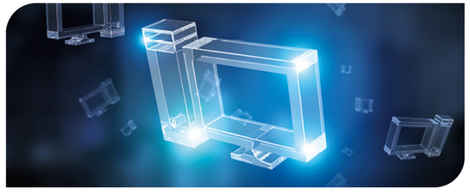
應科院持續引領專用數碼電路創新，開發先進集成電路方案，提升性能、優化效率並滿足行業關鍵需求。這些技術推動人工智能、汽車安全、可持續能源及半導體封裝等多元領域發展，鞏固香港作為領先創科中心的地位。

Ultrasonic Sensor System-on-Chip (SoC)

Aligned with the national semiconductor strategy, ASTRI developed an Ultrasonic Sensor SoC integrating a low-noise amplifier and high-precision processors. This technology improves road safety by enabling safer automotive systems, reducing accidents, and enhancing vehicle performance. The SoC represents a significant step in domestic substitution of ultrasonic radar chips, supporting the localisation of advanced semiconductor technologies.

超聲波感測器晶片系統

為配合國家半導體發展策略，應科院研發集成低噪聲放大器及高精度處理器的超聲波感測器晶片系統。此技術不僅可令汽車系統安全升級，提高道路安全，減少意外發生，更有助增強車輛整體性能。超聲波晶片系統標誌着以中國內地技術取代超聲波雷達晶片的重要突破，進一步促進先進半導體技術的本地化發展。



3D-IC Technology with Through-Glass Via (TGV)

ASTRI partnered with leading laser solution providers to advance Through-Glass Via (TGV) technology, a critical component in 3D-IC packaging. By incorporating Laser Induced Deep Etching (LIDE) techniques, ASTRI is addressing the demand for miniaturised, high-performance electronic devices. TGV technology enables vertical electrical connections through glass substrates, supporting the next generation of compact and efficient semiconductor components.

玻璃通孔三維集成電路封裝技術

應科院與頂尖鐳射解決方案供應商合作，推進玻璃通孔技術的發展，亦即三維集成電路封裝的關鍵組件。應科院為此引進鐳射誘發深蝕刻技術積極解決市場對微型化及高性能電子裝置的需求。玻璃通孔技術能夠實現在玻璃基板上的垂直電連接，支援新一代小型及高效能半導體元件的技術。

Through these advancements, ASTRI is driving innovation in application-specific integrated circuits, enhancing technologies that power intelligent systems, sustainable energy solutions, and semiconductor manufacturing, while reinforcing Hong Kong's position as a leader in high-tech development.

憑藉這些技術突破，應科院不斷推動專用集成電路的創新技術，提升智能系統、可持續能源方案及半導體製造的相關技術，鞏固香港於高科技發展領域的領導地位。

Partnership and Commercialisation
合作夥伴及市場化項目

Display Bridge Chip for Automotive Applications 車用顯示橋接晶片技術	We established a collaboration with a Hong Kong-listed enterprise specialising in IC products and display solutions to develop a Display Bridge Chip, a System-on-Chip (SoC) designed for automotive applications. This advanced SoC integrates an Microcontroller Unit Core, Local Dimming Core, and Memory with high-speed Mobile Industry Processor Interface, enabling high-rate display data input and output.	我們與一家專門從事集成電路產品及顯示解決方案的香港上市企業合作，共同開發專為車載應用設計的橋接晶片。這款先進的晶片系統整合了微控制器單元、局部調光核心和記憶體，並配備高速移動產業處理器介面接口，可實現高速顯示訊息輸入和輸出。
Advanced Energy Storage Systems (ESS) 先進儲能系統(ESS)	ASTRI is collaborating with a Hong Kong-based sustainable energy company to develop intelligent charging station solutions featuring advanced Energy Storage Systems. We are also exploring an extension into the emerging Low-Altitude Economy sector, focusing on future eVTOL (electric Vertical Take-Off and Landing) charging infrastructure, while contributing to the sustainable urban mobility and decarbonisation.	應科院正與一家香港可持續能源公司合作，開發採用先進儲能系統的智能充電站解決方案。我們亦正探討將合作擴展至新興的低空經濟領域，聚焦未來電動垂直起降飛行器(eVTOL)充電基礎設施，為可持續城市交通的發展和減碳進程作出貢獻。

Project commenced in 2024/25*
2024/25年度開展的研發項目*

Advanced Energy Storage Module for Storage Station Application	用於儲能電站的先進儲能模組
Mixed Signal IP Platform for Automotive Ultrasonic Sensors	適用於汽車超聲波傳感器的混合信號IP平台
NTN RF Transceiver Chip Towards 5G-A/6G Applications	面向5G-A/6G的NTN射頻收發機芯片
High-Speed and High-Resolution Hybrid Analog-to-Digital Converter for 5G-A/6G Terminals	用於5G-A/6G終端的高速高分辨率混合式模數轉換器
Micron-Diameter High-Aspect-Ratio Through-Silicon Via (MH-TSV) Filling for 3D-Interconnect	應用於三維互連的微米直徑高深寬比的矽通孔填充
Ultra Low-cost SiC Substrate (ULSiC)	低成本碳化矽襯底
AI-Assisted Generation System for Digital Logic Design	用於數碼邏輯設計的人工智能輔助生成系統
Tiny Machine Learning Hardware Platform Computation Optimisation	微型機器學習硬件平台計算優化

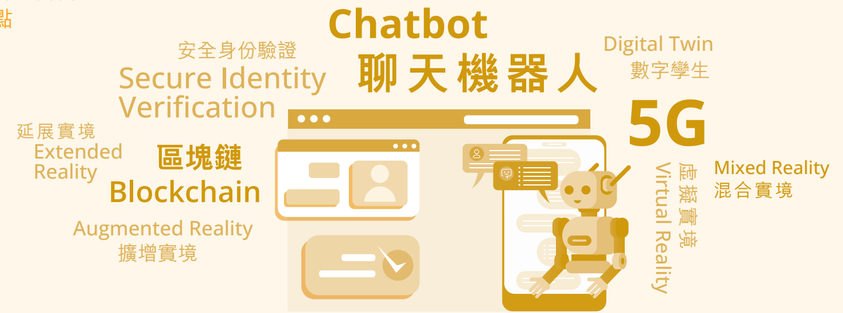
* Funded by the Innovation and Technology Fund
* 創新及科技基金資助

METAVERSE
元宇宙

The metaverse, where physical and virtual spaces converge through immersive technologies, is revolutionising how industries collaborate, communicate, and innovate. ASTRI is at the forefront of this transformation, developing cutting-edge solutions in augmented reality, virtual reality, blockchain, artificial intelligence (AI), and spatial computing. These technologies empower businesses to create cost-effective, scalable, and efficient solutions that address the challenges of modern living while unlocking new opportunities.

元宇宙正透過沉浸式技術融合實體與虛擬空間，革新各行各業的合作、溝通及創新方式。應科院走在轉型前沿，積極開發擴增實境、虛擬實境、區塊鏈、人工智能及空間運算等頂尖技術方案。這些技術有助企業打造具成本效益、可擴展且高效的解決方案，應對現代生活的挑戰及開拓嶄新機遇。

Research Areas & Focus
研究領域與重點



Technologies Breakthrough
技術突破

XR Platform for Automotive Technician Training

ASTRI collaborated with a Chinese Mainland automaker to develop an XR platform that digitalises training for automotive technicians. This innovative solution provides trainees with immersive, computer-generated scenarios to practise skills in a wide range of technical situations, enhancing learning effectiveness and efficiency.

汽車技術人員XR訓練平台

應科院與中國內地汽車製造商合作開發一套汽車技術人員XR培訓平台，實現技術人員培訓數碼化。此創新方案讓學員能在多元技術情境下，透過沉浸式電腦模擬場境練習技能，從而提升學習成效及培訓效率。

AI-Powered Virtual Avatars for Digital Advertising

In January 2025, ASTRI partnered with AsiaPac Net Media Limited to optimise the use of AI-driven virtual avatars in digital advertising. The agreement includes post-project licensing for algorithms that generate half-body human-like avatars and contract services such as speech generation, voice conversion, and video language translation with lip synchronisation. This technology transforms single image or video into multiple outputs, significantly reducing production costs and enhancing digital content creation.

人工智能虛擬人像數碼廣告方案

2025年1月，應科院與亞太網絡資訊有限公司展開合作，改善人工智能虛擬人像於數碼廣告上的應用。該協議涵蓋項目完成後的演算法技術授權安排，用於生成半身虛擬人像，並包括如語音生成、語音轉換及具唇形同步的視頻語言翻譯等合約服務。此技術可將單一圖片或影片轉化為多種輸出形式，大幅降低製作成本，並提升數碼內容製作效率。

Tokenised Asset Systems

Through blockchain technology, ASTRI is advancing Real-World Asset (RWA) tokenisation, integrating physical assets like real estate into the metaverse. Tokenisation improves liquidity, enables fractional ownership, and secures transactions with smart contracts, opening up new possibilities for virtual asset management.

資產代幣化管理系統

應科院透過區塊鏈技術推動實體資產（RWA）代幣化，將房地產等實體資產整合至元宇宙平台。資產代幣化有助提升流動性，實現部分持有權，並通過智能合約保障交易安全，為虛擬資產管理開創更多新可能。

Call Monitoring for Compliance

In November 2024, ASTRI entered into a hybrid agreement with Continuous Technologies International Limited to commercialise advanced chatbot technology. This collaboration includes the development of an audio masking tool, as well as multiple speech recognition and natural language processing (NLP) models designed for call monitoring systems. Beyond post-project licensing, the partnership focuses on delivering innovative compliance tools and facilitating knowledge transfer to improve customer service and operational efficiency.

合規通話監察

2024年11月，應科院與匯卓科技有限公司簽訂混合型協議，合作推動先進聊天機械人技術商業化。此合作項目包括開發用於通話監控系統的音頻遮罩工具、多項語音識別，以及自然語言處理（NLP）模型。除了項目授權外，雙方合作還着重於提供創新的合規工具及知識轉移，從而提升客戶服務和運營效率。

Semi-auto AI for Spatial Computing

ASTRI's Semi-auto AI for Spatial Computing combines real and synthetic data to manage spaces more efficiently across caregiving, construction, and transportation sectors. This solution is already deployed in Hong Kong's mass transit railways (MTR) and traffic light systems, optimising transport flow and improving urban mobility.

半自動人工智能空間運算技術

應科院的半自動人工智能空間運算技術結合真實與合成數據，能更高效管理護理、建築工程及交通等領域的空間。此解決方案已應用於香港的鐵路和交通燈系統，有效改善交通流量，提升城市出行效率。

Through these innovations, ASTRI continues to contribute to the development of Metaverse in Hong Kong.

透過這些創新技術，應科院繼續為香港的元宇宙發展作出貢獻。

Partnership and Commercialisation
合作夥伴及市場化項目

Generative AI Platform for the Hong Kong Airport Authority 香港機場管理局生成式人工智能平台	ASTRI collaborated with the Hong Kong Airport Authority (HKAA) to develop a generative AI platform tailored to its operational needs. The project involved fine-tuning open-source large language models (LLMs) with the HKAA's proprietary data, leveraging Chinese Mainland-based GPUs to ensure security and performance. The platform supports a range of applications, including a staff Wikipedia tool and a self-service knowledge management system, enhancing knowledge sharing and operational efficiency.	應科院與香港機場管理局（機管局）合作研發一個切合其營運需要的生成式人工智能平台，利用機管局專有數據優化大語言模型，並兼用中國內地GPU，保障平台的安全性及提升運算成效。平台支援多項應用，包括專為員工而設的維基百科工具及自助知識管理系統，有助促進知識分享及提升營運效率。
Talent Identification and Succession Planning for the Hong Kong Police Force 香港警務處人才遴選及傳承規劃	In partnership with the Hong Kong Police Force, ASTRI developed an AI-driven solution for talent identification and succession planning. The system evaluates candidates based on their experiences, personality traits, and performance appraisals. It also provides succession recommendations, including training gap analyses and appraisal-based evaluations, ensuring a streamlined and data-driven approach for more effective workforce development and organisational planning.	應科院與香港警務處合作開發一套以人工智能為基礎的人才遴選及傳承規劃方案，根據候選人的經驗、性格特質及績效評核進行綜合評估；並提供崗位繼任建議，包括培訓差距分析及以評核為基礎的綜合評估，確保以精簡和數據驅動的方式，更有效地進行人力資源發展及機構規劃。

Project commenced in 2024/25*
2024/25年度開展的研發項目*

Spatial Computing Intelligence for Enterprise Extended Reality (XR) Applications	適用於企業延展實境 (XR) 應用的空間運算智能
GT4Tech: Gesture Tracking in 4-Dimensional Space	GT4Tech: 四維空間手勢追蹤
Nanoimprinted Active Polarisation-based Metasurface Module	基於納米壓印技術的主動可調偏振的超構表面模組
Hyperrealistic Contextual Enrichment: Cohesion through Topographical Virtual Integration	透過地形虛擬整合實現超現實情境增強

* Funded by the Innovation and Technology Fund
*創新及科技基金資助

CONNECTING THE I&T COMMUNITY
聯繫創科社群

Our network of information and technology (I&T) partners continues to expand, now encompassing government bodies, industry leaders, universities, and research institutes across the region. As an integral part of this vibrant ecosystem, ASTRI remains committed to collaborative innovation that improves lives, guided by our vision of 'Tech for Everyone'.

