



香港科技大學  
THE HONG KONG  
UNIVERSITY OF SCIENCE  
AND TECHNOLOGY

# 2014-2015 Annual Report



# OBJECTS

(The Laws of Hong Kong: Chapter 1141)

The objects of the University –

- (a) To advance learning and knowledge through teaching and research, particularly –
  - i. in science, technology, engineering, management and business studies; and
  - ii at the postgraduate level; and
- (b) To assist in the economic and social development of Hong Kong.



COVER PHOTO CREDIT: Guancong Ma



# STATEMENT OF VISION

To be a leading university with significant international impact and strong local commitment.

**GLOBAL:** To be a world-class university at the cutting edge internationally in all targeted fields of pursuit.

**NATIONAL:** To contribute to the economic and social development of the nation as a leading university in China.

**LOCAL:** To play a key role, in partnership with government, business, and industry, in the development of Hong Kong as a knowledge-based society.

# CORE VALUES

- Excellence, Integrity, and Academic Freedom
- Global Vision and Local Commitment
- Can-do Spirit
- Inclusiveness, Diversity, and Respect
- 1-HKUST











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# CHAIRMAN'S FOREWORD

In 2014-15, higher education in Hong Kong added to its international presence and standing, with HKUST making notable contributions through innovative education and research, and the resulting quality of its graduates.

At the root of innovation lies exploration across frontiers and into previously unknown realms of knowledge, which are then developed and applied to bring advances to society as a whole. That HKUST remains at the forefront of such enterprise was demonstrated by the outstanding results across its Schools in the University Grants Committee's stringent Research Assessment Exercise 2014, assessed by panels comprising over 300 scholars from around the world, where we attained the highest proportion of internationally excellent research work, at 70%.

This is certainly good news for Hong Kong as it strives to embed its global profile as an innovation hub. Meanwhile, HKUST's new world-leading research areas of focus, determined over the year in line with the University's evolving strengths and international advances, will help to maintain this cutting-edge distinction in the years ahead. The positive

outcomes of such endeavors for the wider community were recognized internationally through HKUST's position at No.16 in the widely cited Global Employability University Ranking in 2014.

The further definition of the University's intrinsic philosophy through the development of a set of core values in consultation with the HKUST community was another milestone. In the highly competitive world-class tertiary segment, of which the University is a member, this significant move will help HKUST build a unique identity. Such a "call sign" will enable it to stand out not only for academic achievements but principles and culture. It will give the University the bedrock for on-going long-term sustainability as an institution and as an influential contributor to social advancement at home and beyond.

Such steps forward will consolidate and deepen the already remarkable renown that HKUST enjoys since its establishment just 24 years ago and will draw the eyes of the world to our city in myriad positive ways.





Indeed, when I took up the chairmanship of HKUST Council in March 2015, I joined the University at an exciting time, with preparations for the historic 25<sup>th</sup> Anniversary in the coming academic year in full swing. Despite its relative youth, the University is renowned for its hard work and rapid attainments so there is much to celebrate with both the local and global community as well as within the HKUST family.

I am honored to have been appointed to foster HKUST's institutional development following the untimely passing of former chairman Dr Marvin KT Cheung. Dr Cheung set a high bar with his wise counsel and solid support for the many advances that this high-achieving University made during his tenure. I will endeavor to lead the Council in a similarly productive relationship.

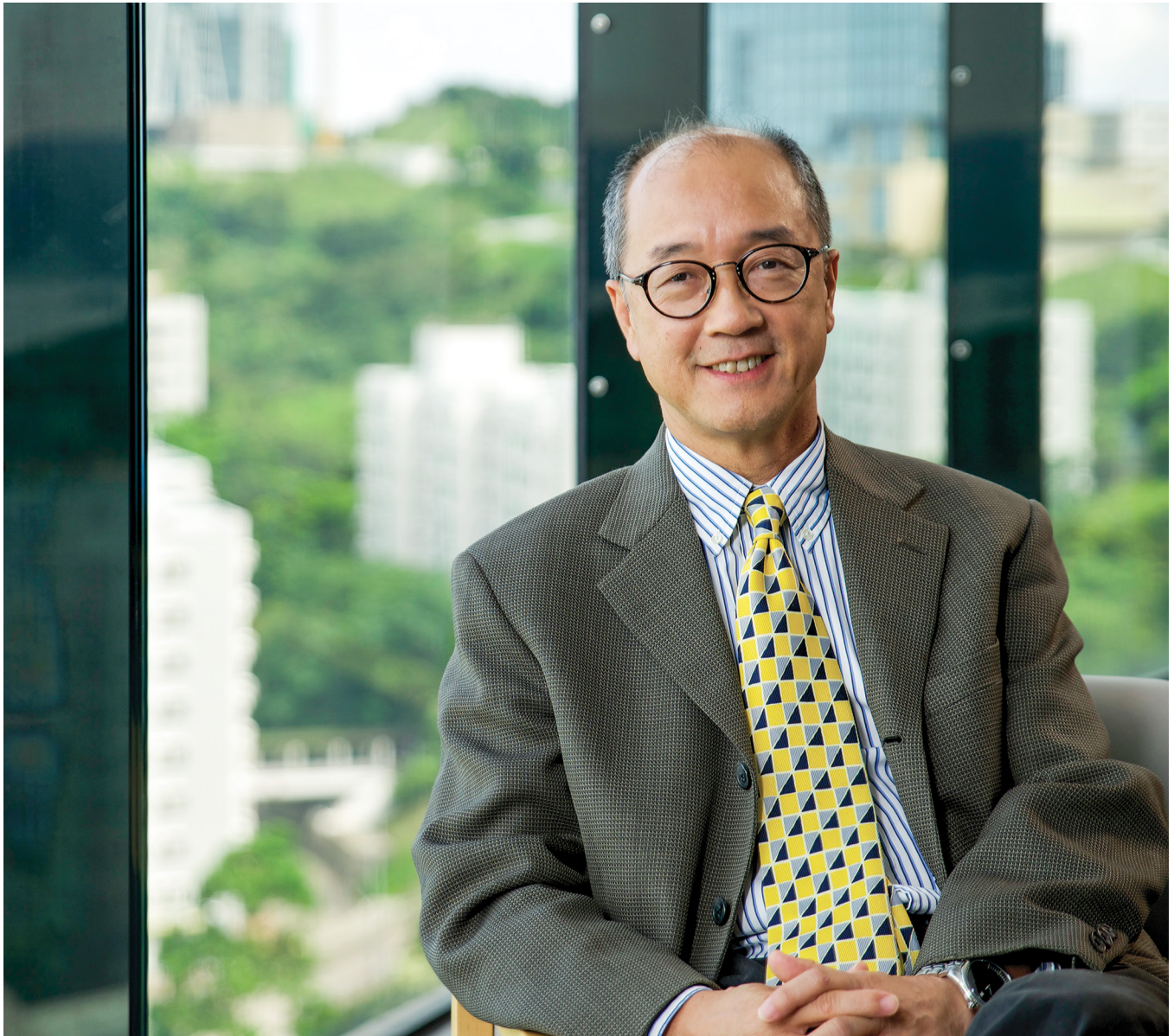
I would like to extend my gratitude to former Council Vice-Chairman Mr Martin Y Tang, who admirably served as Acting Council Chairman in the interim, providing a stable transition for the University. The President and senior management have also ably guided the University community to reflect on its goals and take forward its vision to become a leading

university with significant international impact and strong local commitment.

With a clear strategic outlook, sought-after graduates, and the “heart” of the University beating effectively through its core values, I look ahead with confidence. I see that HKUST is moving on to the next level and has an inspiring role to play in advancing learning and knowledge, powering the development of Hong Kong, and nurturing the creative, caring and contributive citizens to resolve the grand challenges the world faces. It is a truly exciting future in which to take part.

Chairman, University Council  
**The Hon Andrew CS Liao, GBS, SC, JP**





# PRESIDENT'S REPORT

This year saw numerous achievements of lasting importance and it gives me great pride to be leading this remarkable University as we have attained these significant milestones. As one of the world's top universities, we continue to set high goals, enhance excellence and embrace new challenges in the midst of momentous change. Along with capabilities in research and teaching as well as increasing global presence, we are firmly in place to head off to a spectacular future.

## **NURTURING FUTURE LEADERS**

As the final three-year undergraduate cohort completed their degrees and first four-year students progressed smoothly

into the third year of their studies, the University further diversified the undergraduate experience by adopting a tri-modal framework. This move will help to address the individual talents of our increasingly heterogeneous student body. It will see a wider range of active learning opportunities and courses made available. Our signature Undergraduate Research Opportunities Program (UROP) celebrated its 10<sup>th</sup> anniversary. Over 2,600 undergraduates have gained early experience of research life since it was established and some 25% of faculty members now participate, making it the largest program of its kind locally. We are also committed to maintain our leading position on diversity, reaching out around the world and to local international students. In



the year under review, more than 50% of students can go overseas exchange in the same cohort.

HKUST continued its pioneering endeavors in e-learning and Massive Open Online Courses (MOOCs). Faculty members initiated the first visual MOOC analytic system, provided courses to students around the world on the two leading MOOC platforms of Coursera and edX, and gained worldwide recognition at the Wharton-QS Stars Awards.

That HKUST is very much on the right track in the relevance of our study programs and learning experience. The University has been among top 20 in the Global Employability University Ranking, being placed in the 16<sup>th</sup> spot in 2014, while the survey comprised a poll of 4,500 recruiters and executives in 20 countries. To prepare students for their post-graduation journeys, total internships increased to 537, with 230 taking place outside Hong Kong. Meanwhile, entrepreneurship education strengthened, including the setting-up of the enterprising BASE activity center, with facilities to help students advance their start-ups and to hold entrepreneurship events.

## RESEARCHERS WITH IMPACT

2014-15 saw sterling results in all HKUST Schools in the University Grants Committee's Research Assessment Exercise 2014. HKUST attained the highest proportion of internationally excellent research work among the eight UGC-funded institutions in this review. Over the year, the energy, quality and commitment of our faculty and their work secured more than \$521.8 million in total research funding over the year, including support from the Research Grants Council for more than 204 new research projects. Success in the Theme-based Research Scheme saw two projects, focused on different aspects of sustainable development for our city, receive a total of \$66 million.

HKUST's emphasis on five new world-leading research areas – data science, sustainability, public policy, autonomous systems, design thinking and entrepreneurship – will position the University to extend its reach and impact nationally and globally in the years ahead. A corresponding expansion of faculty in these fields will ensure that the University's research output remains at the cutting edge.

Current faculty members and their achievements were acknowledged through a host of top national and international honors. They included State Natural Science

Awards, the election of a Foreign Associate of the US National Academy of Sciences, and the first Hong Kong academic to become a member of the European Academy of Sciences and Arts. The inauguration of four more Named Professors, supported through donations and awarded to recognize exceptional faculty, brought the total number of such prestigious professorships to 29.

Knowledge transfer activities led to a total of 124 new contract research and consultancy agreements in 2014-15. We also formed a Task Force comprising external members and led by one of our Emeritus Professors to advise the University on long-term strategic planning in this area.

## DEEPER GLOBAL PRESENCE

As part of our internationalization drive, I attended the prestigious World Economic Forum Annual Meeting in Davos, Switzerland, and hosted our first named HKUST IdeasLab at the winter gathering on the merging of virtual realities and the physical world together with four of our professors. HKUST was one of just seven universities, including Oxford, Harvard and MIT, to be invited to hold this session. In participating in the Global University Leaders Forum, with over 20 presidents from leading global universities, I was also able to contribute to insightful discussions on the latest developments in university and industry collaborations. Later in the year, I was invited to attend the X<sup>th</sup> Glion Colloquium in Geneva, a biennial forum for leading global research universities.

