



12 March 2021

HKUST Joins Hands with Industry to Develop Aviation Innovation Blueprint

Sponsored by Airport Authority Hong Kong, Hong Kong Aviation Industry Association, and the Hong Kong Science and Technology Parks Corporation, a multidisciplinary team led by Professor Pengyu Zhu of the Division of Public Policy (PPOL) has recently secured full government support from the Innovation and Technology Commission for a one-year research project to develop a strategic plan which aims to transform Hong Kong into a leading global aviation and innovation hub in the next 10 years.

Facing dramatic impacts from the COVID-19 pandemic and an uncertain outlook, Hong Kong's aviation industry expects significant competition in a shrunken market. Technological innovation will play a critical role in addressing new safety, security, health and reliability concerns, reducing costs in a strained market, and retaining Hong Kong's leading position in the sector. Furthermore, local development of technological innovations has become even more urgent with the recent US sanctions on technology sales to China.

“Being more self-reliant in pursuing technological transformation will make Hong Kong's aviation industry less susceptible to the uncertainties and threats brought about by the sanction. In this regard, this strategic planning for upgrading Hong Kong's aviation technology industry is indeed timely and necessary,” said Professor Zhu.

The project will deliver a 10-year roadmap to lay out essential innovations in five key areas, including the technology evolution of the Hong Kong International Airport, efficiency in air traffic, sustainable aviation, intelligent logistics, and cross-industry technology sharing. HKUST will convene the first International Aviation Technology and Business Annual Conference in early 2022, to mark the establishment of a long-term government-industry-academia collaborative network to facilitate knowledge exchange in new-tech development and explore commercialization and investment opportunities.

The research team pools expertise from five leading scholars in the fields of Public Policy, Mechanical and Aerospace Engineering, and Artificial Intelligence. Project coordinator, Professor Pengyu Zhu, is a world-leading scholar in transportation, technology, and economic



development policy, with over 10 years of leadership experience in funded research in China and the United States. Other team members include Professor Rhea Liem and Professor Huihe Qiu of the Department of Mechanical and Aerospace Engineering, Professor Huamin Qu of the Department of Computer Science and Engineering, and Professor Xun Wu, Founding Head of the Division of Public Policy.

“Our team is truly cross-disciplinary, with strong support from industry stakeholders. Given the applicability of many aviation technologies to other industries, the impacts of this study will also spread beyond the aviation industry and benefit the entire community, thereby truly transforming Hong Kong into a world leading innovation hub,” said Professor Huamin Qu, Director of the Interdisciplinary Programs Office at HKUST.

About HKUST Division of Public Policy (PPOL)

As a part of Interdisciplinary Programs Office (IPO), PPOL focuses on fostering interdisciplinary public policy research and education by harnessing synergies between PPOL and other academic units through joint appointments, collaborative research and joint workshops and conferences. The division offers several post-graduate programs in public policy as well as courses for undergraduate students in selected policy areas.

For media enquiries, please contact:

HKUST

Carol Cheung

Tel: 3469 2426

Email: ppol@ust.hk



創新科技署
Innovation and
Technology Commission

Funding organization:

Any opinions, findings, conclusions or recommendations expressed in this material/event (or by members of the project team) do not reflect the views of the Government of the Hong Kong Special Administrative Region, the Innovation and Technology Commission or the Vetting Committee of the General Support Programme of the Innovation and Technology Fund.



2021年3月12日

香港科技大学与航空业界携手制定创新蓝图

在香港机场管理局、香港航空业协会和香港科技园公司的赞助下，由香港科技大学公共政策系朱鹏宇教授领导的跨学科团队最近获得香港创新科技署 (**Innovation and Technology Commission**) 的全力经费支持，开展为期一年的研究项目，为在未来十年内将香港转型成为全球领先的航空和创新中心制定战略规划。

面对 **2019** 新型冠状病毒疫情的巨大影响和不确定前景，香港航空业预计会在萎缩的市场中会面临激烈的竞争。为求解决新的安全、保安、健康和可靠性问题、在紧张的市场中降低成本并保持香港在航空业的领先地位，科技创新将会成为关键。此外，随着美国近年对中国施加的技术禁售和制裁，本地的技术创新发展变得尤为迫切。

「在技术改造方面取回主导权，将使香港航空业不易受到外部制裁所带来的不确定性影响和威胁。从这一点来看，这次针对香港航空科技产业升级的战略规划确实是非常及时和必要的」朱教授说。

该项目将提供一个为期十年的技术规划路线图，在五个关键领域中进行必要的创新，包括香港国际机场的技术变革、高效率的航空交通、可持续航空、智能物流和跨行业技术共享。同时，研究团队将依托香港科技大学，拟于 **2022** 年三月组织召开首届国际航空科技与商业年度会议，这将标志一个长期的政府-产业-学术界合作关系的建立，从而促进新技术开发中的知识交流，探索商业化和投资机会。

研究团队汇集来自公共政策、机械和航空航天工程以及人工智能领域的五位顶尖学者。项目负责人朱鹏宇教授是交通、技术和经济发展政策领域的世界知名学者，在中美两国获得过多项研究项目资助，拥有超过 **10** 年的科研项目领导、管理经验。其他团队成员包括机械及航空航天工程学系的 **Rhea LIEM** 教授和邱惠和教授、计算机科学及工程学系屈华民教授和公共政策学部系主任吴逊教授。

「我们的团队是真正的跨学科团队，得到了业界的大力支持。鉴于许多航空业技术在其他行业中的广泛适用性，这项研究的影响将能够扩展至航空业以外，并惠及整个社会，从而真正地将香港转型为世界领先的创新中心。」香港科技大学跨学科课程事务处处长屈华民教授说。

关于香港科技大学公共政策学部(PPOL)

作为香港科技大学跨学科课程事务处(IPO)的下属学系，公共政策学部致力于通过联合聘任、合作研究以及联合研讨会和会议，利用公共政策学部与其他院系之间的协同作用，重点促进跨学科公共政策研究和教育。公共政策学部提供一系列公共政策研究生课程，并在特定公共政策领域开办为本科生而设的课程。

媒体咨询：

香港科技大学

張小姐

电话：3469 2426

电子邮件：ppol@ust.hk

資助機構:



創 新 科 技 署
Innovation and
Technology Commission

在本刊物／活動內 (或由項目小組成員) 表達的任何意見、研究成果、結論或建議，並不代表 香港特別行政區政府、創新科技署或創新及科技基金一般支援計劃評審委員會的觀點。