Our mission is clear: we drive technology transfer, commercialise research outcomes, and strengthen Hong Kong's position as a leading global I&T hub by fostering collaboration amongst all stakeholders in the I&T ecosystem.

應科院的創科夥伴網絡日益壯大，涵蓋區內不同政府機構、工商業界、大學及科研機構。應科院作為其中一員，致力與各界攜手藉科技改善生活，實現「科技惠民」的願景。我們目標明確：通過促進創科生態圈持份者合作，推進技術轉移與實現科研成果商品化，並鞏固香港作為國際創科中心的地位。

Major Alliances in Action
與主要聯盟同行

In 2024/25, ASTRI led four strategic alliances pushing Hong Kong's technology advancement forward. The Microelectronics Technology Consortium (METC), launched in 2022, celebrated its second anniversary in November 2024 with a high-profile annual forum under the theme 'Fostering Collaboration for Micro-electronics', co-organised with the Federation of Hong Kong Industries, the Hong Kong Electronics Industry Council, the Hong Kong Science and Technology Parks Corporation, and the Office for Attracting Strategic Enterprises.

2024/25年度，應科院成立的四個策略聯盟繼續推動香港的優化技術向前邁進。微電子技術聯盟(METC)於2022年成立，並於2024年11月舉行以「微電子協同共創」為主題的高規格年度論壇，暨慶祝聯盟成立兩週年。該論壇由香港工業總會、香港電子業總會、香港科技園公司及引進重點企業辦公室聯合主辦。

The Smart Mobility Technology Alliance (SMTA), established in 2023, released a landmark study on connected and autonomous vehicles (CAVs) in April 2024, supported by the Innovation and Technology Fund. The study marks a major step forward in shaping our city's smart mobility vision, facilitating CAV deployment and ecosystem collaboration. SMTA has actively engaged with the public through exhibitions, seminars, and a television programme.

智慧出行車聯網技術聯盟(SMTA)於2023年成立，並於2024年4月發佈了關於聯網自動駕駛發展里程碑的研究報告，該項研究更獲得創新及科技基金支持，以就促進本港智慧出行願景、推動聯網自動駕駛部署及生態圈協作邁出了重要一步。SMTA一直積極透過展覽、研討會及電視節目與公眾互動交流。

In support of Hong Kong's status as an international financial centre, ASTRI launched a new FinTech and ESG Alliance (FTEA) in February 2024, uniting stakeholders across the financial and ESG sectors in harnessing the potential of innovative financial technologies while managing their risks. The alliance participated in Hong Kong FinTech Week in November 2024 and the Asian Financial Forum in January 2025.

為支持香港作為國際金融中心的地位，應科院於2024年2月成立了「金融科技與永續發展聯盟」(FTEA)，目標凝聚金融及ESG領域的持份者，共同發掘創新金融科技的潛力，同時有效管理相關風險。FTEA於2024年11月參加為期一周的香港金融科技盛事，以及於2025年1月參與亞洲金融論壇。

Our newest initiative, the ConTech and PropTech Alliance (CPTA), launched in July 2024, is leveraging ASTRI's expertise in advanced technology to revolutionise the construction and property sectors. CPTA has organised visits, seminars, and tours to engage with stakeholders and promote the latest cutting-edge technology, such as AI-powered site safety monitoring systems, mixed-reality helmets, and precision positioning systems for modular construction.

應科院於2024年7月正式啟動建築及房地產科技聯盟(CPTA)，善用我們在先進技術方面的專業優勢，致力革新建築及房地產行業。CPTA通過舉辦交流考察、研討會及參觀等活動，積極與持份者全面互動，並推廣人工智能地盤安全監測系統、混合實境安全帽及精準模組化建築定位系統等最新尖端技術。

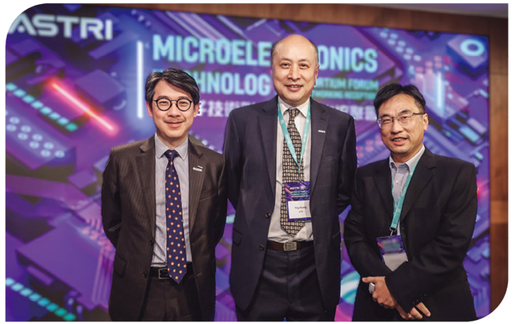
Dr Alan Cheung (left), Chief Director of the Artificial Intelligence and Trusted Technology at ASTRI, was invited to chair a panel discussion at the internationally-acclaimed Asian Financial Forum titled "Dialogues for Tomorrow – Roadmap to be AI Unicorns".
應科院人工智能及可信技術部門首席總監張偉倫博士（左），應邀擔任國際享負盛名的亞洲金融論壇的「明日對話－成為AI獨角獸之路」環節主持。

ASTRI published Hong Kong's first in-depth study on the development of connected and autonomous vehicles (CAV).
應科院發表香港首份有關網聯自動駕駛汽車發展研究報告。

One of the highlights of the Nansha trip is to visit Guangzhou Institute of Software Application Technology.
南沙考察團其中一站到訪廣州軟件應用技術研究院。

All four technology alliances collaborated with the Guangzhou Nansha-Hong Kong-Macao Cooperation Office to organise the Guangzhou Nansha Study Tour 2024. Thirty industry leaders explored Nansha's I&T achievements and engaged in collaboration discussions with representatives from the Ministry of Science and Technology of Nansha District, the Ministry of Industry and Information Technology, and Guangzhou Nansha New Area Industrial Park Development Authority.

應科院旗下四大技術聯盟聯同廣州南沙經濟技術開發區港澳合作事務辦公室合辦「廣州南沙考察團2024」。活動吸引約30位業界領袖親身考察南沙創新科技成果，並與廣州市南沙區科學技術局、工業和信息化部及廣州市南沙新區產業園區開發建設管理局代表展開交流與協作討論。



ASTRI organised "The Brain behind AI: It's the Chip that Matters" forum and networking event, marking the second anniversary of Microelectronics Technology Consortium. The forum began with an opening remark from Dr Jimmy Chiang (left), Deputy Director-General, Office for Attracting Strategic Enterprises of the HKSAR Government. Dr Ying Huang (centre), Chief Technology Officer of ASTRI, delivered the welcome remarks.
為慶祝「微電子技術聯盟」成立兩周年，應科院特別舉辦了「人工智能的命脈：驅動智能的芯片」論壇暨交流聚會，並由香港特區政府引進重點企業辦公室副主任蔣學禮博士（左）致開幕辭，應科院首席科技官黃玺博士（中）致歡迎辭。

Driving Innovation through Partnerships
擁抱合作　驅動創新

Since the launch of the University Technology Transfer (UTT) Scheme in August 2022, ASTRI has forged Memoranda of Understanding (MoUs) with six local universities to strengthen stakeholder connections and accelerate the commercialisation of upstream research and development (R&D) outcomes. In February 2025, we renewed our MoU with the Hong Kong Polytechnic University, reinforcing this strategic partnership.

Currently, ASTRI oversees 37 university collaboration projects, reflecting the strong momentum of our initiatives.

In 2024/25, ASTRI expanded its research connections locally, regionally, and globally. In April 2024, we signed an MoU with Immigration Department of the HKSAR Government that has seen us exploring technology applications to boost service quality and efficiency in four key areas of the department's work: Innovative Immigration Control Operation, Biometric Identification and Authentication, Artificial Intelligence Assisted Immigration Application, and Collaborative Robotics Technology.

We collaborated with Citybus Limited on autonomous driving and C-V2X technologies to enhance public transport safety and efficiency. Partnerships with the Hong Kong Housing Society and Hip Hing Construction implemented Modular Integrated Construction (MiC) technologies and advanced site safety monitoring systems, significantly improving construction safety and efficiency.

Looking ahead, ASTRI will continue to prioritise technology transfer and R&D commercialisation by actively engaging stakeholders in the technology ecosystem, driving impactful innovation and growth.

自2022年8月啟動「大學技術轉移計劃」以來，應科院已與六所本地大學簽署了合作備忘錄，進一步加強與持份者的聯繫，並同時推動上游科研成果商業化應用。2025年2月，我們與香港理工大學續簽合作備忘錄，進一步鞏固雙方的策略性夥伴關係。

至今，我們專責管理37項大學合作項目，足見應科院相關工作推展迅速，成效顯著。

此外，踏入2024/25年度，應科院更積極拓展本地、區域及全球的科研網絡。2024年4月，我們與香港入境事務處簽訂合作備忘錄，在創新通關模式、生物特徵認證、人工智能及機械人技術等四大核心工作範疇上共同探索提升服務質素及效率的科技應用方案。

除此以外，我們亦與城巴有限公司合作研究自動駕駛及車聯網（C-V2X）技術，致力提升公共交通的安全與運作效率。在建築方面，我們與香港房屋協會及協興建築合作推行創新組裝合成建築(MiC)精準定位技術及先進地盤安全監測系統，顯著提升了建築安全及成效。

展望未來，應科院將繼續以技術轉移及科研成果商業化為發展重點，積極聯繫科技生態圈持份者，共同推動具影響力的創新與成長。

Speaking at the inauguration ceremony for ASTRI's ConTech and PropTech Alliance (CPTA), Ms Winnie Ho, Secretary for Housing of the HKSAR Government expressed hope for transforming industry challenges into opportunities for cross-sector collaboration between technology and construction.
香港特區政府房屋局局長何永賢女士於應科院「建築及房地產科技聯盟」成立典禮上致辭，並重申藉科技加快發展智慧建築的決心，冀把業界挑戰轉化為科技與建築跨界合作的發展新機遇。

Supported by government officials, ASTRI and Immigration Department signed an MoU for fostering closer collaboration.
應科院與入境事務處簽署合作備忘錄加強合作，獲一眾官員支持。

PROMOTING HONG KONG AS AN INTERNATIONAL I&T HUB
推動香港成爲國際創科中心

One of ASTRI's core missions is to promote Hong Kong as an international innovation and technology (I&T) centre, and fostering exchange and collaboration between Hong Kong and overseas partners is key to realising this vision. In 2024/25, we actively participated in major global I&T events, expanded our connections with partners worldwide, and showcased Hong Kong's I&T excellence, strong talent, and ample development opportunities.

Looking ahead, we will continue to strengthen cooperation with the world and deepen our ties with relevant government departments, industries, academia, and research institutions.

應科院其中一項核心使命是推動香港成為國際創科中心，而促進香港與境外的交流協作是實現此願景的關鍵。**2024/25**年度，我們積極參與全球各項大型創科活動，擴展與世界各地夥伴的聯繫，並展示香港在創科領域的卓越能力、人才優勢及發展機遇。

展望未來，我們將繼續加強與世界各地的合作，深化與相關政府部門、企業、大學與科研機構的聯繫。

Showcasing Innovation Through Flagship Events in Hong Kong

ASTRI played a central role in several flagship events in Hong Kong, bringing together global stakeholders and promoting Hong Kong's strengths in I&T.