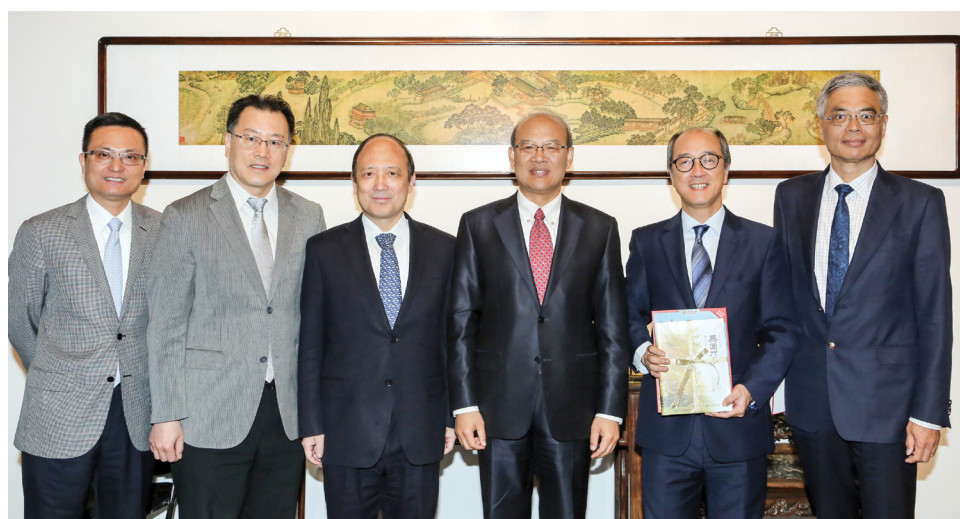
In line with overseas visits of previous years to extend HKUST's worldwide partnerships and reach, I led delegations to Mexico and Central Europe, both areas of strong potential for fresh academic collaborations and student exchange. During the visits, we held meetings at science and technology institutions, government entities, and top universities, raising awareness of the University and Hong Kong.

Closer to home, preparations also advanced well for co-hosting the 14<sup>th</sup> National Challenge Cup in summer 2015. The competition is a large-scale science and technology innovation contest for leading university students in China. HKUST was responsible for a new theme-based contest open to student from other countries as well as China.

## FORGING AHEAD WITH NEW INITIATIVES

Following approval from the University Council, we moved





forward on a campus masterplan that will provide facility upgrade to support our current initiatives and future development. Sporting activities will benefit from a new hall and a water sports center. In addition, major University gatherings and events will be able to utilize a 1,000-seat multi-purpose auditorium. The hostel in Tseung Kwan O is expected to provide an extra 520 bed spaces for students. With the completion of the Cheng Yu Tung Building, the state-of-the-art laboratories and teaching facilities became available on the campus, undoubtedly adding to our strengths in both the advancement of research and teaching. These much-needed additions will help build cohesiveness within the HKUST community.

Events to celebrate this 25<sup>th</sup> anniversary landmark took shape over the year, with an engaging program arranged to highlight HKUST's remarkable progress and achievements in just two and a half decades. From the launch of our Distinguished Speaker Series this September to co-hosting the Asian Physics Olympiad and International Mathematical Olympiad on campus in May and July 2016 respectively, as well as the Global 25<sup>th</sup> Anniversary Celebration Dinners and School-sponsored Conferences in four major cities around





the world in the coming year, the anniversary presents an apt way to build stronger bonds with alumni and others in the HKUST family, and among stakeholders beyond the campus.

### LASTING VALUES

In another fitting landmark in our development, we developed five core values as a visible commitment to the spirit that identifies HKUST and defines the character and outlook of our graduates to stand alongside the University's mission and vision. These core values are: excellence, integrity, and academic freedom; global vision and local commitment; can-do spirit; inclusiveness, diversity, and respect; and 1-HKUST. While values such as these were espoused from the outset at HKUST, the clarity brought through such formal acknowledgement will guide and help bring together the University community when working through challenging decisions, now and in the future. I see the core values will raise positive awareness among potential members and the wider community in general as to what drives HKUST and why it is such a special place to learn and work.

Throughout all these advances in 2014-15, I have felt proud and encouraged by the cooperative spirit and willingness to engage that has been apparent among faculty, staff, students, and alumni. I would also like to recognize our wider community supporters, who have generously donated both funds and time to enable this remarkable University to flourish at such peaks of excellence. Our achievements both locally and globally at a still youthful 24 years old are indeed outstanding. The many and far-reaching developments of 2014-15 will pave the way for us to soar yet higher in the exciting future that lies ahead.

President  
**Prof Tony F Chan, JP**



(From left):

**Mr Mark Hodgson**

*Vice-President for  
Administration and Business*

**Dr Eden Y Woon**

*Vice-President for  
Institutional Advancement*

**Prof Tony F Chan**

*President*

**Prof Joseph Hun-Wei Lee**

*Vice-President for Research  
and Graduate Studies*

**Prof Wei Shyy**

*Executive Vice-President and Provost*









# EDUCATION DEVELOPMENT

The University continued to advance its student-focused four-year curriculum, increased its international recognition for graduate employability, strengthened entrepreneurship education, and made fresh advances in global e-learning



## UNDERGRADUATE EDUCATION

The year under review marked the final year for three-year undergraduate degree students, bringing the double cohort to an end. The progression of the first batch of four-year undergraduate degree students continued to be smooth during their third year of study.

### Responding to Individual Needs

The University advanced its efforts to diversify the undergraduate education experience. HKUST's incoming students are no longer a homogeneous group, displaying increasing variety in terms of academic preparation, career goals, and aspirations. In response to such diversity, the University has adopted a tri-modal educational framework to address this development. HKUST is seeking to build on its enterprising and flexible four-year curriculum through cross-disciplinary courses, active learning, and in-depth

academic engagement. Innovative practicum or experiential-based courses are being developed to extend active learning provision and accelerated honors courses for students seeking more in-depth academic pursuits.

Such learning extensions will generate additional opportunities and are intended to address individual interests, readiness and motivation to enable students to fully engage in all dimensions of their chosen undergraduate program and more effectively realize their potential.

HKUST also underwent a Quality Assurance Council audit during the year. The Council, set up under the aegis of the Hong Kong University Grants Committee (UGC), carries out periodic audits on the quality of students' learning experience at UGC-funded institutions to provide feedback and guidance to individual institutions and continuously enhance quality provision. The report is due out in Fall 2015.



## Enhancing Diversity and Career Development

HKUST has made considerable in-roads in creating a multicultural and vibrant campus for local and overseas students. With an extensive student exchange programme, vigorous recruitment of full-time non-local students from around the world, and outreach to local international schools, the University retained its position as the campus with the most diversified student body at the undergraduate level in 2014-15.

Diversity is further enhanced through an increasing number of scholarship opportunities recognizing a variety of talents. These include local and non-local high academic achievers as well as those who excel in endeavors such as sport and arts. In the year under review, 2,332 students received scholarships, amounting to \$64.03 million.

The University has also established a solid international reputation for producing highly employable graduates. Despite the relatively short history of the University, HKUST's graduates are sought after worldwide. In a global survey conducted by Emerging, a French human resources consultancy, and Trendence, a leading German research institute, HKUST ranked 16<sup>th</sup> worldwide in the employability of graduates in 2014, up two places from the previous year. This was further reflected in a Universum survey based on 7,200 students from local universities. Universum, a global employer branding leader, awarded HKUST Career Center three of the nine awards in 2015: Best Career Service Satisfaction Award, Best Employability Rating Award, and Best University Experience Rating Award.

## Widening Overseas Learning Opportunities

Student exchanges and the learning opportunities they provide grew in both number and diversity. Over 50% of students in the same cohort spent a term or more overseas through the University's regular exchange program. The number of

exchange-in and exchange-out students increased to 1,047 and 962 respectively in 2014-15.

In addition to regular international exchange, there was a steady increase in student participants in overseas internships and service learning programs. In 2014-15, the number of overall internships increased, reaching 537. Among them, 230 were overseas internships.

## Fostering Interest in Research

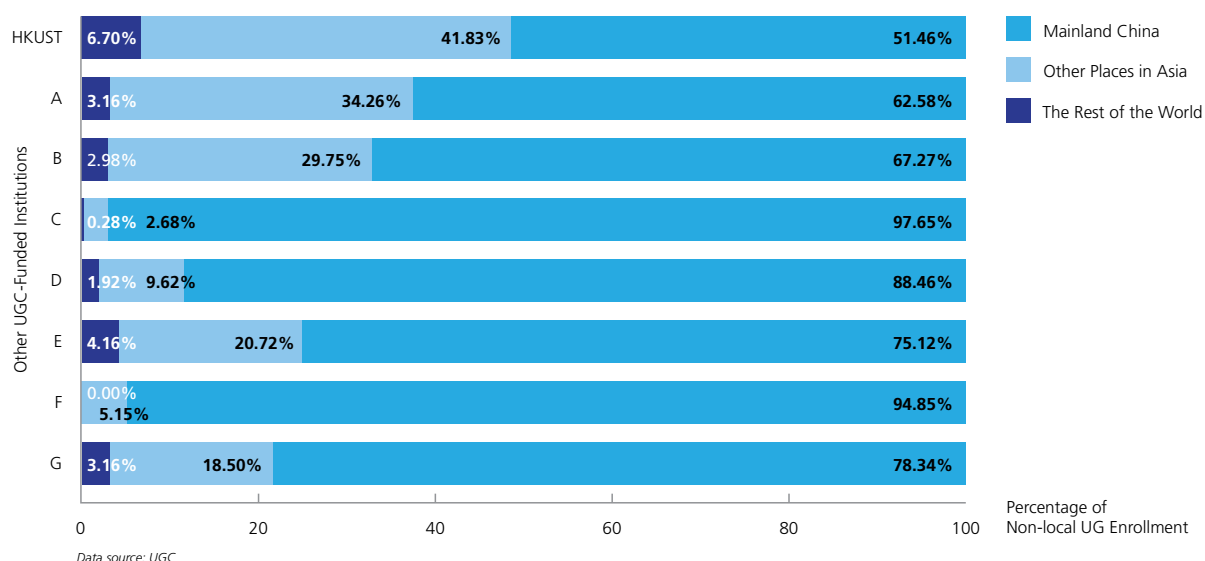
The University's signature Undergraduate Research Opportunities Program (UROP) celebrated its 10<sup>th</sup> anniversary in 2015. The program provides undergraduate students with an opportunity to work on research projects with professors and nurtures young scientists and academic explorers. Since its inception, over 2,600 students have taken part in the program and many participants, inspired by their experience, decided to pursue advanced study upon graduation. The scale and faculty involvement in UROP, with close to 25% serving as project supervisors, make it the largest of its kind among UGC institutions.

## Cultivating All-Round Abilities

Common Core courses and other programs and activities that encourage creativity through arts education have drawn strong interest from students. In 2014-15, over 2,200 of 8,940 undergraduates enrolled in creative arts education classes: 1,555 in Music and Composition, 561 in Co-curricular Arts Performance, and 161 in Literature and Creative Writing. In the same year, 7,154 students and members of the University community attended University music performances (including 600 who attended student-led events) while another 400 attended Literature and Creative Writing workshops and presentations. The University has decided to establish the HKUST SHSS Center for Creative Arts Education.

