

A dynamic centre of advancement

Attracting bright minds from around the world, the **INSTITUTE OF ADVANCED STUDY AT THE CITY UNIVERSITY OF HONG KONG** pursues curiosity-driven research and spreads the importance of scientific knowledge.



Serge Haroche
Chairman of Institute for
Advanced Study

The Institute for Advanced Study (IAS) was established at the City University of Hong Kong (CityU) in November, 2015, under the leadership and inspiration of the President of CityU, Way Kuo. As one of the few such centres in the region, it aspires to be an international centre of excellence for innovation by bringing together an interdisciplinary team of world-renowned scholars, including Nobel laureates, to contribute to the solutions of pressing real-world problems.

IAS takes on basic and applied research across disciplines from mathematics and natural science to materials and life sciences. It will contribute to fundamental knowledge and innovative ideas for expanding the frontiers of science, engineering and technology.



Jacob C. Huang
Executive Director of Institute for
Advanced Study

Nobel Laureate in leadership
In March 2018, CityU invited Nobel Laureate, Serge Haroche, to be IAS chairman. Haroche has received many prizes and awards for his research in quantum optics and quantum information science, including the 2012 Nobel Prize in Physics. His significant contributions to cavity quantum electrodynamics are demonstrated by the observation of the enhancement of a single atom spontaneous emission in a cavity, the direct monitoring of the decoherence of mesoscopic quantum superpositions (or Schrödinger cat states), and the quantum-non-demolition counting of photons.

"I am particularly pleased about this appointment because I come from an

institution which shares the IAS values," said Haroche. "The IAS has the ambition to convey the excitement of research to the academic world and beyond."

Under his leadership, the IAS will further its mission of building a regional and global intellectual centre to spearhead CityU's drive for interdisciplinary excellence.

Distinguished scholars

When Jacob C. Huang, former Vice-President of National Sun Yat-Sen University, was appointed as the executive director of IAS in 2017, the renowned material scientist brought a wealth of experience. "I share the university's values for education and research excellence," Huang says. "It is also our goal to further raise the global profiles of CityU's science and engineering community and other academic/research institutions in Hong Kong and the rest of China."

Committed to a supportive research environment, the IAS has appointed internationally acclaimed academics as its senior fellows. They have great opportunities to work with and mentor other research fellows, young scholars and students at CityU through IAS Distinguished Lectures/Workshops and other events.

IAS has 27 senior fellows,

including three Nobel Prize winners: Jean-Marie Lehn, 1987 Nobel Laureate in Chemistry and Klaus von Klitzing, 1985 Nobel Prize in Physics (along with Haroche); Stephen Smale, Fields medallist and Wolf Prize recipient; Philippe Ciarlet, renowned French mathematician; CityU president, Way Kuo; Légion d'Honneur recipient and CityU vice president Jian Lu; renowned material scientist, Chain Tsuan Liu; and many other distinguished scholars in fields ranging from catalysis to humanities.

Enlightening events

Since 2015, IAS has organised more than 40 outstanding lectures, workshops and conferences with 80-plus renowned scholars.

Upcoming events in 2018 include: a Materials Summit in June; an Extended Biomedical Workshop in July discussing areas from genomes and cells to mathematics; and a France-Hong Kong Workshop in November in honour of the 80th birthday of Ciarlet, who is well known for his mathematical analysis of the finite element method and applications of differential geometry. The workshop will bring renowned French scientists of IAS to discuss their research fields. ■

MATERIALS SUMMIT

10 Distinguished Scientists discuss about
the Future Trends and Latest Development in Nanomaterials

Date: 27 June 2018
Venue: City University of Hong Kong

For more information:
http://www.nano2018.org/prog_materials_summit.php



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Making Hong Kong a hub for science and technology innovation

Leaders of some major research institutions in Hong Kong talk about translating research into innovation to make an impact.



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ALBERT WONG

CEO, Hong Kong Science and Technology Parks Corporation (HKSTP)

HKSTP aims to transform Hong Kong into a regional hub for innovation and technology (I&T) development, focusing on bio-tech, artificial intelligence, robotics, data and smart cities. HK Science Park is a living lab with 9,000 R&D practitioners - where ideas are not only conceptualised and developed, but also tested until they become solutions ready for commercialisation. Over 130,000 lab hours have been logged in 2017 alone. We have built a vibrant I&T ecosystem - where talent is nurtured, and innovators regularly meet with investors and industry leaders. As a super-connector, we empower technology companies to tap into the emerging opportunities presented by the Greater Bay Area in southern China.