At InnoEX 2024, held during the Business of Innovation and Technology Week in April 2024, ASTRI showcased a wide array of smart city technologies. These innovations highlighted Hong Kong's capability to realise its vision of becoming a world-class smart city. Running alongside InnoEX, ASTRI co-hosted two major forums at the Digital Economy Summit: the "Energy, Environment & Mobility Forum" in partnership with the Smart City Consortium, and the "Smart Finance Forum" with Cyberport. These forums, attended by 500 global thought leaders, entrepreneurs, and investors, fostered meaningful discussions on the I&T future.

ASTRI also participated in the 44th HKTDC Hong Kong Electronics Fair (Autumn Edition) in October 2024, where its smart mobility technologies, including Cellular Vehicle-to-Everything (C-V2X) solutions, took centre stage. A seminar titled "Navigating Tomorrow: How Connected Autonomous Vehicles Reshape Industries" offered further insights into the transformative potential of these innovations.

For public events, ASTRI participated in the InnoCarnival at the Hong Kong Science Park, showcasing its pioneering technologies under the theme "Tech for All". Highlights included a robotic guide dog for the visually impaired, Formula A virtual race cars powered by smart mobility solutions, and pharmacy simulators demonstrating advancements in digital healthcare.

以旗艦盛事展現香港創新實力

應科院在多項香港旗艦盛事中成功匯聚全球持份者，發揮積極推廣香港創科領域優勢的作用。

於2024年4月「國際創科營商周」期間舉行的「香港國際創科展2024」上，應科院展示了多項智慧城市技術，而這些創新技術展現了香港實現世界級智慧城市願景的實力。除參與「香港國際創科展2024」外，應科院亦於「數字經濟峰會」與合作夥伴聯合主辦兩個重點論壇，包括與智慧城市聯盟合作的「能源、環境與出行論壇」以及與數碼港合作的「智慧金融論壇」。該兩個論壇共吸引了500位全球思想領袖、企業家及投資者參與，促進了對未來創新科技的深度交流與討論。

2024年10月應科院亦參加了「第44屆香港秋季電子產品展」，並以「蜂窩車聯網」等智能出行技術成功贏得焦點。另外，「領航未來：網聯自動駕駛如何重塑各行業」研討會亦進一步探討相關創新技術的變革潛力。

在面向公眾活動方面，應科院參加了於香港科學園舉行的「創新科技嘉年華」，以「科技引路創新啟航」為主題展示領先技術。重點展品包括為視障人士設計的機械導盲犬、應用智慧出行技術的Formula A虛擬賽車，以及藥房模擬器，展示數碼健康技術的最新突破。

ASTRI's booth at InnoEX was well-received by the visitors.
應科院於香港國際創科展的展位廣受歡迎。

ASTRI showcased a range of research outcomes that promote smart city development at InnoCarnival 2024. Picture shows Ir Prof Sunny Lee, Board Chairman of ASTRI (fifth from right, back row) along with members of Board of Directors, senior management and R&D team.
應科院在創新科技嘉年華上，展示多項推動智慧城市發展的科研成果。應科院董事局主席李惠光教授工程師（後排右五），與一眾董事局成員、高級行政人員和科研團隊合照。

Strengthening Footholds in the Chinese Mainland
穩固立足中國內地

ASTRI expanded its network and collaborations across the Chinese Mainland in 2024/25, focusing on the Greater Bay Area (GBA), the Yangtze River Delta (YRD), and Beijing. These efforts enhanced ASTRI's visibility and strengthened its R&D commercialisation capabilities.

於2024/25年度，應科院進一步擴展在中國內地的網絡及合作，尤其以大灣區、長三角及北京為重點。此舉不僅有助提升應科院的知名度，同時加強把研發成果商業化的能力。

Greater Bay Area 大灣區

The official opening ceremony of ASTRI Science and Technology Research (Shenzhen) Company Limited office in the Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone was held in October 2024. This marked a new milestone in ASTRI's GBA journey.

Through the 1:1 Matching Fund Programme, ASTRI has developed cutting-edge technology platforms in semiconductors and next-generation communications. Two major commercialisation projects reached completion in December 2024, while three others are actively underway.

應科院科技研究（深圳）有限公司位於河套深港科技創新合作區的辦事處於2024年10月正式揭幕，標誌着應科院擴張大灣區版圖的重要新里程。

透過「1:1配對基金計劃」，應科院已開發出半導體和下一代通訊領域的尖端技術平台。兩項重要的商業化項目已於2024年12月完成，同時另有三項正在積極進行中。

Yangtze River Delta 長三角地區

In the Yangtze River Delta, ASTRI established strong partnerships with the Suzhou Municipal Government and local districts, fostering seamless R&D commercialisation. In May 2024, ASTRI co-organised a large-scale Technology Exchange Event with Suzhou New District, attracting over 150 local government officials and business leaders.

A significant milestone was the establishment of a Dedicated Fund for ASTRI Yangtze River Delta Centre for Technology Transfer in Suzhou, finalised in June 2024. This initiative, supported by Suzhou districts and other stakeholders, involves a five-year investment of RMB100 million to accelerate technology transfer and commercialisation in Suzhou and surrounding areas.

應科院在長三角地區與蘇州市政府及當地多個社區建立緊密合作關係，推動研發成果無縫商品化。2024年5月，應科院與蘇州新區合辦大型科技交流活動，成功吸引逾150位當地政府官員及商界領袖參與。

另一項重要里程碑為於蘇州設立「應科院長三角技術轉移中心專屬基金」。該基金於2024年6月落實，獲蘇州各區及其他持份者鼎力支持，五年投資額涉及人民幣1億元，藉以加快蘇州及周邊地區的技術轉移及商品化進程。

Beijing 北京

In September 2024, ASTRI, in partnership with the Hong Kong Beijing Applied Science Innovation Center (HKBASIC), established the ASTRI Beijing Centre for Technology Transfer and Commercialisation. This platform has enabled deeper engagement with local businesses, enhanced connectivity between Hong Kong and Beijing, and fostered a robust ecosystem for technology commercialisation.

Ir Prof Sunny Lee, Board Chairman of ASTRI attended at the 2024 China International Fair for Trade in Services as a guest speaker in September 2024. At the summit titled "Promoting the Development of New Quality Productive Forces through the Integration of Manufacturing and Service Industries", he shared insights on leveraging technology to create "New Quality Productive Forces" and the importance of industry integration and innovation for driving economic growth.

2024年9月，應科院與港京應用科技創新中心共同成立「應科院北京成果轉化中心」，作為可促進與本地企業的緊密交流，加強港京兩地聯繫，並推動科技商品化生態系統穩健發展的平台。

2024年9月，應科院董事局主席李惠光教授工程師出席「2024年中國國際服務貿易交易會」，並擔任「兩業融合促進新質生產力發展」主題論壇演講嘉賓，分享如何透過科技力量創建「新質生產力」，推動產業融合創新發展，驅動經濟增長。

Key Collaborations and Partnerships

ASTRI continued to drive impactful collaborations, both locally and internationally in 2024/25. Key highlights include:

- **Strategic agreements** with partners in the Chinese Mainland, such as Shenzhen Luohu District People's Government, Beijing Zhongcheng Kangfu Technology Co., Ltd, and GienTech Technology Co., Ltd, focusing on AI, digital healthcare, and generative AI technologies.
- A partnership with China Merchants New Intelligence Technology Co., Ltd to establish the **Greater Bay Area Interconnected Intelligent Transportation – Joint Innovation Laboratory**.
- An MoU with Shandong Hi-Speech Group Co. Ltd and Lingnan University to advance smart mobility solutions and vehicle networking technologies.
- Our international partnerships include an MoU with Spain's The Centre for Innovation in Transport (CENIT) on sustainable smart city solutions, alongside collaborations with France's Prophesee and Korea's Smart City Association.

Mr Lin Wu, Secretary of the Shandong Provincial Party Committee, led a delegation to Hong Kong and witness the signing of a Memorandum of Cooperation during visit to ASTRI. This significant partnership involves ASTRI, Shandong Hi-Speech Group Co Ltd (SDHS) and Lingnan University for exploring innovative technology solutions that will elevate the development of smart mobility.
山東省委書記林武先生率團訪港，並在參觀應科院期間，見證應科院與山東高速集團和嶺南大學簽署合作備忘錄，攜手探索創新科技解決方案，共同推動智慧出行發展。

主要合作與夥伴關係

應科院於2024/25年度繼續促成富影響力的本地及國際合作。主要成就包括：

- 與中國內地多位合作夥伴簽訂**策略協議**，包括深圳市羅湖區人民政府、北京中成康富科技股份有限公司及中電金信軟件有限公司，以人工智能、數碼醫療及生成式人工智能技術為重點發展。
- 與招商新智科技有限公司合作成立「**大灣區互聯互通智能交通－聯合創新實驗室**」。
- 與山高集團有限公司及嶺南大學簽署合作備忘錄，推動智慧出行解決方案及自動駕駛車聯網技術發展。
- 國際合作方面，包括與西班牙「交通創新中心」就可持續智慧城市解決方案簽署合作備忘錄，以及與法國Prophesee及韓國智慧城市協會展開合作。

ASTRI (Shenzhen) and China Merchants New Intelligence Technology Co., Ltd signed a cooperation agreement to establish the "Greater Bay Area Interconnected Intelligent Transportation – Joint Innovation Laboratory" in the Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone.
深圳應科院與招商新智科技有限公司簽署合作協議，在河套深港科技創新合作區共同成立「大灣區互聯互通智慧交通－聯合創新實驗室」。

International Recognition and Global Engagement

On the international stage, ASTRI achieved remarkable success at the 49th International Exhibition of Inventions Geneva in April 2024. ASTRI was honoured with 23 prestigious accolades, including one "Gold Medal with Congratulations of Jury", six Gold Medals, ten Silver Medals, and six Bronze Medals. This success underscores ASTRI's global leadership in innovation.

ASTRI strives to promote homegrown technologies on the global stage. In June 2024, our team visited the United Kingdom to participate in the London Science and Technology Week. We engaged in in-depth exchanges with local representatives from government, industry, academia, and research to strengthen I&T ties between Hong Kong and the UK.

國際認可及全球參與

在國際舞台上，應科院於2024年4月舉行的「第49屆日內瓦國際發明展」中取得了卓越成績，包括一項「評判特別嘉許金獎」、六項金獎、十項銀獎及六項銅獎合共23個獎項，成績斐然，彰顯應科院於全球創科的領導地位。

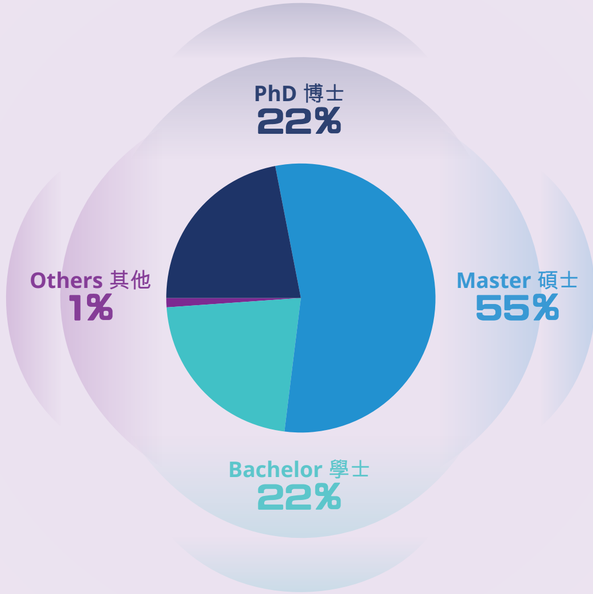
應科院致力推廣香港創新科研成果，於2024年6月，團隊到訪英國參與「倫敦科技周」，與當地「政產學研」代表深入交流，深化兩地創科聯繫。

NURTURING I&T TALENTS
培育創科人才

ASTRI's success is built upon the exceptional talent and expertise of our team. Our high-calibre staff possess extensive knowledge and skills across diverse professional disciplines. Recognising the critical importance of nurturing future innovation and technology talent and retaining top-tier researchers in today's intensely competitive global landscape, we have adopted a comprehensive talent recruitment and development strategy to ensure that ASTRI continues to attract outstanding individuals with innovation and technology potential.