## Non-local Undergraduate Enrollment of UGC-funded Programs by Institution

### Breakdown of Non-local UG Enrolled Students by Origin, 2014/2015



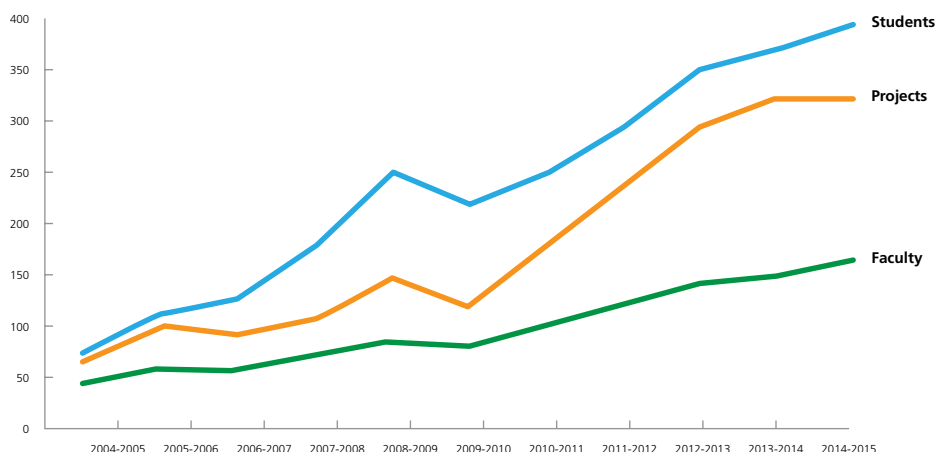


**16<sup>TH</sup>**  
**Global**  
**Employability**  
**University**  
**Ranking 2014**  
(1<sup>st</sup> in Greater China)





## UROP Development



The HKUST Arts Festival, held over March and April 2015, reached out across the campus community, delivering a rich collection of visual and performing art events. Popular Broadway musical comedy *Urinetown* was staged at the HKUST Summer Musical 2015. To promote water sports in addition to track and field activities, a Water Sports Festival was held featuring water polo, coastal rowing, dragon boating and kayaking.

### Integrating Community Service

Service learning is an integral part of students' education experience. HKUST Connect collaborated with 79 community partners and engaged 3,125 students in 139 service projects in 2014-15. The signature HKUST Service Learning Day recruited 906 students, faculty members, staff and alumni to serve in 46 service projects with 38 community partners over three days in April 2015.

The University encouraged student-initiated activities via a range of schemes, including the President's 1-HKUST Student Life Award (25 projects), Student Enrichment Activities Fund (70 projects) and the Graduate Student Life Fund (29 projects), while events such as TEDxHKUST 2015 were successfully organized by students on campus. On the leadership development front, the REDbird Award Program recruited 130 members and eight student leaders (coaches) in 2014-15 and a total of 89 REDbird gold, silver and bronze awards were granted.

## POSTGRADUATE EDUCATION

The overall postgraduate student population grew by 6.4% in 2014-15. The total headcount was 4,515 as of 31 December 2014, including research postgraduates and taught postgraduates.

### Research Postgraduate Students

In 2014-15, student numbers experienced steady growth in the previous year to 1,842, as of 31 December 2014. Over 80% of students came from places outside Hong Kong, the majority from Mainland China. A Task Force on Promotion and Outreach to Local Research Postgraduates was established to formulate and develop strategies to attract high-quality

local research postgraduates to HKUST. Efforts included the launch of a new matching-fund scheme to encourage departments to recruit more local research postgraduates, resulting in a significant increase of 150% in the number of new local enrollment. The percentage of international research postgraduates increased steadily, reaching 11.1% in 2014-15.

The Hong Kong PhD Fellowship Scheme, established in 2009 by the Research Grants Council, seeks to attract the best and brightest students in the world to pursue their PhD programs at Hong Kong institutions. The University received the largest number of Fellowship awardees among sister institutions in 2014-15, securing 65 out of a total of 223 awards, which is equivalent to 29.1%, for the whole of Hong Kong.

The Overseas Research Awards Scheme offered funding support for senior PhD students to participate in research work in overseas institutions. The number of awards was maintained at 36. Research Travel Grant Program funding, which helps research postgraduates to attend conferences, rose to \$4 million in 2014-15 as student numbers increased.

Students on visiting internships continued to grow steadily, up to 75 in 2014-15, while the matching-fund scheme for international visiting internship students provided funding support for 41 eligible visiting internship students.

Among new initiatives, a Master of Philosophy Program in Technology Leadership and Entrepreneurship was introduced by the School of Engineering. In addition, the Asian Future Leaders Scholarship Program, funded by Bai Xian Education Foundation, was also established to support high-caliber Asian students to pursue MPhil studies at the University. Nine MPhil students were awarded this scholarship.

A Task Force on Research Postgraduate Education was established to review the operation of the Professional Development Course, first introduced in Fall 2013. The review was launched to enhance key elements, such as research ethics training and entrepreneurship. The course is mandatory for all new research postgraduates.





### **Taught Postgraduate Programs**

Student numbers rose by 5.6% to 2,673 in 2014-15. Full-time students increased to 1,359 while part-timers decreased slightly to 1,314. Over 50% of taught postgraduates were from outside Hong Kong, the majority from Mainland China. International taught postgraduates increased to 348 in the year under review.

Two new programs were introduced: an MSc in Accounting (School of Business and Management) and MA in International Language Education (School of Humanities and Social Science).

HKUST inaugurated its Graduate Commons, creating a dedicated campus facility for postgraduate students across all schools and disciplines to engage in ideas exchange and collaborative learning.

### **ENTREPRENEURSHIP EDUCATION**

#### **Fostering a Dynamic Ecosystem**

Task Force on Entrepreneurship Education, chaired by Prof Gary Chan (Computer Science and Engineering), was formed to focus on the educational dimension of knowledge transfer and entrepreneurship. Students, faculty, staff and alumni were consulted on how to strengthen HKUST's entrepreneurship education to create a thriving ecosystem.

To further energize entrepreneurship culture and student





interaction, the BASE entrepreneurship activity center was planned and developed in the year under review. The BASE is expected to serve as an active workspace, with facilities for students to move forward on their start-ups and entrepreneurial initiatives, and a space for holding entrepreneurship talks and events. It will also create a platform for all HKUST members, external start-up professionals, and entrepreneurs to mingle, work, meet, and explore partnerships with like-minded people.

### **Building Early Know-how**

Two E-weeks were held in October 2014 and March 2015. The Friday Dreamers' series was initiated, featuring six interactive sharing sessions with invited guests offering industry-specific insights on investment, resources, technology, and market strategies; and Build Your Own Business seminars and CEO seminars were organized throughout the year.

The annual Innovation & Entrepreneurship Training Camp provided systematic training on issues, concepts and skills unique to an innovative or entrepreneurial project and the opportunity to meet budding entrepreneurs from different cultural backgrounds.

In further developments, the Venture Entrepreneur Network, a cross-disciplinary student network, created a website portal integrating all entrepreneurial activities and resources at HKUST and in Hong Kong, and hosted various

events to connect students and faculty across Schools, in particular the School of Engineering and School of Business and Management. Hackathon@HKUST, a 24-hour coding competition co-organized by HKUST students and Tencent Foundation, was opened up to students and alumni of all universities, attracting 225 participants in 47 teams.

### **SETTING THE PACE GLOBALLY IN E-LEARNING**

The University increased its endeavors in e-learning, including blended learning courses on campus and Massive Open Online Courses (MOOCs) for public around the world. In 2014-15, 10 courses ranging from English for Doing Business in Asia to Java Programming to Chinese History were offered on Coursera and edX, the two leading international MOOC platforms. Development of other courses in Chinese Politics and Web Development are now underway. Such courses raised HKUST's presence in the e-learning arena while improving teaching and learning through the experience and data collected in running the MOOCs. HKUST has received two awards at the Wharton-QS Stars Awards 2014: Reimagine Education, also known as the "Oscars" of innovation in higher education, in recognition of its innovative e-learning programs. Prof Huamin Qu and his research team won a HKICT Award for developing the first visual analytic system for MOOCs that enables in-depth analysis of e-learning behavior, heralding improved teaching quality and more demand-focused programs.



# RESEARCH DEVELOPMENT

**HKUST's research excellence and relevance was recognized locally and internationally through top-level funding support and assessment, with knowledge transfer enabling partnerships and pathways to accelerate innovation in Hong Kong and beyond**

HKUST achieved outstanding ratings in the Hong Kong University Grants Committee's Research Assessment Exercise 2014 (RAE 2014), an assessment carried out to the most rigorous international standards. RAE 2014 covered the six-year period from October 2007 to September 2013, with the objective of assessing the research quality of UGC-funded institutions, encouraging world-class research and powering excellence. The University had attained an outstanding result, with world-leading (four stars) and internationally excellent (three stars) levels for 70% of its research submissions, the highest among all other local institutions.

## **DRIVING DISCOVERY**

In 2014-15, HKUST continued to actively pursue research funding, securing total research awards of more than \$521.8 million, including the Research Grants Council (RGC), government and government-related organizations, local private funds, and non-Hong Kong funds. HKUST was awarded 204 new research projects by RGC, with a total project value of \$165 million. HKUST researchers achieved the highest success rate (47%) in the competitive General Research Fund in the 2014-15 exercise.

Two HKUST-led Theme-based Research Scheme projects, focused on Smart Urban Water Supply Systems, and Understanding Debris Flow Mechanisms and Mitigating Risks for a Sustainable Hong Kong, were awarded a total of \$66 million. The projects both come under the Developing a Sustainable Environment theme and seek to support the city's future in these two vital areas through the development of cutting-edge technologies.

Funding of \$163 million was secured for collaborative research (projects supported involving at least two other partners, one of which is a government or public body), up nearly 46% year on year. The number of projects supported

also went up almost 22% to 84.

HKUST was awarded a total of six projects under the Collaborative Research Fund scheme – four Group Research Grants and two Equipment Grants – totaling \$34.55 million. One grant of \$10 million was awarded for the purchase and installation of a super-resolution electron microscopy facility (costing over \$20 million) for cross-disciplinary materials research that can benefit not only HKUST but also other local universities, government laboratories and local industry. The Group Research Grants will enable research on topics as diverse as Alzheimer's disease, muscle stem cells, soft matter, and food waste disposal.

The University submitted a record 74 applications to the Innovation and Technology Fund (ITF) in 2014-15, and secured substantial funding. Grants included \$13.58 million for four projects under the University-Industry Collaboration Programme, \$10.63 million for four projects under the Guangdong-Hong Kong Technology Cooperation Funding Scheme, \$17.57 million for 12 "Tier 3" projects and \$54.23 million for nine "Tier 2" projects for a total number of 29 new projects (\$96 million). Among these projects, the HKUST-MIT Research Alliance Consortium, which fosters collaboration among companies, universities and the HKSAR government, received \$30.54 million from the ITF for three "Tier 2" projects.

## **SECURING MAINLAND AND INTERNATIONAL FUNDING**

Four of HKUST platforms in Mainland China – Guangzhou HKUST Fok Ying Tung Research Institute, HKUST Shenzhen Research Institute, Shenzhen PKU-HKUST Medical Center and HKUST LED-FPD Technology Research and Development Center at Foshan – were awarded a combined RMB40.38



# 70%

research projects were rated "WORLD LEADING" and "INTERNATIONALLY EXCELLENT"

million for 40 research projects funded by the National Natural Science Foundation of China (NSFC), Ministry of Science and Technology, Guangdong Provincial Department of Science and Technology, Nansha Science and Information Technology Bureau, and several others.

The research platforms received three National 973 sub-projects and one National 863 sub-project totaling RMB6.71 million, and 11 NSFC projects totaling RMB13.68 million. One Shenzhen Research Institute NSFC study, focusing on polymers synthesized from triple-bond building blocks, is a Major Fund project, with an overall approved funding of RMB20 million.

Five out of seven proposals in the inaugural invitation by the Ministry of Science and Technology to establish Hong Kong branches of Chinese National Engineering Research Centers were shortlisted in 2014-15. The Ministry and Innovation and Technology Commission members visited the University in March 2015 to meet senior management, principal investigators and team members of the shortlisted proposals covering innovative wastewater treatment, big data, visual computing, Chinese medicine, and aggregation-induced emission-based materials.