PAUL K H TAM

Acting President and Vice-Chancellor, The University of Hong Kong

The University of Hong Kong (HKU) - an English-medium, research-led, comprehensive university established over a century ago - is recognised internationally for its leading-edge work. Our innovative research spans ten faculties, involving collaboration within and across disciplines, and with local, regional and international partners in academia and beyond. Breakthroughs are made in SARS, MERS and other infectious diseases, drug discovery, energy transmission, and suicide prevention, to name a few. Our pursuit of research excellence is underpinned by a strong emphasis on integrity. A key goal is to create high-impact research that brings benefit to society. In the coming years, we will seek to build on these accomplishments and sustain HKU's role as Asia's Global University.



TIMOTHY W. TONG

President, The Hong Kong Polytechnic University

The Hong Kong Polytechnic University is committed to doing high-impact research. We are keen to create and transfer knowledge and technology, both to foster economic development and to enhance quality of lives, making the world a better place for all. In addition to the novel surgical robotic system and the discovery of a new superbug, our researchers have helped develop the first Hong Kong-made instrument deployed for the nation's lunar exploration programme. Guided by our motto: "To learn and to apply, for the benefit of mankind", we look forward to more multi-disciplinary and forward-looking collaborations with institutions worldwide, contributing to global sustainable development.



ROLAND T. CHIN

President, Hong Kong Baptist University



WAY KUO

President, City University of Hong Kong



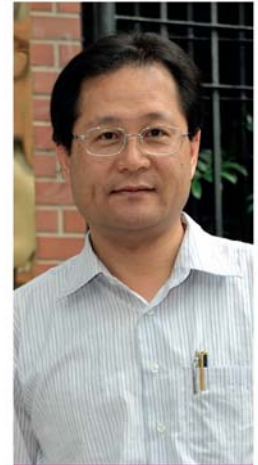
ROCKY S. TUAN

Vice-Chancellor and President, The Chinese University of Hong Kong



FRANCIS CHAN

Dean, Faculty of Medicine, The Chinese University of Hong Kong



JACOB C. HUANG

Executive Director of Institute for Advanced Study, Chair Professor of Materials Science, City University of Hong Kong

Make HKBU your academic home! The world of teaching, learning, and research is fiercely competitive. This is why we make "caring culture" a cornerstone of our mission. At HKBU, we dare to compete in a caring environment, making our campus life competitively delightful. "Global" is another of our cornerstones. We welcome talents from across the world, regardless of race, colour, religion, creed and gender. We do world-class research in selected research clusters, particularly in creative media & practice, health & drug discovery, and data analytics & artificial intelligence. We are more than a university. We are your creative academic home.

City University of Hong Kong is committed to discovery-oriented, interdisciplinary research to advance knowledge and benefit society. We put discovery, innovation and application at the heart of all our research endeavours. Led by internationally renowned faculty and supported by first-rate facilities, our research joins together arts and humanities with science and modern technologies to generate new knowledge, create innovative products and solutions to address pressing world problems and improve people's quality of life. We engage in collaborative activities with private sector, educational, and government partners worldwide to enrich our resources and enhance the global impact of our research.

The Chinese University of Hong Kong (CUHK) endeavours to become a world-class university recognised as a centre of excellence for developing cutting-edge research and interdisciplinary strengths that make greater social impacts. CUHK has a long tradition of eminence in fundamental and applied research, being home to more than 30 research institutes and many more joint research centres. We have also demonstrated strengths and expertise in technology innovation, including artificial intelligence, robotics, genetic screening and so forth. It is my firm belief that CUHK will continue to excel as a fountainhead of basic, applied and translational scientific innovations and breakthroughs.

The Faculty of Medicine of The Chinese University of Hong Kong is a young and emerging centre of excellence in translational research. Our advantage is our relatively short history. Within 37 years, we have built an open and responsive culture, which is conducive to accelerating learning and to creating unparalleled opportunities for trying out ideas, starting projects and working collaboratively with international strategic partners. Our eminent researchers have been internationally recognized for having increased the odds of meeting healthcare challenges in the 21st century. Individuals aspiring to make a mark in the history of health science are welcome to join us.

Aspiring to be an international centre of excellence for innovation, the Institute for Advanced Study (IAS) was established at the City University of Hong Kong (CityU) in November 2015. It brings together an interdisciplinary team of world-renowned scholars, including Nobel laureates, to contribute to the solutions of pressing real-world problems. IAS takes basic and applied research across disciplines such as mathematics, natural science, and life science. The goal of the IAS is to further raise the global profile of the science and engineering community at CityU and other academic/research institutions in Hong Kong and Greater China.