應科院的成功建基於團隊的卓越才華與專業知識。我們的高質素員工知識和技能廣泛，涵蓋不同專業領域。我們深明現今全球競爭激烈，培育未來創科人才及留住頂尖研究人員至關重要，因此採取了全方位的人才招聘及培育策略，確保應科院能持續吸引具創科潛質的傑出人才。

Academic Qualifications of R&D Staff (Excluding Headquarters Non-R&D Staff and Interns)
研發人員學歷分佈（不計總部非研發人員及實習生）



Employee Numbers by Functional Area
員工人數（按職能劃分）

As at 31 March 2025
於2025年3月31日

Headquarters 總部	92
Communications Technologies 通訊技術	112
IoT Sensing and AI Technologies 物聯網感測與人工智能技術	76
Advanced Electronic Components and Systems 先進電子元件及系統	139
Artificial Intelligence and Trust Technologies 人工智能及可信技術	133
Intelligent Perception and Control Technologies 智能感知及控制技術	50
Others 其他	24
Research Talent Hub 研究人才庫	58
Total 總計	684

Remarks: Includes 21 R&D staff employed by ASTRI Science and Technology Research (Shenzhen) Company Limited as at 31 March 2025.

備註：包括於2025年3月31日受聘於應科院科技研究（深圳）有限公司的21名科研人才。

Top Technology Scholar Programme
精英科技人才招聘計劃

Launched in March 2022, the Top Technology Scholar Programme is aimed at attracting the most outstanding graduates from local universities. As of March 2025, the programme has welcomed 111 highly skilled individuals, all of whom hold Master's or doctoral degrees obtained within the past two years. Participants work on impactful research projects, primarily in collaboration with Greater Bay Area (GBA) enterprises and organisations, while benefiting from professional training and exchange opportunities across the GBA and overseas. Those who meet the first-year performance benchmarks are rewarded with promotions and salary advancements, creating a clear pathway for career progression.

應科院於2022年3月推出的「精英科技人才招聘計劃」旨在從本地大學吸引最優秀的畢業生。截至2025年3月，該計劃已吸納111位高技術人才，全部於過去兩年取得碩士或博士學位。參加者主要與大灣區企業及機構合作，參與具影響力的研究項目，並於大灣區及海外的專業培訓和交流機會中獲益良多，當中首年表現達標的學員更可獲晉升及加薪機會，締造清晰的事業發展階梯。

ASTRI WORK-STUDY Programme (PhD)
應科院「兼讀博士生工作計劃」

The ASTRI WORK-STUDY Programme (PhD), introduced in 2023/24, exemplifies our innovative approach to talent nurturing. This programme enables R&D professionals to pursue part-time PhD studies while maintaining full-time employment at ASTRI, ensuring seamless career continuity. Initially launched in collaboration with the Hong Kong University of Science and Technology and the University of Hong Kong, we expanded the programme in 2024/25 by signing MoUs with City University of Hong Kong and The Hong Kong Polytechnic University. By March 2025, 13 staff members were actively enrolled, advancing both their academic and professional expertise.

2023/24年度推出的應科院「兼讀博士生工作計劃」，彰顯我們在培育人才方面的創新方式。這計劃讓研發專才可在應科院全職工作期間兼讀博士課程，確保職業發展無縫連貫。計劃最初與香港科技大學及香港大學合作推出，並於2024/25年度與香港城市大學及香港理工大學簽訂合作備忘錄，進一步擴大計劃規模。截至2025年3月，已有13名員工積極參與計劃，持續提升學術及專業知識水平。

ASTRI Summer Internship Programme
應科院「暑期實習計劃」

Our Summer Internship Programme continues to be a flagship initiative in nurturing emerging I&T talent. In 2024/25, we selected 110 elite interns from a pool of approximately 3,000 applicants. These interns, drawn from prestigious institutions such as the National University of Singapore, the University of Oxford, Harvard University, and top universities in the GBA and Hong Kong, participated in an eight-week intensive training. From Tech Talks, CEO Dialogues, to company visits and networking opportunities with industry leaders, interns were provided with invaluable exposure to the innovative and collaborative environment at ASTRI.

「暑期實習計劃」一直是應科院培育新興創科人才的旗艦項目。於2024/25年度，我們從約3,000名申請者中，甄選出110名精英實習生。這批來自新加坡國立大學、牛津大學、哈佛大學，以及大灣區和香港各大頂尖學府的實習生，參與為期八週的密集訓練。從科技演講、與行政總裁對話，到企業參觀及與業界領袖交流，他們都能獲得寶貴經驗，加深了解應科院創新、鼓勵合作的工作環境。

FinTech Future Leader Academy
「金融科技未來領袖學院」

The FinTech Future Leader Academy 2024 marked the third year of this core programme, designed to identify and cultivate promising talent in financial technologies. Over an eight-week internship, 16 carefully selected STEM undergraduates and postgraduates explored cutting-edge FinTech innovations in ASTRI's FinTech division. They also gained real-world insights through visits to the Hong Kong Monetary Authority and Bank of China (Hong Kong), deepening their understanding of how financial technologies are applied in practice.

「金融科技未來領袖學院」是應科院的重點計劃，專門物色及培育具潛質的金融科技人才。踏入第三年，我們於2024年精心挑選了16位STEM本科及研究生，於應科院金融科技部門進行為期八週的實習工作，探索最尖端的金融科技創新知識，又透過參觀香港金融管理局及中國銀行香港等機構，深入了解金融科技如何在現實世界中落地應用。

Campus Recruitment
校園招聘

To strengthen our talent pipeline and promote Hong Kong as a premier I&T hub, ASTRI actively engages in campus recruitment activities across local and GBA universities. In 2024/25, we participated in 11 career fairs and held four recruitment talks at leading institutions, including The Chinese University of Hong Kong – Shenzhen (CUHK-Shenzhen), Sun Yat-Sen University, Southern University of Science and Technology, and South China University of Technology. These initiatives not only connect us with the next generation of innovators but also reinforce ASTRI's reputation as an employer of choice.

為加強人才供應及讓香港成為首屈一指的創科中心，應科院積極於本地及大灣區大學開展校園招聘活動。於2024/25年度，我們參與了11場職業博覽會，以及在香港中文大學（深圳）、中山大學、南方科技大學及華南理工大學等頂尖學府舉辦了四場招聘講座。這些舉措不僅讓我們能與新世代創科人才建立聯繫網絡，亦進一步建立了應科院作為理想僱主的名聲。

Staff Engagement
員工參與

Fostering collaboration, wellbeing, and creativity among our innovation-driven workforce remains a core priority. In 2024/25, we introduced wellness initiatives such as office massage sessions, fitness classes, and the Treadmill Corporate Challenge to promote physical health and mental wellbeing.

To build camaraderie and celebrate cultural diversity, we organised a variety of engaging events, including Free Coffee Weeks, Gelato Day, Fruit Day, and seasonal food celebrations. Highlights included the much-loved Hong Kong Street Food Day, showcasing the vibrancy of local culinary traditions, and our annual Christmas Party, which drew over 420 staff members for an evening of talent showcases and festive cheer.

促進員工間的協作、福祉及創意，實踐以創新驅動科研的理念，一直是應科院首要關注的事項。於2024/25年度，我們推出辦公室按摩活動、健身課程及「跑步機企業挑戰賽」等項目，大力推廣員工身心靈健康。

為促進團隊凝聚力及鼓勵多元文化，我們舉辦了多項趣味盎然的活動，包括免費咖啡週、意式雪糕日、水果日及季節美食慶典，以及深受歡迎的「香港街頭小食日」，充分展現了本地飲食文化的多姿多彩；而年度聖誕晚會亦吸引逾420名員工，透過參與及欣賞才藝表演共享節日歡樂氣氛。

THE YEAR AHEAD
來年展望

As Hong Kong accelerates its transformation into a global hub for innovation and technology (I&T), ASTRI remains steadfast in driving impactful research, fostering industry collaboration, and supporting the city's strategic vision. ASTRI will play a pivotal role in shaping the region's I&T future by addressing critical societal and industrial challenges through innovation.

隨著香港加速轉型為全球創新及科技樞紐，應科院將繼續致力推動具影響力的科研項目、促進業界合作，全力支持香港的策略發展願景。一方面，我們將積極應對社會和產業的關鍵挑戰；另一方面，擔當塑造區內創新科技未來的重要角色。

AI and Data Science: Catalysts for Transformation
人工智能與數據科學：推動轉型前行

The Chief Executive's latest Policy Address highlights artificial intelligence (AI) and data science as key to Hong Kong's development strategy. Initiatives such as the AI Efficacy Enhancement Team aim to drive AI adoption in public services, reform administration, and promote industrial transformation. "AI+" will also create high-quality jobs while fostering economic growth.

To support these priorities, ASTRI's expertise in AI research combining with other cutting-edge technologies will be central to developing solutions that enhance competitiveness and advance Hong Kong's position as a world-class innovation hub. Leveraging its strengths in research, talent, and diverse use cases, ASTRI is uniquely positioned to address emerging challenges and unlock the transformative potential of AI across industries.

行政長官在最新《施政報告》中明確指出，人工智能及數據科學是香港發展策略的重點。政府將透過成立由政務司副司長領導的「人工智能效能提升小組」，加速推動AI在公共服務的應用，藉此提速改革行政管理、促進產業轉型。同時，「AI+」計劃將創造優質職位並推動經濟增長。

為配合這些政策重點，應科院將憑藉在人工智能研究的深厚實力，加上其他嶄新技術，在開發提升競爭力的解決方案上發揮關鍵作用，助力香港發展成為世界級創新樞紐。應科院將充份運用科研、人才及多元應用場景等優勢，應對新興挑戰，並釋放人工智能於各行各業的轉型潛力。

The Northern Metropolis: A Strategic Growth Area
北部都會區：策略性增長重點區域

The Northern Metropolis, a cornerstone of Hong Kong's growth strategy, offers over 3,000 hectares of new development land to address industrial space shortages, create 500,000 jobs, and facilitate I&T development. Its proximity to Shenzhen strengthens collaboration within the Guangdong-Hong Kong-Macao Greater Bay Area (GBA).

Through our presence at the Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone, ASTRI will continue to expand cross-border synergies and drive economic integration, leveraging its Shenzhen office to deepen ties with regional stakeholders.

「北部都會區」作為香港未來增長策略的核心，將提供超過3,000公頃新發展土地，有效解決產業空間不足的問題，預計創造50萬個就業機會，並促進創科發展。其毗鄰深圳的地理優勢，更為深化粵港澳大灣區內的合作創造龐大機遇。

透過設於「河套深港創新及科技合作區」的深圳辦事處，應科院將繼續強化跨境協作，推動經濟融合，並與區內持份者加強聯繫與合作。

ASTRI-NAMI Merger: Unlocking Synergies
應科院與NAMI合併：發揮協同效應

A key milestone in the coming year is the planned merger between ASTRI and the Nano and Advanced Materials Institute (NAMI). This strategic unification will combine ASTRI's expertise in information and communications technology with NAMI's strengths in advanced materials and nanotechnology, enhancing research capabilities and creating new opportunities for commercialisation.

The merger will strengthen synergies across Hong Kong's R&D ecosystem, positioning the new institute to deliver high-impact outcomes that support long-term I&T growth.

來年重要的里程碑，是應科院與納米及先進材料研發院的合併。此策略合併將結合應科院在資訊及通訊科技方面的專長與納米及先進材料研發院在先進材料及納米技術的優勢，進一步提升科研能力，並創造更多科研成果商品化的機會。

是次合併將加強香港研發生態系統內的協同效應，整合後，新的研究院將能提供更具影響力的研究成果，有力支持香港創新科技的長遠發展。

Low-Altitude Economy and Smart Mobility
推動低空經濟與智慧出行

Aligned with policy priorities, ASTRI is advancing emerging sectors such as the low-altitude economy. As the technical partner for Hong Kong's low-altitude regulatory sandbox pilot project, ASTRI is enabling innovation in unmanned aerial vehicle technologies.

Autonomous driving technologies are also a major focus of ASTRI, with trials planned across multiple districts to modernise transportation infrastructure and enable smart mobility.