International companies and institutions continued to support HKUST laboratories and institutes. Qualcomm Inc. donated another US\$200,000 to the HKUST-Qualcomm Joint Innovation and Research Laboratory in addition to the previous year's initial funding, while the World Bank granted another US\$210,000 to the HKUST Institute for Emerging Marketing Studies for its Network Jobs and Development project.

During the reporting year, HKUST launched 157 research projects funded by non-Hong Kong sources, worth over \$109.6 million.

## ADVANCING KNOWLEDGE EXCHANGE

The Energy Institute fostered partnerships with national and international institutions, and the HKSAR government, including joint workshop and research collaboration with the Institute of Engineering Thermophysics, Chinese Academy of Sciences, collaboration with the Drainage Services Department for biogas fuel cell research for power generation from sewage treatment plants, and collaboration with Tsinghua University on Bio-fuels. The Institute for Emerging Market Studies (IEMS), which provides research and builds dialogue on issues facing policy-makers and business, produced nine Thought Leadership Briefs and launched a new working paper series, along with conferences and workshops, IEMS seminars, policy and business talks, and forums addressing different issues on emerging markets. The Macao Meteorological and Geophysical Bureau supported a \$2 million project with the Institute for Environment (IENV) while the University of Macau awarded MOP647,000 to a HKUST research team. IENV was also awarded \$8 million for a feasibility study on PM<sub>2.5</sub> for air quality improvement in the Pearl River Delta.

## HIGHEST STANDARDS OF INTEGRITY

Along with the pursuit for excellence and quest for new knowledge, HKUST knows that a critical factor of our success





## RESEARCH DEVELOPMENT



is our strict adherence to a code of professional conduct. In 2014-15, the University developed a Policy on Research Conduct and Integrity. Together with the Framework on Academic Integrity, they underpin the institution's ethos and guide the faculty, students and researchers at all levels of our research enterprise, recognizing that professional conduct is fundamental to building trust between colleagues, collaborators, sponsors and the society at large.

## KNOWLEDGE TRANSFER

The University further enhanced related systems, policies, and processes in 2014-15. The Knowledge Transfer and Entrepreneurship Task Force, chaired by Professor Emeritus

Prof Ping Ko and comprising external members, was formed in late 2014 to advise the University on advancing its knowledge transfer and entrepreneurship capacities. A two-day task force meeting took place in November 2014 with representatives of each School and key members of relevant offices to discuss long-term strategic planning and framework.

The University started a review of IP policies and technology transfer practices, with the help of the professional IP consultant, to fortify and enhance current procedures. A concurrent effort to streamline invention disclosure and review processes is also underway. Overall, in 2014-15, 139 inventions were disclosed and 199 new patent applications filed. With 73 newly granted patents, the University's current IP portfolio contains 940 active patents and patent applications.

In 2014-15, HKUST R and D Corporation Limited (RDC) signed 124 new contract research and consultancy agreements worth a combined \$83 million. In addition, 495 analytical and testing jobs performed by University research centers brought total cash receipts of \$2.2 million. Total cash receipts generated through intellectual property licensing and assignment agreements signed or managed by RDC was \$3.3 million. Activities related to MOOC courseware distribution gained momentum, with licensing revenue of \$2.2 million.



## ACTIVE INDUSTRY ENGAGEMENT

To strengthen ties with industry, a Cluster Technology Acceleration Initiative was started with a two-year trial. This initiative seeks to engage domain experts in coordination at School level and to help cross-disciplinary faculty groups engage with industry and develop large-scale research projects. The University expanded and continued significant strategic industrial partnerships with major companies, including TCL, Lenovo, Thales and Rohde & Schwarz HK Ltd.

Global healthcare leader Sanofi sponsored an open innovation workshop at HKUST to build understanding between Sanofi's R&D needs and HKUST's top scientists' research directions in drug discovery, leading to a mutual partnership with the Sanofi R&D China team and collaborative projects supported by the Innovation and Technology Fund.

The Shenzhen Research Institute invited the Shenzhen New Material Association to meet faculty members and visit laboratories at the Clear Water Bay campus in June 2015. The Institute also co-organized the 2015 Pan Pearl River Delta Integrated Circuit Market Promotion and Innovation Development Summit Forum.

## VIBRANT ENTREPRENEURIAL CULTURE

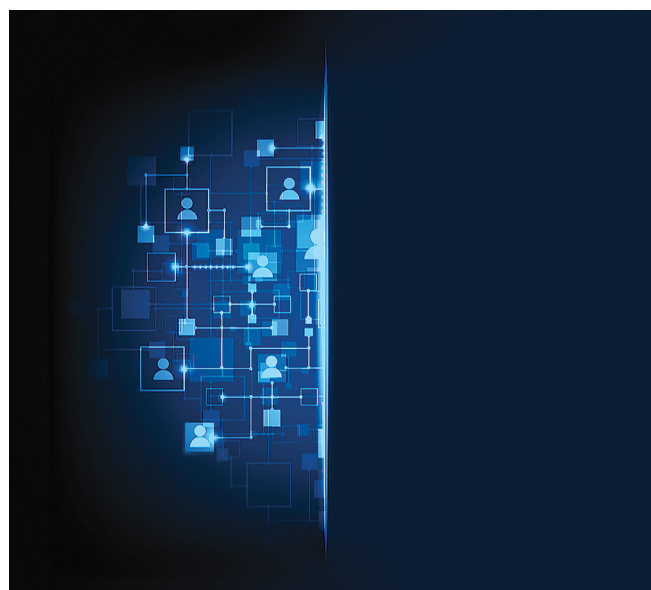
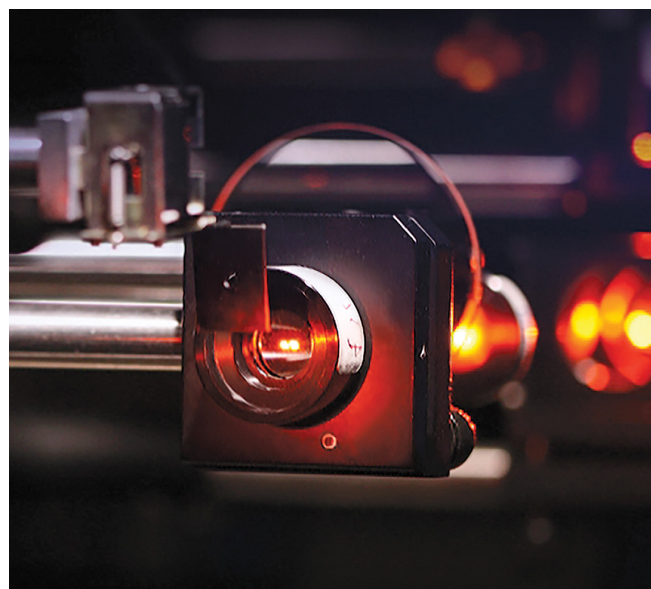
The Proof-of-Concept Fund provided gap funding to enable pre-commercialization development of promising, cutting-edge technologies emerging from the University's research. In 2014-15, seven projects were recommended by the selection committee for a total funding of \$1.353 million. Five technology licenses were granted to HKUST start-ups.

In response to the Technology Start-up Support Scheme for Universities (TSSSU), launched in Fall 2014 by the Innovation and Technology Commission, a platform was formed to encourage the University community to establish start-up companies to apply funding from the scheme with HKUST technology. The scheme attracted 13 HKUST applications in the government's financial year of 2014/15, with seven start-ups being funded in 2014/15.

Several university-wide forums on different aspects of knowledge transfer and innovation were also held, featuring speakers from Harvard University, Technion – Israel Institute of Technology, and Pontifical Catholic University of Rio de Janeiro, HKUST entrepreneurs, and a Kleiner Perkins Caufield & Byers venture capital firm partner.

The HKUST Entrepreneurship Program continued to assist University start-ups, with a total of 39 active companies, including 10 firms currently being incubated.

At the Shenzhen Research Institute, the Incubator Express program and newly established Entrepreneur Center encouraged further activity. Fourteen start-ups established by HKUST professors or alumni are located in the HKUST IER Building, covering biological recognition, mobile health, internet finance, automatic control, biological medicine, and integrated circuits, among others. EasyHin Technology, the first mobile medical start-up in Mainland China, successfully secured Series A venture capital funding of US\$10 million in May 2015.





# RESEARCH HIGHLIGHTS

HKUST faculty continued to make fresh discoveries, originated new knowledge, and pioneered leading technologies

## DEVELOPMENT OF A MOUSE MODEL FOR AUTISM RESEARCH

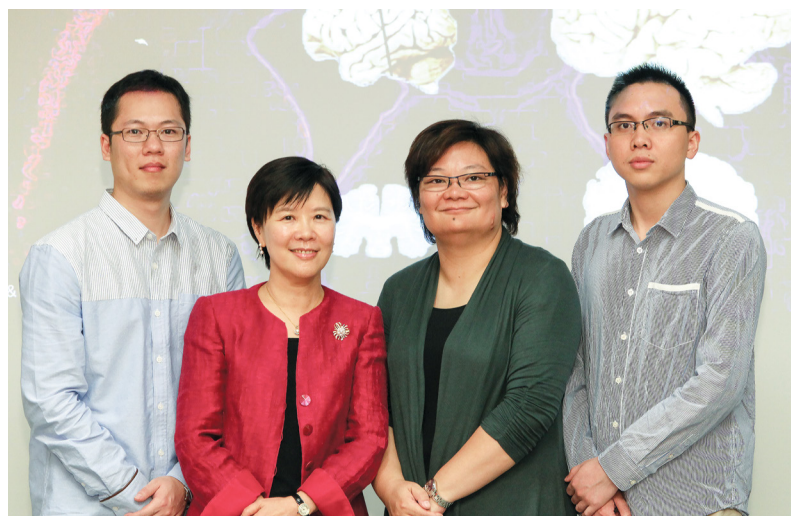
Prof Nancy Ip (Life Science), The Morningside Professor of Life Science, and her research team established a mouse model, which exhibited autistic-like features. Their work showed that injection of a specific chemical into the fetal mouse brain triggered the overproduction of excitatory neurons in the cerebral cortex resulting in increased brain size, a feature which was observed in some autistic children. These mice also exhibited abnormal circuit formation and dysregulation in neural communication. More importantly, in the adult stage, they displayed abnormalities in behavioral tests that are reminiscent of human autism. Thus, establishment of this mouse model was a significant breakthrough as it could be used in studies of neurodevelopmental disorders, in particular autism. This exciting discovery was published in *Cell Reports*.

## ENZYMES AND EVOLUTION

A team led by scientists at the HKUST Jockey Club Institute for Advanced Study, and The Scripps Research Institute R&D Laboratory and aTyr Pharma has found that ancient enzymes, known for their fundamental role in translating genetic information into proteins, evolved a myriad of other functions in humans. The surprising discovery of 250 new proteins with previously unidentified activities, spanning stem cell biology to immunology, represents a new area of biology and an opportunity to develop protein-based drugs for human diseases associated with malfunctions of the newly discovered proteins. The findings, co-authored by IAS Senior Fellow and Kerry Holdings Professor of Science, Prof Mingjie Zhang (Life Science), appeared in *Science*.

## POLYMER SOLAR CELL EFFICIENCY

Prof Henry He Yan (Chemistry) and his research group developed single-junction organic solar cells that achieved an officially certified world record efficiency of 11.5%. The team discovered a material design motif that led to new polymers and high-performance material combinations yielding high solar cell efficiencies. This major technological breakthrough marked the first time that research generated



from Hong Kong researchers was included in the renowned US National Renewable Energy Laboratory chart of “best research cell efficiencies”, and greatly increased the visibility of Hong Kong and HKUST in the global solar cell research world and industry sector. Polymer solar cell technology is low cost and environmentally friendly. The previous record efficiency (10.8%) was also achieved by Prof Yan’s group in 2014 and published in *Nature Communications*.