為配合政策優次，應科院正積極開拓低空經濟等新興領域。作為香港「低空經濟監管沙盒」試點項目的技術夥伴，我們正推動無人機技術創新。

同時，應科院亦着力發展自動駕駛技術，計劃於多個地區進行試驗，以革新交通基建，實現智慧出行。

Future Ready
面向未來

In the year ahead, ASTRI will focus on delivering impactful applied research, and technology commercialisation in areas such as smart city, FinTech, smart mobility, intelligent manufacturing, and digital health. Special emphasis will be placed on transformative solutions integrating AI with other technologies including IoT sensing, trusted technologies, advanced communications, microelectronics and more.

By aligning with government priorities and leveraging its expertise, ASTRI is poised to drive breakthroughs, foster collaboration, and strengthen Hong Kong's position as a global I&T hub. With a clear mission and unwavering commitment, ASTRI stands ready to shape a brighter future for Hong Kong, the Greater Bay Area, and beyond.

展望未來，應科院將聚焦智慧城市發展、金融科技、智慧出行、智能製造及數碼健康等領域，提供具影響力的應用科技研究，並推動科研成果商品化。同時，將重點放在結合人工智能，以及其他科技如物聯網感測、可信技術、先進通訊、微電子等技術的解決方案。

透過配合政府優先發展方向，並充份發揮專業優勢，應科院將推動技術創新、促進合作，並鞏固香港作為全球創新科技中心的地位。應科院秉持清晰的使命與堅定的承諾，將全力以赴，共同打造香港、粵港澳大灣區以至更廣泛地區的美好未來。

ESG 概覽

ESG OVERVIEW

ESG HIGHLIGHTS
ESG 焦點

In 2024/25, the Hong Kong Applied Science and Technology Research Institute (ASTRI) remained steadfast in its commitment to Environmental, Social, and Governance (ESG) responsibilities, advancing initiatives that reflect our dedication to sustainability, inclusivity, and transparency.

在2024/25年度，應科院致力承擔「環境、社會和管治」(ESG)責任，積極推動多項舉措，體現我們對可持續發展、共融及透明度的重視。

On the environmental front, we bolstered our sustainable energy practices, implemented upgrades to enhance energy-efficiency across our facilities. These efforts underscore our commitment to reducing our environmental footprint and embracing a greener future.

In the social domain, we continue to prioritise the well-being of our employees through the range of health and wellness programmes highlighted in the previous chapter. We also conducted regular diversity and inclusion training, fostering a workplace culture that values equality, respect, and collaboration.

In corporate governance, we reinforced our dedication to ethical practices and regulatory compliance. Training sessions were organised to strengthen awareness of high ethical standards, and maintain open and honest dialogue with stakeholders.

環保方面，我們加強可持續能源措施，進行多項設施升級項目以提升能源效益，以示我們減少環境足跡，擁抱綠色未來的決心。

社會範疇方面，我們依舊優先關注僱員福祉，故此提供一系列於上文摘錄的身心靈健康活動，並定期進行多元共融培訓，營造重視平等、尊重及協作的職場環境。

企業管治方面，我們強化了道德操守及合規性方面的工作，並舉辦培訓課程以提升員工對高道德標準的意識，並與持份者維持公開坦誠的對話。

ESG Pledge

This accreditation, by The Chinese Manufacturers' Association of HK, demonstrates ASTRI's commitment to implementing and promoting sustainable development over the years.

ESG 約章

這項由香港中華廠商聯合會頒發的認證，彰顯應科院多年來致力實施及推廣可持續發展的不懈努力。

Beyond our internal ESG efforts, ASTRI has undertaken relevant research projects, leveraging innovation to address global challenges and deliver sustainable solutions for society at large.

PV Battery Storage 光伏電池儲能

Environmentally-friendly photovoltaic (PV) systems convert sunlight into electricity and are a cornerstone of sustainable Smart City development. ASTRI has developed a super-efficient PV Battery Storage hybrid system designed specifically for DC grid applications, which is reliable, highly efficient and exceptionally resilient.

The system achieves an impressive 98.32% peak efficiency for battery charging from the PV panel, and an outstanding 99.32% peak efficiency power transfer between the battery and the DC grid. It also incorporates a low-power forced-air cooling feature, further enhancing its performance and reliability. Its advanced features and exceptional efficiency make this PV Battery Storage hybrid system a significant step forward in sustainable energy solutions.

環保型光伏系統可將陽光轉化為電力，是智慧城市可持續發展的重要基石。應科院研發的超高效能的光伏電池儲能混合系統專為直流電網應用系統而設，既可靠、高效並且高度靈活。

該系統的光伏板充電最高效率高達98.32%，電池與直流電網之間的電力傳輸最高效率則高達99.32%，同時加入低功能耗強製風冷功能，進一步提升其表現及可靠度。這光伏儲能混合系統的先進功能及卓越效率，毋疑讓可持續能源方案方面邁進一大步。

除內部ESG工作外，應科院同時進行相關研發項目，善用創新科技應對全球挑戰，為廣大社會提供可持續的解決方案。

Smart Air Filters 智能空氣過濾器

ASTRI is developing a novel monitoring system for the Air Handling Unit (AHU). This system will monitor the performance, filtration efficiency, and effectiveness of the filters installed inside the AHU, allowing operators to determine the remaining lifespan of the filters without needing to enter the unit. Also, the power consumption of the AHU can be monitored in real-time. This approach not only ensures the best performance of the system, reduces manpower costs and filter costs, but also enhances safety.

應科院正研發新型空氣處理裝置監測系統，用以監測空氣處理裝置內過濾器的運作表現、過濾效率及效能，讓操作人員毋需進入裝置便能掌握過濾器的剩餘使用壽命，亦可實時監測空氣處理裝置的耗電量。這方法不僅能確保系統運作達至最佳效能，降低人力及過濾器成本，亦能提升安全程度。

ESG Report Enhancements

ASTRI undertook two pioneering projects in 2024/25 aimed at simplifying the accessibility, analysis and understanding of the complex data in companies' ESG reports.

Universal Information Extraction (UIE) for Financial Document Analysis and ESG Intelligence — ASTRI has developed an AI analytics engine that efficiently processes unstructured data, even when working with limited labelled datasets. By combining Universal Information Extraction with Few-shot Learning technologies, the engine delivers multiple capabilities including document summarisation, compliance verification, ESG profiling with actionable recommendations, and industry benchmarking. This solution is designed to serve financial institutions, investors, and regulators, offering scalability and adaptability that extends beyond ESG to other unstructured data analysis applications.

Study Report on AI Model Research and Development for Chart Analysis — ASTRI investigated how large multimodal models (LMMs) can analyse charts within ESG reports. The study showed that vision-language models (VLMs) perform well in specific tasks like extracting chart titles, though they need further refinement to achieve human-level accuracy in chart summarisation and data extraction. As VLM technology continues to advance, these models will become increasingly capable of extracting meaningful insights from complex visual data, making them more valuable for ESG and financial analysis. Together, these initiatives demonstrate ASTRI's dedication to advancing ESG intelligence and enabling data-driven sustainability practices.

強化ESG報告

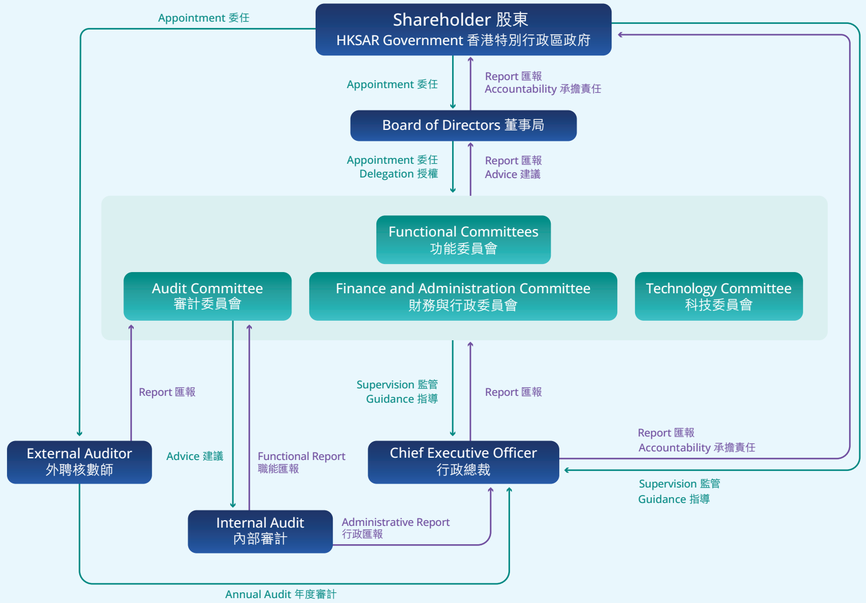
應科院於2024/25年度開展了兩項創新項目，以簡化各公司ESG報告中獲取、分析與理解複雜數據的流程。

「**金融文件分析與ESG智能通用資訊提取(UIE)**」— 應科院開發了一套AI分析引擎，即使在標記數據集有限的情況下，也能高效處理非結構化數據。該引擎結合了通用資訊提取與少樣本學習技術，提供多項功能，包括文件摘要、合規性驗證、ESG檔案分析並提供可行建議，以及行業基準比較。此解決方案專為金融機構、投資者和監管機構而設計，具備可擴展性和適應性，應用範圍可延伸至ESG以外的其他非結構化數據分析領域。

「**ESG報告中圖表分析的人工智能模型研發研究報告**」— 應科院探討了大型多模態模型如何分析ESG報告中的圖表。研究顯示，視覺語言模型在特定任務（如提取圖表標題）中表現良好，但在圖表摘要和數據提取方面，仍需進一步改進才能達到人類水平的準確度。隨著視覺語言模型技術持續進步，這些模型從複雜視覺數據中提取有意義見解的能力將不斷提升，使其在ESG和金融分析領域更具價值。這些工作共同展現了應科院致力於推動ESG智能發展，並支持數據驅動的可持續發展實踐。

CORPORATE GOVERNANCE 企業管治

CORPORATE GOVERNANCE STRUCTURE 企業管治架構



BOARD OF DIRECTORS
董事局

Board Composition 董事局的組成

The composition of the Board includes the Chairman and 19 members, two of whom are official members.
應科院董事局成員包括主席及19位董事，當中兩位為官守董事。

Chairman 主席

Ir Prof Sunny Lee Wai-kwong, BBS, JP
Adjunct Professor and Senior Director, Office of the President, City University of Hong Kong
李惠光教授工程師 銅紫荊星章、太平紳士
香港城市大學客座教授及校長室高級總監

Official Members 官守董事

Mr Eddie Mak Tak-wai, GBS, JP
Permanent Secretary for Innovation, Technology and Industry, HKSAR Government
麥德偉先生 金紫荊星章、太平紳士
香港特區政府創新科技及工業局常任秘書長

Mr Ivan Lee Kwok-bun, JP
Commissioner for Innovation and Technology, HKSAR Government
李國彬先生 太平紳士
香港特區政府創新科技署署長

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

Prof Chan Chun-kwong
Programme Director, MSc in Financial Technology, Faculty of Engineering, Professor of Practice in FinTech, Department of Systems Engineering and Engineering Management, The Chinese University of Hong Kong
陳俊光教授
香港中文大學
工程學院金融科技碩士課程主任
系統工程與工程管理學系金融科技實務教授

Prof Christopher Chao Yu-hang
Senior Vice President (Research and Innovation), Chair Professor of Thermal and Environmental Engineering, Director of Policy Research Centre for Innovation and Technology, The Hong Kong Polytechnic University
趙汝恒教授
香港理工大學
高級副校長（研究及創新）
熱能及環境工程講座教授
科技及創新政策研究中心主任

Mr Stephen Chau Kam-kun
Executive Director and Chief Technology Officer, SmarTone Telecommunications Holdings Limited
鄒金根先生
數碼通電訊集團有限公司
執行董事及科技總裁

Prof Cheng Shuk-han, MH
Associate Vice President (Research) and Executive Director of Hong Kong Institute for Advanced Study, City University of Hong Kong
鄭淑嫻教授 榮譽勳章
香港城市大學協理副校長（研究）及香港高等研究院執行院長

Mr Jason Chiu Tsz-kiu, JP
Founder, Cherrypicks
趙子翹先生 太平紳士
創奇思 創辦人

Dr Felix Chow Bok-hin
Executive Chairman and Executive Director, Niche-Tech Semiconductor Materials Limited
周博軒博士
駿碼半導體材料有限公司
執行主席兼執行董事

Mr Dennis Ho Chiu-ping
Partner, PricewaterhouseCoopers
何超平先生
羅兵咸永道會計師事務所合夥人

Mr William Ho Tat
Executive Director, Corporate Development
Airport Authority Hong Kong
何達先生
香港機場管理局企業發展執行總監

Ir Arthur Lee Kam-hung
Founder and Chairman, Kolinker Group
李錦雄工程師
科研集團 創辦人及主席

Mr Theodore Ma Heng
Managing Partner, CoCoon Ignite Ventures
馬衡先生
科控資本企業管理合夥人

Mr Peter Ng Hon-yu
R&D Project Consultant, Enabling Technology Group ASMPT Technology Hong Kong Limited
吳漢瑜先生
香港先進科技有限公司
促成科技開發組研發項目顧問

Dr Alfred Ng Man-cheuk
Executive Director and Chief Executive Officer, Suga International Holdings Limited
吳民卓博士
信佳國際集團有限公司 執行董事及首席執行官

Mr Jack Ng Wun-kit, JP
School Principal, Pui Kiu Middle School
伍煥杰先生 太平紳士
培僑中學 校長

Ir Dr Samson Tai Kin-hon
Professor of Practice, School of Business, Hong Kong Baptist University
戴劍寒博士、工程師
香港浸會大學 工商管理學院專業應用教授

Mr Anthony Tong Tat-hay
Managing Partner, Robin Bridge & John Liu
湯達熙先生
喬立本廖依敏律師行 管理合夥人

Prof Martin Wong Ding-fat
Provost and Chair Professor of Computer Science, Hong Kong Baptist University
黃定發教授
香港浸會大學 常務副校長
計算機科學講座教授

Mr Wilfred Wong Kam-pui, BBS, JP
Managing Director, RESOLUTIONS HR & Business Consultancy Company Limited
黃錦沛先生 銅紫荊星章、太平紳士
雋思人才及商務顧問有限公司 常務董事

FUNCTIONAL COMMITTEES
功能委員會

Three Functional Committees assist the Board in managing ASTRI. The Finance and Administration Committee oversees ASTRI's financial and administrative matters; the Technology Committee oversees ASTRI's research initiatives; and the Audit Committee ensures both internal and external audit processes are properly carried out. Below are the committee memberships as of 31 March 2025:

董事局成立了三個功能委員會，以協助董事局管治應科院：財務與行政委員會監察應科院財務及行政事宜；科技委員會監察應科院研究項目；審計委員會則確保內部及外部審計程序妥善執行。下方是於2025年3月31日各委員會的成員名單：

Finance and Administration Committee
財務與行政委員會

Prof Chan Chun-kwong (Chairman)
陳俊光教授（主席）

Mr Ivan Lee Kwok-bun, JP
李國彬先生 太平紳士

Mr Stephen Chau Kam-kun
鄒金根先生

Dr Felix Chow Bok-hin
周博軒博士

Ir Arthur Lee Kam-hung[1]
李錦雄工程師[1]

Mr Theodore Ma Heng
馬衡先生

Mr Jack Ng Wun-kit JP
伍煥杰先生 太平紳士

Mr Anthony Tong Tat-hay
湯達熙先生

Mr Wilfred Wong Kam-pui BBS, JP
黃錦沛先生
銅紫荊星章、太平紳士

Resigned Member 辭任委員
Mr Edmund Lee Chi-wai[2]
李治緯先生[2]

Technology Committee
科技委員會

Mr Peter Ng Hon-yu (Chairman)
吳漢瑜先生（主席）

Mr Ivan Lee Kwok-bun, JP
李國彬先生 太平紳士

Prof Christopher Chao Yu-hang
趙汝恒教授

Prof Cheng Shuk-han, MH[1]
鄭淑嫻教授 榮譽勳章[1]

Mr Jason Chiu Tsz-kiu, JP[1]
趙子翹先生 太平紳士[1]

Mr William Ho Tat
何達先生

Ir Prof Sunny Lee Wai-kwong BBS, JP
李惠光教授工程師
銅紫荊星章、太平紳士

Mr Theodore Ma Heng
馬衡先生

Dr Alfred Ng Man-cheuk
吳民卓博士

Prof Martin Wong Ding-fat
黃定發教授

Retired Member 退任委員
Prof Steve Chuang Tzu-hsiung[1]
莊子雄教授[1]

Audit Committee
審計委員會

Mr Dennis Ho Chiu-ping (Chairman)[1]
何超平先生（主席）[1]

Mr Ivan Lee Kwok-bun, JP
李國彬先生 太平紳士

Mr William Ho Tat
何達先生

Ir Arthur Lee Kam-hung[1]
李錦雄工程師[1]

Dr Alfred Ng Man-cheuk
吳民卓博士

Ir Dr Samson Tai Kin-hon
戴劍寒博士、工程師

Mr Anthony Tong Tat-hay[1]
湯達熙先生[1]

Retired Members 退任委員
Mr Charles Chow Sai-keung[1]
周世強先生[1]

Ms Ada Wong Yin-man[1]
王賢敏女士[1]

Resigned Member 辭任委員
Mr Edmund Lee Chi-wai[2]
李治緯先生[2]

1 *With effect from 21 October 2024 自2024年10月21日生效*
2 *With effect from 19 October 2024 自2024年10月19日生效*

Movements of Directors
董事局成員變動

New Directors 新委任董事	Date of Appointment 委任日期
Prof Cheng Shuk-han, MH 鄭淑嫻教授 榮譽勳章	21/10/2024
Mr Jason Chiu Tsz-kiu, JP 趙子翹先生 太平紳士	21/10/2024
Mr Dennis Ho Chiu-ping 何超平先生	21/10/2024
Ir Arthur Lee Kam-hung 李錦雄工程師	21/10/2024

Retired/Resigned Directors 退任／辭任董事	Date of Retirement/Resignation 退任日期
Mr Edmund Lee Chi-wai 李治緯先生	19/10/2024
Mr Charles Chow Sai-keung 周世強先生	21/10/2024
Prof Steve Chuang Tzu-hsiung 莊子雄教授	21/10/2024
Ms Ada Wong Yin-man 王賢敏女士	21/10/2024

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

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。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	21/6/2024	15/7/2024 Special Meeting 特別會議	26/9/2024	5/11/2024 Special Meeting 特別會議	12/12/2024	14/3/2025
Total number of directors during the period 期內董事局成員人數	20	20	20	20	20	20
Total number of directors present at meeting 董事出席人數	16	18	16	17	14	17
Total number of apologies 缺席人數	4	2	4	3	6	3
Percentage in attendance 出席率	80%	90%	80%	85%	70%	85%

Finance and Administration Committee (FAC) Meetings 財務與行政委員會會議	4/6/2024	21/8/2024	29/11/2024	19/2/2025
Total number of FAC members during the period 期內財務與行政委員會成員人數	9	9	9	9
Total number of FAC members present at meeting 財務與行政委員會成員出席人數	6	7	5	8
Total number of apologies 缺席人數	3	2	4	1
Percentage in attendance 出席率	67%	78%	56%	89%

Technology Committee (TC) Meetings 科技委員會會議	5/6/2024	6/9/2024	25/11/2024	21/2/2025
Total number of TC members during the period 期內科技委員會成員人數	9	9	10	10
Total number of TC members present at meeting 科技委員會成員出席人數	7	6	9	7
Total number of apologies 缺席人數	2	3	1	3
Percentage in attendance 出席率	78%	67%	90%	70%

Audit Committee (AC) Meetings 審計委員會會議	30/5/2024	29/8/2024	27/11/2024	6/3/2025
Total number of AC members during the period 期內審計委員會成員人數	7	7	7	7
Total number of AC members present at meeting 審計委員會成員出席人數	6	5	6	6
Total number of apologies 缺席人數	1	2	1	1
Percentage in attendance 出席率	86%	71%	86%	86%

GOVERNANCE AND CONTROL
管治及監察

As a publicly funded R&D centre, ASTRI is committed to upholding the highest standards of corporate governance. In line with our mission, we work in the best interests of our stakeholders and the taxpayers of Hong Kong.

ASTRI's corporate governance policies and principles are clearly laid out in our Corporate Governance Manual (The Manual). The Manual guides the efforts of the Board and Senior Management to ensure that ASTRI always operates in a transparent and accountable manner. It includes comprehensive guidelines on:

Organisation and management structure
公司組織及管理架構

HR policies and staff conduct
人力資源政策及員工操守

Financial management and controls
財務管理及監控

Internal controls and external reporting
內部監控及外部匯報

Risk management
風險管理

The Manual is updated from time to time to incorporate developments needed to improve ASTRI's operations, and to reflect the changing business environment.

作為一所政府資助的應用科技研發機構，應科院承諾恪守最高的企業管治標準。我們秉承使命，竭誠維護持份者及香港納稅人的最佳利益。

應科院的企業管治手冊（「手冊」）清楚列明企業管治政策和原則，協助董事局和管理層以透明、負責之準則經營應科院。手冊詳載以下守則：

應科院因應企業發展需要改善運作及營商環境的變化，不時更新手冊。

Internal Audit
內部審計

ASTRI's Internal Audit Department (IAD) was set up in 2003 under the Audit Committee (AC). Via the AC, the IAD assists the Board with corporate governance matters by providing it with information about and assurance regarding ASTRI's internal controls.

ASTRI's Internal Audit Charter, endorsed by the AC, affirms the IAD's independence, sets out its responsibilities, and defines the scope of its authority.

The IAD conducts internal audit reviews in accordance with a 3-year risk-based rolling plan, approved annually by the AC. In these reviews, the IAD assesses the adequacy and effectiveness of ASTRI's internal control processes and procedures, as well as compliance with them.

During the reporting year, the IAD conducted internal audit reviews on a number of different areas of ASTRI's operations, including regulatory compliance, project management, performance measurement, IT, and duty travel. The audit reviews indicated that appropriate controls were largely in place in all these areas, but also identified a number of enhancement opportunities. During the reporting year, the IAD submitted two half-yearly reports on the abovementioned reviews to the AC, together with its recommendations. The IAD periodically follows up the implementation status of the recommendations it makes.

應科院於2003年成立內部審計部，向董事局審計委員會匯報。內部審計部透過審計委員會向董事局提供有關應科院內部監控的資訊及保證，協助董事局處理企業管治事宜。

經審計委員會審批的應科院內部審計章程確認內部審計部的獨立性、規定其職責，並界定其職權範圍。

內部審計部根據審計委員會每年批准的風險為本三年滾動計劃進行內部審計審查，內部審計部會評估應科院內部監控流程及程序的充分性和有效性，以及相關遵守情況。

在報告年度內，內部審計部對應科院業務多個可審計範疇進行了內部審計審查，包括規例合規、項目管理、績效衡量、資訊科技及公務出差。在完成的審計項目中，內部審計部認為應科院已制定適當的監控措施。在報告年度內，內部審計部提交兩份半年度審查報告予審計委員會審議，以交代上述範疇的審查結果。內部審計部定期跟進所提出建議的實施情況。

Compliance
合規

Since April 2007, the Board has appointed the Head of Internal Audit to the role of Compliance Officer. The Compliance Officer's role is to assist the Board, via the AC, with compliance matters relating to internal and external procedures and regulations. The Compliance Officer receives reports from departmental compliance officers and submits quarterly compliance reports to the AC.

董事局於2007年4月委任內部審計主管擔任合規主任。合規主任的職責是透過審計委員會協助董事局處理與內部和外部程序及規例有關的合規事宜。合規主任負責接收部門合規主任的報告，並向審計委員會提交季度合規報告。

Safeguards against Conflicts of Interest
防範利益衝突

ASTRI has comprehensive internal controls in place designed to safeguard against conflicts of interest. The Code of Conduct is regularly reviewed and updated to ensure that potential conflicts are always declared and adequately managed. All ASTRI employees are required to make an annual declaration to confirm that they have read, understood and are compliant with the Code.

應科院設有全面的內部監控措施來防範利益衝突。應科院定期檢討並更新員工行為守則，以確保潛在衝突能夠妥為申報並處理。應科院全體員工每年均需作出申報，確認已細閱、理解並遵守守則。

Workplace Policy
工作環境守則

ASTRI has zero tolerance for discrimination and harassment. We organise regular seminars on relevant policies and regulations, with the aim of promoting equal opportunities and preventing discrimination and harassment in the workplace.