## P-FIELD THEORY IN PRACTICE

Prof Huai Liang Chang (Mathematics) developed a highly effective new methodology in deformation theory, in conjunction with Prof Jun Li from Stanford University. P-field theory has assisted with many previously unsolvable problems and become one of the mostly used methods in this area. Using this method, Prof Chang, Prof Li and Prof Wei Ping Li (Mathematics) were able to give an algebraic geometric definition of FJRW theory, which was published in the top mathematics journal *Invent Math*.

## TWO-STEP PHASE TRANSITION

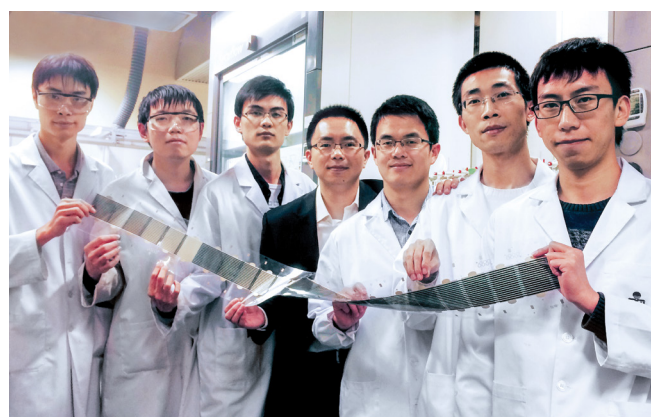
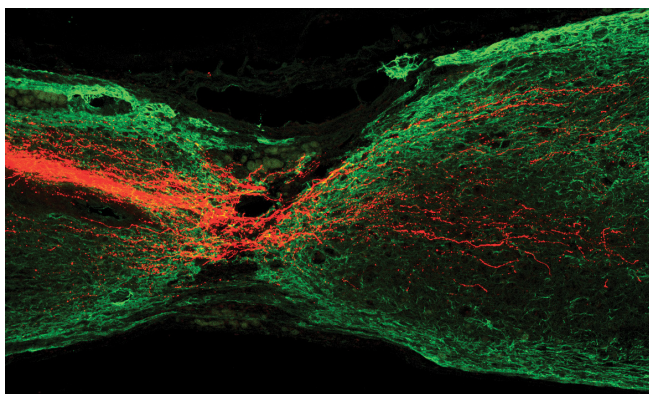
Prof Yilong Han (Physics) and his research group directly



imaged the nucleation process in solid-solid transition at the single-particle level for the first time, using colloidal crystals. The breakthrough showed that a square lattice does not directly transform to the final state of a triangular lattice, but develops a liquid nucleus first, which then transforms into the triangular-lattice nucleus. The finding indicates a novel two-step pathway that could widely exist in metals and alloys. The result was published as the cover story in *Nature Materials* and reported by international science websites, including Physorg, ScienceDaily, (e) Science News, US News, and EurekAlert!

### SINGLE-PHOTON-CAVITY LOADING RECORD

Prof Shengwang Du (Physics) and his research group set a world record in experimental cavity quantum electrodynamics (CQED) by successfully demonstrating the loading of a single photon into a single-sided Fabry-Perot cavity with an efficiency of 87%. In previous experiments, single-photon-cavity loading efficiencies were all below 20%. The researchers achieved this result by shaping the single-photon temporal wave function to match the cavity property. CQED is the area of Physics for which French professor Serge Haroche was awarded the 2012 Nobel Prize. The approach and the results of the HKUST team have enabled promising applications in realizing large-scale CQED-based quantum networks. The work was published in *Physical Review Letters*, and highlighted in *APS Physics*.



### IN THE PIPELINE

Urban water supply systems are vital to billions of people globally, but many are aging, inefficient, or both. A research team led by Prof Mohamed S Ghidaoui (Civil and Environmental Engineering) was awarded \$33.225 million under the government's Theme-based Research Scheme to develop a new diagnostic paradigm for water supply network monitoring and fault detection. The Smart Urban Water Supply Systems project will be conducted in close collaboration with the Hong Kong Water Supplies Department, support the government's "Water Intelligent Network" vision, and crucially contribute to the sustainable development of Hong Kong through water conservation via locally developed innovation and technology.

### MITIGATING DEBRIS FLOWS

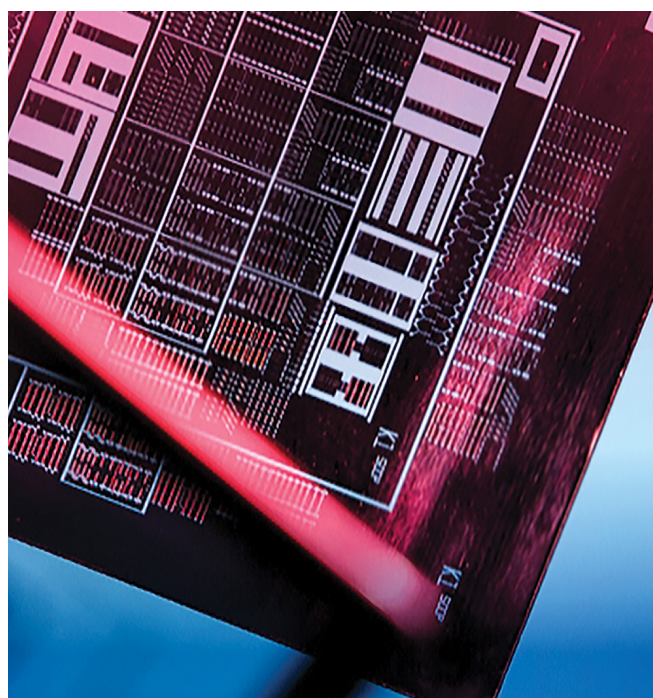
Prof Charles Ng (Civil and Environmental Engineering) and his team were awarded \$33.225 million under the Theme-based Research Scheme for their project Understanding Debris Flow Mechanisms and Mitigating Risks for a Sustainable Hong Kong. The scientific advancements and technologies expected to result from this project will improve fundamental understanding of debris flow dynamics via world-leading physical model tests and novel multi-scale and multi-physics coupled theoretical model. The project should



have an immediate impact on local and international practice on the analysis of the interaction between debris flows and multiple flexible barriers, lead to world-leading design guidelines, sustainable and proven mitigation measures and enhance cost-effectiveness and more environmentally friendly maintenance and remediation works in Hong Kong, and other countries where debris flows are a constant threat.

### SMART GREEN WORKPLACES

Prof Amine Bermak (Electronic and Computer Engineering) is leading a team of academics in Hong Kong and the Massachusetts Institute of Technology in the US in developing a wireless multi-sensing platform that can be fitted in smart green buildings to detect temperature, humidity, motion in the room, and harmful gases in the air. The HKUST-MIT Research Alliance Consortium project received a grant from the government's Innovation and Technology Fund, Intel and Texas Instruments. The sensors should enable collection of data to develop better working environments for office workers and contribute to the evolution of smart green buildings.



### CLEANING UP WATERWAYS

Prof Irene Lo (Civil and Environmental Engineering) led a consultancy project on the remediation of river sediment contaminated by heavy metals and organic pollutants in collaboration with the Guangdong government. Prof Lo has devoted the past two decades to soil, sediment and water pollution control through physical, chemical and biological treatment processes. She proposed several alternatives for the remediation of such river contamination.

### FRESH ROUTE TO PEPTIDE THERAPEUTICS

Prof Ying Chau, Biomedical Engineering, and Dr Rong Ni, Chemical and Biomolecular Engineering, designed short peptides that co-assemble with DNA to form virus-like particles, offer a potential new route to transport genes or small-molecule drugs into cells. This discovery may overcome the limitation of both viral and non-viral gene delivery vectors and breakthrough the current bottleneck of gene therapy by leading to safer and higher efficiency viral-like gene-transfer vehicles through peptide sequence regulation. This simple peptide/DNA co-assembling system also provides us a study model to understand the origin of virion at the prebiotic age. This work has been published in *Journal of the American Chemical Society*.

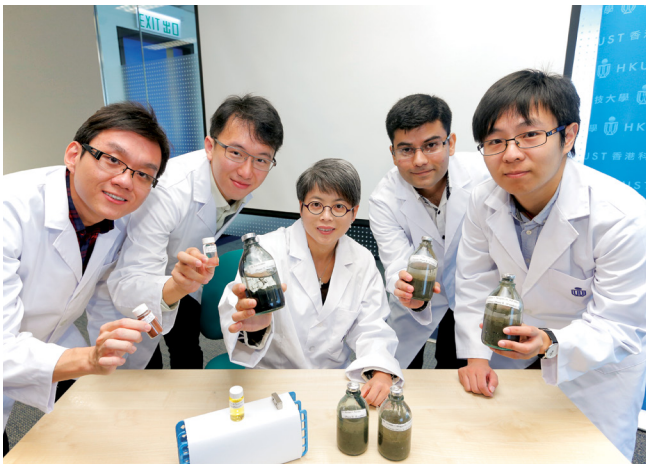
### CROSS-CULTURAL GAINS

Intercultural negotiations are often seen as challenging because cross-cultural differences and distrust toward those regarded as foreign can impede communication. Contrary to this conventional wisdom, research conducted by Prof Melody Chao (Management), and co-authors, demonstrated that intercultural negotiations can be more effective than intracultural ones. Findings from two negotiation simulation studies revealed that negotiators who believed in malleable cultural characteristics were more likely to extend trust to their intercultural (vs intracultural) partners, which enhanced personal gains, as well as joint gains of negotiation dyads.

### PRICE INFORMATION AND MARKET ACCESS

In a field experiment by Prof Sujata Visaria (Economics), and co-authors, in two districts of West Bengal, India, farmers





received daily information about the prices at which their potato harvests were being resold by middlemen. The intervention did not change the average quantity that farmers sold or the revenue they received, but increased the volatility of sales and revenues. These results are consistent with a model of sequential competition between a cartel of middlemen located in the village and a cartel located at the market. They indicated that the primary constraint to farmers' ability to benefit from price information is lack of direct access to markets.

### CLAWBACK CONSEQUENCES

Research by Profs Kevin CW Chen and Tai-yuan Chen (Accounting) found that a heralded provision of the controversial 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act in the US, namely, Section 954 or the so-called "clawback" mandate, was likely to have an unwelcome unintended consequence. This Section required all firms listed on national securities exchanges to recover any incentive compensation paid to executives on the basis of erroneous company financial statements. While not yet mandatory, many companies have voluntarily enabled or made it a requirement to implement such "clawbacks". Previous research found such provisions reduced the number of corporate financial restatements and increased investor

confidence in financial reports. However, the new research suggested that gains implied by those findings may be more illusory than initially thought.

### TWITTERING ABOUT EARNINGS

Prof Rong Zheng (Information Systems, Business Statistics and Operations Management) examined firms' differential information dissemination behavior on Twitter. He found that firms disseminated more earning news with more financial information in a positive tone when earnings performance was good; when earnings performance was poor, less earning news would be released. In addition, firms released more non-earnings information in a positive manner shortly after poor earnings announcements. The results provided evidence that firms were involved in discretionary dissemination using Twitter. Additional analyses showed that tweet dissemination could moderate market returns to earnings surprises.

### LEARNING THE OFFICIALS' STORY

Prof Yongshun Cai (Social Science) published *State and Agents in China* (Stanford University Press), describing the crucial role that Chinese government officials have played in China's economic development, but also how they have been responsible for severe problems. Prof Cai looked at how the Chinese Party-state responded when a government official committed malfeasance, and how it balanced the potential political costs of disciplining its own agents versus the loss of legitimacy in tolerating their misdeeds.

### INDIVIDUAL VISION

Prof Jianmei Liu (Humanities) authored *Zhuangzi and Modern Chinese Literature* (Oxford University Press, forthcoming in late 2015), a powerful account of how the ruin and resurrection of Zhuangzi in modern China's literary history corresponded to the rise and fall of modern Chinese individuality. Prof Liu explored modern Chinese writers' complicated relationship with "tradition" and shed light on how the encompassing cultural space inspired by Zhuangzi's spirit was allowed to exist in the modern Chinese literary context.