應科院絕不容忍任何歧視和騷擾事故。為提倡平等機會，並防止工作環境中出現歧視和騷擾，應科院定期舉行研討會講解相關政策及條例。

Quality Management System
品質管理系統

Quality is paramount in all ASTRI's research deliverables. To this end, ASTRI has adopted the ISO 9001 Quality Management standard, which helps us deliver consistently high-quality research to our clients and partners. In June 2024, international quality assurance body Bureau Veritas Certification conducted an ISO 9001 surveillance audit on ASTRI's operations. The audit certified that ASTRI's operations were fully compliant with the standards, with zero non-conformance.

應科院對所有研究成果均以品質為先。因此，應科院採用ISO 9001品質管理標準。憑藉ISO 9001標準，應科院可向客戶及合作夥伴交付一貫高品質的研究成果。2024年6月，國際品質認證機構必維國際檢驗集團對應科院業務執行ISO 9001監督審計。審計結果確認應科院的業務完全符合標準，並無違規事故。

Risk Management
風險管理

ASTRI has a Risk Management (RM) process to identify, evaluate and mitigate risks. The process is governed by an RM Policy and is facilitated by the IAD. The RM Policy sets out the roles and responsibilities of different parties, and provides an overview of the RM process. A Risk Register is maintained to keep track of various risks identified, covering the following broad thematic categories:

應科院設有風險管理流程，以識別、評估並減低風險。該流程受風險管理政策規管，並由內部審計部促進實施。風險管理政策規定不同人員及部門的角色和責任，並概述風險管理流程。應科院設有「風險登記冊」，以追蹤已識別的各種風險。「風險登記冊」涵蓋以下廣泛主題：

- Compliance 合規
- Corporate communications and relations 企業傳訊及關係
- Corporate governance and ethics 企業管治及道德
- Finance 財務
- Health and safety, premises and facilities 健康及安全、物業及設施
- Human resources 人力資源
- Information technology 資訊科技
- Reporting 匯報機制
- Research and development 研究及發展
- Strategy and partnership 策略及合作夥伴關係

Information Security Management System
資訊保安管理系統

ASTRI has adopted the ISO/IEC 27001 Information Security Management standard for its R&D activities in Financial Technologies (FinTech) in order to safeguard the confidentiality, integrity and availability of the information it handles. Adoption of the standard is also helping us to mitigate cybersecurity risks and improve our cyber-defence capabilities. Our FinTech R&D professionals regularly attend information security awareness training sessions to learn about the latest cybersecurity risks and the best tools for mitigating them.

An external consultancy company performs a full-scale vulnerability assessment and penetration tests on ASTRI's Information Technology infrastructure, network, and systems every year to ensure our security controls are highly effective. In October 2024, certification body Bureau Veritas Certification conducted an ISO/IEC 27001 recertification and transition audit of ASTRI's operations and found zero non-conformance. ASTRI is continuing to improve and strengthen its data, information and operations security practices, as well as staying abreast of the latest technologies for combatting cybersecurity risks.

應科院已就金融科技研發項目採用ISO/IEC 27001資訊保安管理標準，以保障資訊保密，不會被人篡改或竊取。採用此標準有助應科院減低網絡保安風險，同時改善防範風險能力。我們的金融科技研發專才定期參加資訊安全意識培訓課程，以了解最新的網絡安全風險。

應科院每年僱用外部顧問公司，對屬下資訊科技基建、網絡及系統進行全面漏洞評估及入侵測試，藉以確保網絡保安措施高度有效。2024年10月，認證機構必維國際檢驗集團對應科院業務進行ISO/IEC 27001再認證與過渡審計，並無發現違規事故。應科院正不斷改進及加強數據、資訊及業務保安，緊貼最新科技，以遏止網絡保安風險。

ANNUAL REMUNERATION OF STAFF IN THE ORGANISATION'S TOP THREE TIERS
應科院最高三層員工的全年薪酬

Post 職位	Annual Remuneration* 全年薪酬* (HK$ 港元)
First tier 第一層 Chief Executive Officer 行政總裁	$2,601,070
Second tier 第二層 Three senior executives # 三名高級行政人員#	$6,248,460
Third tier 第三層 Eight functional leaders/senior technology experts 八名部門主管／高級技術專家	$17,008,110

Annual Remuneration* 全年薪酬* (HK$ 港元)	Number of staff members 員工人數
1,000,001 - 1,500,000	1
1,500,001 - 2,000,000	4
2,000,001 - 2,500,000	4
2,500,001 - 3,000,000	2
3,000,001 - 3,500,000	1

\# The former Chief Operating Officer departed on 1 April 2024 that there was no remuneration received by the staff for fiscal year 2024/25.

* The information covers actual remuneration (including base salary, salary adjustment, performance-linked pay, variable payment and cash award) from 1 April 2024 to 31 March 2025 received by staff at the top three tiers who were in service as of 31 March 2025. It also covers the actual remuneration of –
(a) staff appointed during the financial year – Chief Technology Officer and Chief Operating Officer were appointed on 2 September 2024, and
(b) staff departed during the financial year – Chief Executive Officer departed on 5 October 2024 and One Vice President departed on 6 December 2024.
The figures have been rounded to the nearest HK$10.

\# 前任首席營運官於2024年4月1日離職，在2024/2025財政年度未領取任何薪酬。

* 有關資訊包括截至2025年3月31日應科院最高三層在職員工，於2024年4月1日至2025年3月31日的實際薪酬（包括基本薪酬、薪酬調整、與表現掛鈎薪酬、可變薪酬和現金獎勵）。有關資訊還包括以下員工的實際薪酬－
(a) 財政年度中加入的員工－於2024年9月2日加入的新任首席科技官和首席營運官；及
(b) 財政年度中離開的員工－於2024年10月5日離職的行政總裁，及於2024年12月6日離職的副總裁。
數字經四捨五入至十位數。

KEY PERFORMANCE INDICATORS

Level of Industry Income	2024/25 Target	2024/25 Actual
Industry Contribution (HK$ million)	72.10 (20.6%)	73.68 (21.0%)
Industry Income (HK$ million)	119.11	100.14[1]
Level of industry and other income[2]	63.5%	59.2%[3]
R&D Projects		
Number of ongoing R&D Projects as at end of the reporting period	54	76
Number of ongoing R&D projects as at end of the reporting period involving industry participation[4]	33	37
Number of companies participating in these ongoing R&D projects[5]	74	91
Utilisation of Research Output of ITF-funded R&D Projects		
Number of licensing agreements signed	30	32
Number of contract research projects undertaken[6]	55	83
Public Sector Trial Scheme Projects		
Number of ongoing Public Sector Trial Scheme projects as at end of the reporting period	5	9
Number of organisations benefitting from these Public Sector Trial Scheme Projects[7]	5	11
Other Performance Indicators		
Number of patents filed (number of inventions)	66 (34)	66 (34)[8]
Number of patents granted[9]	68	47[10]
Number of academic/industry awards received[11]	62	52

1. Industry income is calculated on a cash-received basis. Clients have had issues making payments due to the adverse global economic conditions.
2. Level of industry and other income (%) is calculated by:

$$\frac{\text{(1) Industry Contribution Pledged}^{*} + \text{(2) Other Sources of Financial Contribution Pledged}^{\wedge} + \text{(3) Commercialisation and Other Income Received}^{*}}{\text{(4) Approved R\&D Project Expenditure}^{\wedge}} \times 100\%$$

* Commercialisation income received refers to income arising from licensing, contract services, royalties and others (e.g. sale of IPs etc.) but excluding those from Public Sector Trial Scheme Projects, seed projects and public sector platform projects with sponsorship waived by Commissioner for Innovation and Technology (CIT). Other Income also includes non-ITF Government funding schemes.

^ Excluding Public Sector Trial Scheme Projects, seed projects and public sector platform projects with sponsorship waived by CIT.

3. Commercialisation income was affected by the delayed payments from clients and this in turn significantly impacted the level of industry and other income.
4. Refer to the number of on-going R&D projects as at 31 March 2025 involving industry contribution.
5. Refer to the number of sponsorship companies participating in on-going R&D projects as of 31 March 2025.
6. Referred to non-ITF Contract Research in which a company or entity pays 100% of the full costs for the project.
7. Refer to the number of public sector organisations involving in trials under on-going and completed public sector trials projects during the year.
8. The number of patents granted and filed in Hong Kong in fiscal year 2024/25 are 27 and 34 respectively.
9. Number of patents granted depends on number of patents filed in previous years. It typically takes two to three years to get a patent granted.
10. Several patents that should have been issued in fiscal year 2024/25 had been granted in fiscal year 2023/24, resulting in an unusually high number for fiscal year 2023/24 and a lower number in fiscal year 2024/25.
11. There was a strategic shift to prioritise the quality over the quantity of awards and this strategy resulted in a decrease in the number of applications for awards. Compared with fiscal year 2023/24, applications for awards in fiscal year 2024/25 for the International Exhibition of Inventions Geneva decreased from 33 to 24, while that for Asia Exhibition of Innovations and Inventions Hong Kong decreased from nine to four. The number of awards received is therefore lower than the original target.

關鍵績效指標

業界收入水平	2024/25 目標	2024/25 實際
業界贊助（百萬港元）	72.10 (20.6%)	73.68 (21.0%)
業界收入（百萬港元）	119.11	100.14[1]
來自業界及其他收入水平[2]	63.5%	59.2%[3]
研發項目		
於報告期末「在研項目」總數	54	76
於報告期末業界參與的「在研項目」總數[4]	33	37
參與「在研項目」的公司總數[5]	74	91
創新及科技基金所資助研發項目研究成果的運用		
已簽訂授權合約總數	30	32
已承接合約研究項目總數[6]	55	83
公營機構試用計劃項目		
於報告期末的公營機構試用計劃項目總數	5	9
公營機構試用計劃項目惠及的機構總數[7]	5	11
其他表現指標		
申請專利總數（發明總數）	66 (34)	66 (34)[8]
獲得專利總數[9]	68	47[10]
獲頒學術／業界獎項總數[11]	62	52

1. 業界收入是根據實收現金來計算的。隨着全球經濟下行，客戶普遍傾向延遲付款。
2. 來自業界及其他收入水平(%)計算如下：

$$\frac{\text{(1) 承諾的業界贊助額}^{*} + \text{(2) 承諾的其他來源財務贊助額}^{\wedge} + \text{(3) 已收取的商品化及其他收入}^{*}}{\text{(4) 獲批的研發項目開支}^{\wedge}} \times 100\%$$

* 已收取商業化收入為因授權、合約服務、版權費及其他事項（如出售知識產權等）而得的收入，惟不包括自創新科技署豁免贊助的公營部門試用計劃項目、種子項目及公營部門平台項目所得收入。其他收入還包括非創新及科技基金的政府資助計劃。

^ 不包括創新科技署豁免贊助的公營部門試驗項目、種子項目及公營部門平台項目。

3. 商業化收入受到客戶延遲付款的影響，因而明顯影響了來自業界及其他收入的水平。
4. 指於2025年3月31日涉及業界投入資金的「在研項目」總數。
5. 指於2025年3月31日參與「在研項目」的贊助公司數目。
6. 指公司悉數支付項目成本的項目。
7. 指在本財政年度已完成項目的「公營部門試驗項目」以及於報告期末「在研項目」中涉及的公營部門總數。
8. 於2024/25財政年度，在香港已獲得及申請的專利數目分別為27項和34項。
9. 獲批的專利數量取決於過去數年提交的專利申請數量。一般來說，獲批專利需時兩至三年。
10. 原本預計在2024/25財政年度獲批的數項專利提前於2023/24財政年度獲批，導致2023/24財政年度的獲批專利數量增加，因此2024/25財政年度的獲批數量相對較低。
11. 因為策略轉變優先考慮獎項的品質而非數量，這導致申請獎項的數量減少。與2023/24財政年度相比，2024/25財政年度「日內瓦國際發明展」的獎項申請從33個減少到24個，而「亞洲創新發明展覽會」的獎項申請則從九個減少到四個。因此，獲得的獎項數量低於原訂目標。

FINANCIAL REPORT
財務報告

OVERVIEW
概況

For 2024/25 financial year, the consolidated income and expenditure of ASTRI amounted to HK$748,649,957 and HK$758,149,804 respectively, resulting in a deficit of HK$9,499,847.

The funds from the Government comprised HK$159,724,521 from recurrent subvention, HK$32,774,989 from Innovation and Technology Fund ("ITF"), and HK$2,094,167 from Smart Traffic Fund ("STF") for reimbursement of administrative overheads, HK$283,473,003 from ITF project funds, HK$8,827,896 from ITF General Support Programme ("GSP"), HK$21,022,667 from ITF Public Sector Trial Scheme ("PSTS"), HK$24,184,978 from ITF Research Talent Hub, HK$19,266,600 from ITF for Hong Kong Branch Of National Engineering Research Center for Application Specific Integrated Circuit System ("CNERC") and HK$18,364,266 from STF.

In 2024/25 financial year, the income from the industry amounted to HK$172,870,546. The total administrative expenses amounted to HK$220,515,422 (comprised of administrative expenses of HK$219,619,971 and finance cost of HK$895,451 under subvention), which represented an increase of HK$17,593,065 (8.7%) compared with the previous year. ASTRI's operation remained steady with prudent financial management throughout the year. The total expenditure of the ITF, GSP and PSTS projects amounted to HK$398,948,413, of which 72% of the expenditure was spent on manpower and 28% of the expenditure was spent on equipment, other direct costs and administrative overheads.

The total expenditure mainly represented the actual cash outflow incurred during the year for 95 full projects, 52 seed projects, seven GSP projects and 11 PSTS projects. Meanwhile, the Research Talent Hub expenditure amounted to HK$24,184,978, representing the actual cash outflow of salary payment for research talents engaged in 45 full projects and 12 seed projects.

The consolidated financial statements of ASTRI for the year ended 31 March 2025 have been audited by independent auditors with unqualified audit opinion, an extract of the Consolidated Statement of Income and Expenditure, Consolidated Statement of Comprehensive Income and Consolidated Statement of Financial Position are set out on pages 101 - 103.

應科院在2024/25財政年度的綜合收入和支出分別為港幣748,649,957元及港幣758,149,804元，錄得港幣9,499,847元虧損。

來自政府款項包括經常性撥款港幣159,724,521元；創新及科技基金發還行政費港幣32,774,989元；智慧交通基金發還行政費港幣2,094,167元；創新及科技基金的項目研發經費港幣283,473,003元；創新及科技基金的一般支援計劃（「一般支援計劃」）資助港幣8,827,896元；創新及科技基金的公營機構試用計劃（「公營機構試用計劃」）資助港幣21,022,667元；創新及科技基金的研究人才庫資助港幣24,184,978元；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19,266,600元；及智慧交通基金資助的港幣18,364,266元。

在2024/25財政年度內從業界所得的收入為港幣172,870,546元。總行政支出為港幣220,515,422元（包括歸屬資助之行政支出港幣219,619,971元及財務成本港幣895,451元），比去年同期增加港幣17,593,065元（8.7%）。應科院全年保持穩定的經營狀況，並繼續秉持審慎的理財方針。創新及科技基金的項目研發、一般支援計劃資助和公營機構試用計劃資助項目的總支出為港幣398,948,413元，當中72%用於人力資源，28%用於儀器、其他直接開支及行政費。

總支出主要為本年度95個正式項目、52個種子項目、七個一般支援計劃項目和11個公營機構試用計劃項目的實際現金支出。同時，研究人才庫支出為港幣24,184,978元，為研究人才參與45個正式項目和12個種子項目的實際薪酬支出。

應科院截至2025年3月31日止年度的綜合財務報表經由獨立核數師審計，並獲發無保留審計意見書。綜合收支表、全面收益表及綜合財務狀況表的摘要載於第101至103頁。

Consolidated Statement of Income and Expenditure and Comprehensive Income
綜合收支表及全面收益表

Year ended 31 March 2025 截至2025年3月31日止年度	2025 (HK$ 港幣)	2024 (HK$ 港幣)
SUBVENTION 資助		
Income from Government subvention 政府資助收入	159,724,521	154,168,281
Administrative expenses 行政支出	(219,619,971)	(202,574,347)
Finance cost 財務成本	(895,451)	(348,010)
Deficit on subvention 資助虧損	(60,790,901)	(48,754,076)
FUNDING SUPPORT FROM INNOVATION AND TECHNOLOGY FUND/GOVERNMENT FUNDING SCHEMES 創新及科技基金資助／其他政府資助計劃		
Reimbursement of administrative overheads 發還行政費		
– Innovation and Technology Fund 創新及科技基金	32,774,989	40,695,306
– Smart Traffic Fund 智慧交通基金	2,094,167	–
	34,869,156	40,695,306
	(25,921,745)	(8,058,770)
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 項目資金收入		
– Innovation and Technology Fund 創新及科技基金	283,473,003	260,514,361
– Industry contributions 業界投入資金	83,458,027	66,595,649
Project expenditure 項目支出	(366,931,030)	(327,110,010)
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	8,827,896	6,305,479
– Industry contributions 業界投入資金	2,166,820	902,680
Project expenditure 項目支出	(10,994,716)	(7,208,159)
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	21,022,667	20,661,654
Project expenditure 項目支出	(21,022,667)	(20,661,654)
Balance on project funding 項目資金餘額	–	–
Project fund income – Research Talent Hub 項目資金收入 – 研究人才庫		
– Innovation and Technology Fund 創新及科技基金	24,184,978	26,876,474
Project expenditure 項目支出	(24,184,978)	(26,876,474)
Balance on project funding 項目資金餘額	–	–

Consolidated Statement of Income and Expenditure and Comprehensive Income (Continued) 綜合收支表及全面收益表（續）		
Year ended 31 March 2025 截至2025年3月31日止年度	2025 (HK$ 港幣)	2024 (HK$ 港幣)
PROJECT FUNDING FROM SMART TRAFFIC FUND AND INDUSTRY CONTRIBUTIONS 智慧交通基金及業界投入資金		
Project fund income 項目資金收入		
– Smart Traffic Fund 智慧交通基金	18,364,266	15,202,741
– Industry contributions 業界投入資金	600,000	1,686,300
Project expenditure 項目支出	(18,964,266)	(16,889,041)
Balance on project funding 項目資金餘額	–	–
FUNDING SUPPORT FROM INNOVATION AND TECHNOLOGY FUND FOR HONG KONG BRANCH OF NATIONAL ENGINEERING RESEARCH CENTER FOR APPLICATION SPECIFIC INTEGRATED CIRCUIT SYSTEM ("CNERC") 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/utilised in relation to Funding Support from Innovation and Technology Fund 與創新及科技基金資助有關的支出	(19,266,600)	(19,583,783)
Amount for reimbursement 發還款項	19,266,600	19,583,783
	–	–
RESERVE FUND 儲備資金		
Reserve Fund – income 儲備資金－收入	6,046,324	3,452,486
Reserve Fund – expenditure 儲備資金－支出	(6,046,324)	(3,452,486)
	–	–
OTHER INCOME, NET 其他淨收入		
Other income 其他收入	86,645,699	63,532,999
Other expenses 其他支出	(65,984,177)	(50,947,062)
	20,661,522	12,585,937
AMOUNT RETURN TO THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION 退還香港特別行政區政府款項	(4,057,412)	(3,410,207)
SURPLUS/(DEFICIT) BEFORE TAX 稅前盈餘／(虧損)	(9,317,635)	1,116,960
INCOME TAX EXPENSE 所得稅支出	(182,212)	(119,632)
SURPLUS/(DEFICIT) FOR THE YEAR 本年度盈餘／(虧損)	**(9,499,847)**	**997,328**
OTHER COMPREHENSIVE LOSS THAT MAY BE RECLASSIFIED TO SURPLUS OR DEFICIT IN SUBSEQUENT PERIODS 在以後會計期可能重新分類作盈餘或虧損的其他全面虧損		
Exchange differences arising on translation of foreign operations 外幣報表換算差額	(66,813)	(178,981)
TOTAL COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR 本年度全面總收入／(虧損)	**(9,566,660)**	**818,347**

Consolidated Statement of Financial Position 綜合財務狀況表		
31 March 2025 於2025年3月31日	2025 (HK$ 港幣)	2024 (HK$ 港幣)
NON-CURRENT ASSETS 非流動資產		
Property, plant and equipment 物業、機器及設備	17,360,742	17,216,435
Right-of-use assets 使用權資產	70,462,608	29,913,599
	87,823,350	**47,130,034**
CURRENT ASSETS 流動資產		
Accounts receivable, contract assets, prepayments and deposits 應收款項、合約資產、預付款項及按金	39,852,764	33,457,185
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	82,740,429	85,413,796
Tax recoverable 可退回稅項	–	201,762
Cash and cash equivalents 現金及現金等值	179,936,174	252,920,802
	302,529,367	**371,993,545**
CURRENT LIABILITIES 流動負債		
Accounts payable, contract liabilities, other payables and accruals 應付款項、合約負債、其他應付款項及應計款項	124,317,579	116,796,118
Deferred government grants 遞延政府資助	18,718,085	20,621,384
Receipts in advance 預收款項	94,221,875	164,829,267
Amount due to the Government of the Hong Kong Special Administrative Region 應付予香港特別行政區政府款項	6,234,886	4,591,820
Lease liabilities 租賃負債	25,547,869	21,111,177
Tax payable 應繳稅項	144,083	–
Provisions 撥備	–	17,820,975
	269,184,377	**345,770,741**
NET CURRENT ASSETS 流動資產淨值	**33,344,990**	**26,222,804**
TOTAL ASSETS LESS CURRENT LIABILITIES 總資產減流動負債	**121,168,340**	**73,352,838**
NON-CURRENT LIABILITIES 非流動負債		
Lease liabilities 租賃負債	43,000,099	4,340,215
Provisions 撥備	20,838,458	2,116,180
	63,838,557	**6,456,395**
Net Assets 資產淨值	**57,329,783**	**66,896,443**
EQUITY 股權		
Share capital 股本	2	2
Reserves 儲備	57,329,781	66,896,441
Total Equity 股權總值	**57,329,783**	**66,896,443**

Note:

These financial statements have been prepared in accordance with HKFRS Accounting Standards (which include all Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards and Interpretations) as issued by the Hong Kong Institute of Certified Public Accountants and the Hong Kong Companies Ordinance. They have been prepared under the historical cost convention and are presented in Hong Kong dollars ("HK$").

The financial information relating to the years ended 31 March 2025 and 31 March 2024, included in the Consolidated Statement of Income and Expenditure and Comprehensive Income, and the Consolidated Statement of Financial Position set out on pages 101 - 103, is not part of the Company's statutory consolidated financial statements for those years but is derived from them. Further information relating to those statutory financial statements required to be disclosed in accordance with section 436 of the Hong Kong Companies Ordinance is as follows:

As the Company is a private company, the Company is not required to deliver its financial statements to the Registrar of Companies and has not done so.

The Company's auditor has reported on the consolidated financial statements of the Group for both years. The auditor's reports were unqualified; did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying its reports; and did not contain a statement under sections 406(2), 407(2) or (3) of the Hong Kong Companies Ordinance.

備註：

本財務報表乃根據香港會計師公會頒布的香港財務報告準則（包括所有香港財務報告準則、香港會計原則及詮釋）及香港公司條例編製。本財務報表根據歷史成本慣例編製，並以港幣呈報。

以上第101至103頁之綜合收支表及全面收益表以及綜合財務狀況表截至2025年3月31日及2024年3月31日止年度的財務資料，並不構成本公司有關年度的法定綜合財務報表，但這些財務資料均取自有關財務報表。有關該等法定財務報表須根據香港公司條例第436條作進一步披露的資料如下：

本公司是私人公司，因此毋須向公司註冊處遞交其財務報表，亦從未遞交過。

本公司的核數師已就本集團兩年的綜合財務報表作出報告。核數師呈交的無保留報告，並不包括該核數師在不作保留意見之情況下，以強調方式促請有關人士垂注任何事宜的提述，亦無載有根據香港公司條例406(2)、407(2)或（3）條所作出的陳述。

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