# SCHOOL OF SCIENCE

The School has advanced its holistic education approach and received significant local and international acknowledgement of its world-class faculty and research achievements

## BROADENING SCIENCE EDUCATION

Blended and experiential learning were introduced in several undergraduate courses to build upon the innovative science education, along with academic advising and enrichment activities to foster whole-person development.

A tri-modal practicum course was launched in Spring 2015 to provide students with opportunities to explore entrepreneurship possibilities based on applied sciences projects. Students learnt about the process of knowledge transfer and commercialization through a combination of seminars, project courses, and group work. The blended learning course "Great Ideas in Chemistry" was rolled out in Spring 2015. Video clips and interactive learning materials were made available online, while students worked in groups during class-time through exercises that went beyond lectures on topics such as energy policy and climate change. Additional blended learning projects in Physics and other disciplines are under development.

The International Research Enrichment Track (IRE) commenced its second cohort, with the Guided Study in Research course enabling each student to work on a research topic under close mentorship of a faculty member. Non-classroom enrichment activities such as field trips to the Biopharmaceutical Research Center and the Wind Tunnel in Shenzhen were also organized to expand their horizons in different scientific frontiers. The Lee's Pharmaceutical – Kanya Lee Scholarship Limited made a generous donation of \$3 million to support IRE students to go overseas for research internship and exchange activities.

In 2014-15, the School organized over 80 seminars, workshops, and activities through its Induction Course to assist undergraduate freshmen in adapting to university life and exploring different majors, interests, and careers. Interaction between students and the School's advising team, faculty advisors and peer mentors, was also structurally embedded into the Induction Course.

Adding to the School's taught postgraduate programs, the first cohort for the MSc in Analytical Chemistry will commence in Fall 2015, while a new MSc in Mathematics for Educators is scheduled to launch in 2016-17. The School

also undertook a review of its Professional Development Course for research postgraduates, which aims to add value to students on various areas such as research management, professional conduct, and career planning.

## FOSTERING STUDENT ENRICHMENT

The School continued to run its Career Training and Internship Program, providing students with individual consultations, company visits, mock interviews hosted by human resources experts, internship opportunities, and job referrals to partner companies. A number of career forums were organized by the Division of Life Science for UG and PG students to plan for career development after graduation.

In Summer 2014, the Department of Mathematics arranged projects with the Beijing Genomics Institute, Hong Kong Observatory, Lenovo, and Microsoft Research Asia, as part of the Research in Industrial Projects for Students summer program for senior undergraduates, co-organized with the Institute of Pure and Applied Mathematics, University of California, Los Angeles. Students worked in teams to tackle real-world issues proposed by the industry sponsors under the guidance of an academic mentor.





# 75%

research projects in the School of Science were rated "WORLD LEADING" or "INTERNATIONALLY EXCELLENT"

## SEEKING TO RECRUIT THE BRIGHTEST GLOBALLY

The School stepped up its efforts to recruit high-caliber students. Locally, the School continued to provide inspiring science lectures and admission talks for secondary school students. Connections with alumni teachers were reinforced by strengthening alumni ties with the School and University. Non-local student recruitment continued to be fruitful. Recruitment trips and admission interviews in various regions, coupled with active participation in school fairs and visits, have resulted in a more diverse undergraduate body within the School.

The School continued to recruit top students to its postgraduate programs. Recruitment efforts were enhanced through research internships and summer research programs, together with active outreach to potential students outside of Hong Kong.

## LEADING RESEARCH RECOGNITION

The School of Science achieved remarkable results in the University Grants Council's Research Assessment Exercise 2014.

Over 75% of research activities were rated "world-leading" (four-star) or "internationally excellent" (three-star). For four-star plus three-star achievements, Biological Sciences, Physics, and Chemistry achieved the highest percentage among all UGC institutions, with Mathematics the second highest among counterparts. The year also saw a significant increase in the overall success rate of faculty members in the Research Grants Council's Collaborative Research Fund applications. Five research projects led by Science faculty members received funding totaling over \$28 million.

## REINFORCING ACADEMIC EXCHANGE

As part of HKUST's strategic partnership initiative, the first HKUST-École Normale Supérieure (ENS) Workshop was held in October 2014 at ENS in Paris. Life Science and Physics faculty members presented talks and exchanged ideas at the workshop. The first HKUST-California Institute of Technology (Caltech) Joint Symposium was hosted by HKUST in December 2014. Fifteen HKUST Life Science faculty members and seven faculty members from Caltech's Biology Division gave presentations at the symposium.



# SCHOOL OF ENGINEERING

Along with excellent results in the Research Assessment Exercise 2014, the School continued to fly high in global rankings, being first in Greater China and 21<sup>st</sup> globally in the Times Higher Education Engineering and Technology Rankings 2014-15 and No.15 in the QS World University Rankings by Faculty 2014 – Engineering and Technology



## BROADER EDUCATION OPPORTUNITIES

The first intake for the Department of Mechanical and Aerospace Engineering's new BEng in Aerospace Engineering was recruited from among the School's first-year students. They will embark on the program in Fall 2015. A Minor in Design was launched by the Department of Industrial Engineering and Logistics Management where the various technology and user-centered courses would allow an enhancement of creativity through constant shifting of divergent and convergent thinking to support a future career as a leading innovator in a technologically-driven design team.

Experiential learning and tri-modal education opportunities expanded, with the inaugural Engineering Community Services Project series. This provided a unique crossover of engineering design and service learning for students from all engineering majors and levels to work in teams alongside non-profit agencies, government groups and educators on real-world challenges. In 2014-15, three courses were offered: Innovative Trolley Design for the Elderly; Mobile App Development for Hearing-impaired Children; and

the Underwater Robot Community Engagement Project. The experiential Engineering Team Airship Design course remained popular and was developed into a Common Core course to be offered from Fall 2015. A Design Studio was set up to teach such experiential courses and is scheduled for use from Fall 2015.

The School's Center for Global & Community Engagement enabled students to participate in more than 20 international and local competitions, including the GE Foundation TECH Award, Asia Pacific Information & Communications Technology Alliance Awards, and Airbus Fly Your Ideas.

## HOLISTIC PROVISION FOR POSTGRADUATES

For the sixth consecutive year, the School received the largest number of awardees among all engineering schools in Hong Kong in the prestigious city-wide Hong Kong PhD Fellowship Scheme. Thirty-five engineering awardees from around the world will commence their PhD studies at HKUST in Fall 2015. To expand career pathways, a SENG MPhil Student Internship Scheme was launched to provide industrial experience in leading companies.

Multinational electronics company TCL agreed to donate \$250,000 per year for three years to support MSc projects related to communications and information technology, in particular 5G wireless technology, internet services or big data. In addition, a MSc internship program was agreed with the Spanish National Research Council. In the second year of the Ford-HKUST Conservation and Environmental Research Grants program saw 19 grants awarded to MSc students in 2014-15.

## RESEARCH RECOGNITION

The School received remarkable results in the Research Assessment Exercise 2014. On average, over 73% of its research activities were rated world-leading (four stars) or internationally excellent (three stars). With regard to



# NO.1

Times Higher Education  
Engineering and  
Technology Ranking  
2014-15 (Greater China)

the percentage of four-star plus three-star results, Civil Engineering, Computer Studies/Science, Electronic Engineering and Mechanical Engineering achieved the best performance among all universities in Hong Kong.

The School also received the largest amount of Research Grants Council's General Research Fund grants (27%, \$49.18 million) among all engineering schools in Hong Kong. The Department of Electronic and Computer Engineering formed a new research laboratory known as the IC Design Village, creating a permanent home for the Integrated Circuit and Systems research group and fostering interdisciplinary cooperation. In further interdisciplinary moves, the HKUST Robotics Institute, set up by the University and involving many of the School's departments, encouraged education, research and knowledge transfer in areas such as human-robot interaction and autonomous systems.

In January 2015, four of the School's academics, including Dean of Engineering Prof Khaled Ben Letaief, hosted HKUST's

first IdeasLab at the World Economic Forum's "Winter Davos" in Switzerland. The IdeasLab focused on physical and cyber world integration and the impact on society. Four engineering professors also presented their breakthrough ideas at the HKUST IdeasLab at the "Summer Davos" 2014 in Tianjin.

## COMPETITIONS AND INDUSTRIAL LINKS

In the Google Solve For X Competition at HKUST, the winning project was developed by Prof Michael Sung (Electronic and Computer Engineering) and his team, becoming the first Hong Kong and Mainland China "moonshot" accepted by Google for its Solve For X platform. The first Aero Day was organized by the Department of Mechanical and Aerospace Engineering and the Student Branch of the American Institute of Aeronautics and Astronautics at HKUST to build students' knowledge of the aviation industry, both locally and internationally, and showcase career opportunities. Many related industrial partners took part.



# SCHOOL OF BUSINESS AND MANAGEMENT

**The School continued to boost its international standing in research and stay at the forefront of program rankings**

The School of Business and Management's new and expanding connections, both at home and abroad, reinforced its foundations to nurture global business talents in Asia.

## INTERNATIONAL RECOGNITION

The School was ranked No.1 in Asia in the University of Texas at Dallas' Top 100 Business School Research Rankings for the tenth straight year. In the Hong Kong University Grants Committee's Research Assessment Exercise 2014, the School achieved the highest percentage of four-star and three-star research among the eight UGC institutions, where four stars represented a "world-leading" standard and the highest rating, and three stars were awarded for "internationally excellent" work.

The Kellogg-HKUST EMBA program was ranked the world's No.2 in 2014 by the *Financial Times* and the full-time MBA program ranked No.14 globally in 2015. While year-to-year ranking performance can fluctuate, the School was pleased with its full-time MBA's three-year average rank which was ahead of other leading international business schools, and No.1 in Asia.

The School also received impressive accolades in international case competitions during the year, with one team winning the Belgrade Case Competition in Serbia, and two second runner-up positions at the Scotiabank Case Competition in Canada and the Maastricht Case Competition in the Netherlands. In local contests, student teams collected a number of championships, including the Research Challenge organized by the Chartered Financial Analyst Institute, the Qualification Program Case Analysis Competition organized by the Hong Kong Institute of Public Accountants, the Financial Planner Awards (University Student Category) organized by South China Morning Post and Institute of Financial Planners of Hong Kong, as well as the Hong Kong Finals of the L'Oreal Brandstorm Contest.

## NURTURING GLOBAL TALENTS

The School stepped up internationalization of its curriculum through overseas study trips, off-site company assignments, and other enhancements of the student learning experience. Highlights included a pilot training course in collaboration with a Brazilian food company and a study trip to Korea for MBA students. To assist students in exploring best business practices globally and to increase their exposure to cultural diversity, study trips were introduced for HKUST EMBA students to countries including Sweden, Dubai and Germany.

At the undergraduate level, the School is committed to providing a similar international learning experience. With a





3-year average rank of  
Full-time MBA Program –

**NO.1  
IN ASIA**

donation of \$300,000 from the Wong Chak Chui Charitable Foundation, the School established a scholarship to help business undergraduates with financial difficulties participate in overseas competition, conferences and similar enrichment programs.

### **BROADER COLLABORATION**

The initial cohort in the School's first company-sponsored MBA program, organized in collaboration with Saudi Aramco for employees in Saudi Arabia, completed their studies in 2015. Following the successful pilot run, the second cohort began their studies.

The move to expand the MSc portfolio saw the first cohorts from the MSc in International Management, offered in collaboration with the world's top business school alliance CEMS, and MSc in Global Operations graduated in 2014. The two programs recorded promising placement results for graduates. Another two programs were launched in 2014-15. The MSc in Accounting received accreditation from major professional accounting bodies. The MSc in Investment Management developed a partnership with the Chartered Alternative Investment Analyst Association (CAIA), in addition to its current partnership with the Chartered Financial Analyst Institute. It was the first academic

partnership in Hong Kong for CAIA, recognized globally as the leader in alternative investment education.

The School has been involved in higher education alliances, such as the Global Network for Advanced Management led by the School of Organization & Management at Yale University, offering more global learning opportunities for students.

The School has also expanded its executive education programs through collaboration with existing and new corporate clients as well as academic partners such as Kaliningrad International Business School in Russia and EADA Business School, Barcelona, in Spain.

### **ACTIVE ENGAGEMENT**

To enhance the impact of faculty research on society at large and strengthen relationships with the business sector, the School organized several high-impact conferences, including the Inaugural Management and Organization Review Research Frontiers Conference, HKUST Finance Conference and the Asian Leadership Series Forum. The School continued to hold its regular HKUST Business Insights Presentation series at which faculty present their research on topical issues at luncheon talks held in its downtown center.



**OVER  
70%**

Global China Studies  
students study abroad  
for at least one term



# SCHOOL OF HUMANITIES AND SOCIAL SCIENCE

**The School raised its education and research profile internationally, and fostered innovation at HKUST through creative arts teaching and learning**

The School's two divisions enable students to explore and develop their interest in different fields related to humanities and social science. Opportunities to extend creativity are also provided through an increasing focus on courses encompassing musical appreciation and performance, while communication is strengthened through the enhancement of language capabilities. The School also carries out internationally acclaimed research.

## **WIDENING STUDENT EXPERIENCE**

After four years of running the signature undergraduate Global China Studies (GCS) program, the School initiated

a review of the curriculum to maximize current faculty strengths and to meet the changing needs of students and employers. Developments included a one-credit career course offered with HKUST's Student Affairs Office from Spring 2016 to help students' career pathways and the launch of a dual degree program with the School of Political Science and Economics at Waseda University in Japan, through support from the Bai Xian Foundation. The number of exchange partners also expanded. Currently, 90% per cent of GCS undergraduate students have at least one international experience and over 70% study abroad for at least one term. Through generous support from University alumnus Mr Shing Cheong Liu, sponsorship will



be available from Fall 2015 to support different international learning experiences for GCS students, including exchanges, internships, competitions and workshops.

The educational impact of the novel practice of “flipping” classrooms by asking students to watch videoed lectures before class has turned lectures into active task-oriented learning. Student feedback appeared positive. The methodology was documented for future reference by faculty interested in introducing this type of classroom teaching.

## EXTENDING GLOBAL PRESENCE

Among the many research accomplishments of the School's faculty members, the highlights are the publication of *State and Agents in China*, (Stanford University Press 2014), by Prof Yongshun Cai (Social Science), which examines state responses to disciplining government officials, and *Zhuangzi and Modern Chinese Literature* (Oxford University Press 2015), by Prof Liu Jianmei (Humanities), which explores the connections between Zhuangzi, modern China's literary history, and Chinese individuality.

The School's research postgraduates continued to distinguish themselves. PhD graduates took up positions at Peking University, Zhongnan University of Economics and Law, Shanghai University of International Business and Economics, and the Chinese Academy of Social Sciences. An MPhil

2010 alumnus who completed her PhD with new HKUST Social Science faculty, Cameron Campbell, of UCLA accepted an assistant professorship in Sociology at the University of Chicago. Two incoming MPhil students were awarded fellowships from the Asian Future Leaders Scholarship Program, funded by the Bai Xian Education Foundation.

Two additional taught MA programs joined the established Master's programs in Global China Studies and Social Science. The Master of Arts in International Language Education program, initiated by the Center for Language Education, graduated its first class of 46 students in 2014-15. The Division of Humanities' Master of Arts in Chinese Culture enrolled 44 students for the inaugural class in Fall 2015.

## INSPIRING INNOVATIVE THINKING THROUGH THE ARTS

Teaching creativity through arts education is a distinctive feature of the HKUST Common Core. In 2014-15, around one-quarter of undergraduates enrolled in creative arts education classes, focused on music, composition, arts performance, literature or creative writing. In recognition of such clear interest in the arts, a fundraising initiative to establish the HKUST SHSS Center for Creative Arts Education was approved as part of the University's 25<sup>th</sup> Anniversary campaign.

In Fall 2014, the School and the HKUST Jockey Club Institute for Advanced Study jointly organized an international workshop on contemporary Chinese literature with Nobel Laureate in literature Gao Xingjian, Prof Zaifu Liu and other distinguished scholars.

The internationally acclaimed Intimacy of Creativity workshop celebrated its Fifth Anniversary Season in 2015, with renowned guests including Pulitzer Prize-winning composer Aaron Jay Kernis, and the return of the Tanglewood New Fromm Players. The Intimacy of Creativity 2015 was led by Founder and Artistic Director Prof Bright Sheng, YK Pao Distinguished Visiting Professor of Cultural Studies and IAS Visiting Fellow, and featured collaboration with Beijing Modern Music Festival, the pre-eminent new music festival in China.

HKUST Music Alive!'s 2014-2015 season brought acclaimed international and local artists to the University, including a three-day Dream of the Red Chamber Symposium featuring the renowned creative team of David Henry Hwang and Stan Lai. Events showcased the newly opened Cheng Yu Tung Building Multi-purpose Hall.



# INTERDISCIPLINARY PROGRAMS OFFICE

**The Interdisciplinary Programs Office (IPO) comprises the Division of Environment and the Division of Biomedical Engineering, enabling students and researchers to optimize their capabilities in a non-traditional collaborative environment**

At the beginning of 2014-15, IPO unveiled a newly renovated and brightly colored office area and two Learning Commons, which provided a vibrant environment for faculty, students and staff to study and socialize.

## **SPARKING BRIGHT IDEAS**

Fostering internationalization and a global outlook, Dual Degree Program in Technology and Management undergraduates visited Silicon Valley in the US in January 2015 to join the Technology and Management International Business Plan Competition. Working with multicultural peers from overseas universities, they conceived business plans on the theme of automotive and information communication technologies. While in Silicon Valley, they also made eye-opening visits to innovative companies, including Google, eBay/PayPal, Tesla, Walmart, Mercedes-Benz, and Uber.

A collaboration between Google and HKUST resulted in IPO and the School of Engineering jointly organizing the Solve For X competition in Fall 2014 to encourage students and faculty across disciplines to work together on out-of-the-box concepts or moonshot ideas. Two Dual Degree undergraduates were part of the winning team led by Prof Michael Sung, School of Engineering, on the research of Mass-Volume Graphene Production Using Waste Carbon Emission Harvesting to Enable EV Battery Technologies. The project was the first from Hong Kong and Mainland China to be accepted by Google on its Solve For X platform.

## **FOSTERING LINKS WITH INDUSTRY**

Dual Degree students gained closer connections and deeper understanding of the business world through an experimental corporate project, sponsored by Hong Kong Trade Development Council (HKTDC) and IBM. Working in teams, students interviewed HKTDC managers and global buyers to understand market needs and challenges. They were

coached by HKUST course instructors and IBM consultants during the semester to develop strategies and proposals on increasing the number of global buyers attending various exhibitions and conferences at the Convention Centre.

The annual Risk Management and Business Intelligence (RMBI) Symposium served as a useful platform for experts from academia and industry to meet and exchange views while providing students with an invaluable opportunity to learn from industry professionals. RMBI Symposium 2015 focused on the topical issues of Hong Kong-Shanghai Stock Connect and big data analysis, drawing over 200 students, scholars and industry leaders.

## **RESEARCH BEYOND BOUNDARIES**

The Division of Environment and Institute for the Environment's scientific team took the lead in an Air Quality Improvement Project in the Pearl River Delta. The project adopts a regional approach to quantify sources of PM2.5 particles, which have a major impact on health and visibility, and is the first to involve Hong Kong, Guangdong and Macau environmental authorities in complementary and coordinated research of this problem.

The Division of Biomedical Engineering co-sponsored two workshops on Bio-inspired Flight Systems and Bio-inspired Autonomous Systems, with international experts conducting intensive courses and discussions with participants from both academia and industry. This new engineering field combines the disciplines of biology and engineering technology with the goal of solving practical problems through transfer and application of knowledge gained from biological systems.

## **SOLVING REAL-WORLD CHALLENGES**

IPO students stepped out of school to apply their knowledge and innovative technologies through the Student Innovation



for Global Health Technology (SIGHT) program. This project seeks to help the underprivileged through simple technology. SIGHT members first visited slums in Cambodia last year to understand the difficulties faced by NGO's medical teams. They returned to Cambodia this year with their developed electronic medical record system and drug dispensary boxes to answer the needs of the medical teams there.

Two Environmental Management and Technology Program graduates initiated an innovative Food & Beverage Game to promote sustainability at secondary schools. Through playing the game, students are taught how to protect the environment in daily life and develop a sustainable way of living. The activity constitutes an active community engagement effort with strong education element for the high school students.

Capstone projects by Environmental Management and Technology Program final-year students included the Ocean Plastic Education and Solutions Project, which set out to strategically plan a major year-long campaign on the importance of keeping plastic out of waterways. Students organized a "No More Plastic Waste" campaign at HKUST and developed a teaching kit for primary and secondary schools. To draw public attention to the issue, the students joined the *Out to Sea – Oceans of Plastic Exhibition* at the Hong Kong Science Museum in November 2015.

IPO will continue to promote a vibrant and collaborative learning environment to help students discover their interests, acquire necessary skills and further develop their potentials testing their imagination.







# HKUST FOK YING TUNG GRADUATE SCHOOL

The School celebrated the official opening of the Fok Ying Tung Research Institute's state-of-the-art building, deepened its technology transfer endeavors and gained recognition for its efforts

HKUST Fok Ying Tung Graduate School was restructured and adopted a significant new strategic focus to implement and coordinate HKUST's technology transfer and commercialization endeavors in Mainland China. In seeking to integrate the pioneering research achievements of HKUST and the needs of the Pearl River Delta, the School is focusing on technology transfer related to four main areas: Internet of Things; Advanced Manufacturing and Automation; Advanced Materials; and Green Buildings and Environment. In the past year, the School made tremendous efforts to optimize resources to establish a vibrant knowledge transfer base for faculty and students.

## FACILITIES BOOST

Fok Ying Tung Research Institute's new campus building, located in Nansha IT Park, was officially opened in December 2014. The new building has a total floor area of 36,000 sqm and contains advanced laboratories and facilities for research and education. With the new campus building in place, the School is well positioned to capture further opportunities that are emerging in Nansha, one of the sub-zones of the China (Guangdong) Pilot Free Trade Zone. Agreements were signed on setting up the National Computer Center in Nansha and education, research and industry collaboration projects. Fok Ying Tung Research Institute partners included the Ministry

of Public Security, Guangdong Environmental Monitoring Center, China Telecom, and East China University of Science and Technology, among others.

## EXTENDING ENTREPRENEURSHIP

During the period under review, the School launched several initiatives to enhance its knowledge transfer capabilities and cultivate entrepreneurial talents. The Redbird Entrepreneur Cradle Project began in January 2015. In this series, successful entrepreneurs and scholars from HKUST and the Mainland Thousand Talents Program shared their insights on start-up preparations and challenges. The workshops attracted over 500 participants from Fok Ying Tung Research Institute and universities in the Mainland and Macau.

To provide soft skills training and technical support, the School started to develop a central “DIY Center” facility for HKUST faculty, students, and other young entrepreneurs who foster start-ups at the Institute. The facility is due to be completed at the end of 2015. The School also took the lead in forming the Guangdong-Hong Kong-Macau Higher Education Alliance for Innovation and Entrepreneurship with South China University of Technology, Sun Yat-sen University, Guangzhou University, Guangdong University of Technology and the University of Macau. The objective is to strengthen coordination between the universities and provide a unique knowledge transfer platform for young people in the Pearl River Delta region.

To recognize the School’s enterprise in these areas, two plaques, namely the Innovation and Business Hub for Youths in Guangdong, Hong Kong and Macau, and Guangzhou Nansha

(International) Entrepreneurship Platform, were awarded to the Institute by the Guangdong provincial government.

## ADVANCING COMMERCIALIZATION AND MARKETING CAPABILITIES

A Technology Marketing and Incubation Office was set up to build the School’s capability to commercialize applicable HKUST technologies and services. The Office will collaborate closely with the University’s Office of Associate Provost for Knowledge Transfer, Technology Transfer Center and HKUST R and D Corporation Ltd to create connections between the HKUST community, industry and venture capital firms, and improve synergy among Mainland platforms and HKUST technology transfer support units.

Start-up incubation was actively pursued through the formation of the Deep Innovation Center, which sought to connect research strengths and industries for the School’s four areas of focus. Through this Center, the School can provide the full spectrum of incubation services and apply to Mainland government funds earmarked for entrepreneurial endeavors.

## TRAINING TALENTS

The School also engaged in knowledge exchange, offering professional training to local government officials and entrepreneurs to foster innovative and global mindsets. During the year under review, seven programs were held on big data, technology innovation, IP management, and other relevant areas, attracting over 350 participants from the local business sector and the government.





# HKUST JOCKEY CLUB INSTITUTE FOR ADVANCED STUDY

The HKUST Jockey Club Institute for Advanced Study (IAS) is committed to drawing the world's foremost intellectual talents to work with HKUST academics and share their knowledge with the wider community

The Institute continued to serve as an international knowledge hub for Asia, bringing together the world's most brilliant minds to drive cutting-edge research and discoveries.

## INTELLECTUAL POWERHOUSE

The first three IAS Professors, all at the pinnacle of their respective fields globally, participated in various activities on and off campus. These included an IAS Commons talk on the Chinese economy by IAS Helmut & Anna Pao Sohmen Professor-at-Large and Nobel Laureate in Economic Sciences Prof Sir Christopher A. Pissarides, an in-town dialogue between IAS Bank of East Asia Professor Prof Ching W. Tang and more than 300 high school students on the future of display technology, and a mini course on multi-wave imaging for postgraduate students by IAS Si Yuan Professor Prof Gunther Uhlmann.

Twenty prominent HKUST professors have now been engaged as IAS Senior Fellows and IAS Fellows to promote synergistic research on campus with the IAS professors and visitors. IAS also enlisted four Junior Fellows and 14 Postdoctoral Fellows from various disciplines to work on different research projects.

IAS Visiting Professors and Visiting Fellows, most of whom are members of national academies or of equivalent stature, have been invited to HKUST on a regular basis. In the year under review, 22 Visiting Professors, six Senior Visiting Fellows and six Visiting Fellows visited the Institute, and collaborated and interacted with faculty and students in different ways. The IAS HKUST-Scripps R&D Laboratory led by Visiting Professor Prof Paul Schimmel from the Scripps Research Institute, and Senior Fellow and Kerry Holdings Professor of Science Prof Mingjie Zhang, discovered metamorphosed protein building enzymes for therapeutic use.



## SHARING LATEST KNOWLEDGE

In 2014-15, IAS organized some 170 academic events, including 52 distinguished lectures, 43 joint school lectures and a UC RUSAL President's Forum, attracting over 9,000 participants. Four Gordon Research Conferences were also held at the Institute in Summer 2014, with three of the world-renowned gatherings chaired by HKUST faculty. Subjects spanned fields in life science, civil engineering and chemistry.

To encourage the development of research clusters and new initiatives, IAS arranged topical research programs in specialized areas, such as neural engineering, scattering amplitudes, creative Chinese writing, materials science, high-energy physics, and statistics and the computational interface to big data. Through short courses, workshops and discussion, participants were able to gain a deep understanding of the latest advances in the field.







# FACULTY DEVELOPMENT

HKUST advanced excellence through catalyzing fresh approaches to teaching and learning, extending the University's leading faculty team, and giving due recognition to the first-rate minds at work



The Center for Enhanced Learning and Teaching held an enlightening series of workshops and seminars over the year, providing a significant platform for discussion on the latest trends in teaching, motivating faculty to explore fresh methodologies and technologies for student learning and inspiring them to initiate innovations of their own.

## FOSTERING TEACHING EXCELLENCE

The Center's activities were presented by international experts and HKUST faculty with specialist knowledge and focused on a range of topics, including effective experiential learning, blended learning, group work and team assessment, collecting student feedback, Common Core issues, Massive Open Online Courses and tri-modal education. Overseas speakers came from Massachusetts Institute of Technology and UMassOnline, University of California, San Diego, Coursera, and National Taiwan University, among others. The Center offered an orientation program for new faculty members, specifically designed to take account of key aspects of teaching and learning in the context of HKUST, and a four-day University Teaching and Learning Course, organized for new and experienced faculty to explore fresh approaches to pedagogy.

Learning support for research postgraduates ranged from sessions focused on improving presentation skills to working as an effective teaching assistant. There was also the opportunity to attend a training camp to develop leadership capabilities. The Center for Engineering Education Innovation (E<sup>2</sup>I) participated in and co-organized events over the year to build cutting-edge approaches to engineering teaching and learning, and contribute to developments in this field internationally. In addition, the Sixth International Workshop on Innovative Engineering Education brought together academics and students from Sungkyunkwan University and HKUST on campus to discuss fresh directions and challenges in engineering education in Hong Kong and Korea.

## NEW APPOINTMENTS

Prof Charles Ng (Civil and Environmental Engineering) was

appointed Associate Vice-President (Research and Graduate Studies). He will assist the Vice-President for Research and Graduate Studies in overseeing strategic development as well as overall planning and administration of research activities and postgraduate studies at the University. Prof Roger Cheng (Electronic and Computer Engineering) was appointed Associate Provost (Teaching and Learning). Prof Cheng will lead the University's endeavor in setting the strategic direction and policies for the undergraduate curriculum, teaching and learning, and quality assurance of undergraduate and postgraduate education.

Other senior staff appointments were:

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**PROF KING L CHOW**

Director of Interdisciplinary Programs Office

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**PROF CHRISTOPHER CHAO**

Head of Department of Mechanical and Aerospace Engineering

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**PROF A V MUTHUKRISHNAN**

Head of Department of Marketing

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**PROF YANG WANG**

Head of Department of Mathematics

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**PROF QIANG YANG**

Head of Department of Computer Science and Engineering

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The Division of Social Science also completed the hiring of the founding Director of the HKUST Institute for Public Policy. Prof Jack A Goldstone, a distinguished sociologist from George Mason University in the US, will join as a Chair Professor on 1 January 2016.

HKUST recognized the contributions of the following faculty members to HKUST by granting them the title of Professor Emeritus upon their retirement or departure from University service:





**PROF KWING LAM CHAN**

Mathematics

**PROF VLADIMIR CHIGRINOV**

Electronic and Computer Engineering

**PROF CHANG TAI HUNG**

Division of Humanities

**PROF BOZHONG LI**

Division of Humanities

**PROF ALBERT Y LO**

Information Systems, Business Statistics  
and Operations Management

**PROF ZONGLI LU**

Division of Humanities

**PROF BARRY SAUTMAN**

Division of Social Science

**PROF BRUNO SOLNIK**

Finance

**PROF YEOU KOUNG TUNG**

Civil and Environmental Engineering

**PROF TONGYI ZHANG**

Mechanical and Aerospace Engineering

The following faculty members were awarded the title of Associate Professor Emeritus upon their retirement from University service:

**DR SHU MING NG**

Information Systems, Business Statistics and  
Operations Management

**DR HELEN CM SHEN**

Computer Science and Engineering

## GLOBAL ACHIEVERS

The year brought a host of accolades for faculty members at HKUST, reinforcing the global standing and influence of its academics. In national awards, Prof Weijia Wen (Physics), Prof Ping Sheng (Physics), Prof Wing Yim Tam (Physics) and Prof Shihe Yang (Chemistry) were awarded a State Natural Science Award (Second Class). Another State Natural Science Award (Second Class) also went to Prof Jianping Gan (Mathematics). This national award is the most prestigious award given in China in such fields.

Three professors also received Ministry of Education Higher Education Outstanding Scientific Research Output Awards, Second Class: Prof Yilong Han (Physics) and Prof Bing Zeng (Electronic and Computer Engineering) in the Natural Science category; and Prof Huamin Qu (Computer Science and Engineering) in the Scientific and Technological Progress category.

In Hong Kong, Prof Tom Hiu Tung Cheung (Life Science) and Prof Kam Tuen Law (Physics) saw their scientific research achievements recognized with Croucher Innovation Awards

Internationally, Dean of Science and The Morningside Professor of Life Science Prof Nancy Ip was elected a Foreign Associate of the US National Academy of Sciences; Prof Irene Lo (Civil and Environmental Engineering) was made a member of the European Academy of Sciences and Arts, becoming the first academic in Hong Kong to gain such recognition; Prof Michael Altman (Physics) was elected a Fellow of the American Physical Society; and Prof Ricky Lee (Mechanical and Aerospace Engineering) was the first scholar in the city to receive the Calvin W Rice Lecture Award. In addition, Prof Pascale Fung and Prof Patrick Yue (both Electronic and Computer Engineering) became Fellows of the Institute of Electrical and Electronics Engineers (IEEE), bringing the total number of Fellows at HKUST to 34.

## NAMED PROFESSORSHIPS

The Second Inauguration Ceremony for Named Professorships honored four outstanding faculty members whose accomplishments have placed them at the forefront of international scholarship. Dean of the School of Business and Management Prof Jitendra V Singh was named Michael Jebson Professor of Business, Prof Qiang Yang was appointed New Bright Professor of Engineering, Prof Xin Zhang was made Swire Professor of Aerospace Engineering,

and Visiting Professor from the University of Michigan Prof Xiuli Chao was named Fung Visiting Professor of Information Systems, Business Statistics and Operations Management.

## RECOGNITION OF TEACHING

The University strives to create an environment whereby excellence thrives among faculty members and recognition for such excellence is given. For his remarkable contribution to student learning, the annual Michael G Gale Medal for Distinguished Teaching was awarded to Prof Chun Man Chan (Civil and Environmental Engineering) in 2014. The Common Core Course Excellence Award for 2015 was awarded to Prof May Yi Shaw and Mr Bo Xu (Humanities) for the course "Identity Goes Global: From Border Crossing to Boundary Remaking".









# COMMUNITY ENGAGEMENT

**The University advanced leadership skills, enhanced capabilities in innovation and business, strategically utilized generous donations to support initiatives for development, and widened alumni networks**

The University deepened its bonds with the community by organizing activities in science, technology, business, social science and humanities to make contributions to both local and global development.

## **BUILDING LEADERSHIP**

The HKUST Leadership and Public Policy Forum Executive Education held a forum to discuss the way forward for democracy in Hong Kong. The keynote address was given by Prof John M Carey, John Wentworth Professor of Dartmouth College and an expert in electoral systems. Dr Vincent Lo, Chairman of Shui On Group and former Council Chairman of HKUST, chaired the panel discussion.

To develop and nurture management talent in Hong Kong, a conference on “Service Leadership Education for University Students: Experience in Hong Kong” was organized by HKUST’s Center for Engineering Education Innovation, together with the seven other UGC-funded institutions. The event was sponsored by the Victor and William Fung Foundation, in collaboration with the Hong Kong Institute of Service Leadership & Management Limited. Participants included educators, academics, and business leaders.

## **NURTURING FUTURE INNOVATORS**

In Spring 2015, the School of Science established the social service team SCI/NUCLEUS and mobilized a group of student leaders to drive the team. The team aimed to build a close network among students, alumni, and staff with a passion for serving the community. In collaboration with the British Council, students in the School of Science were invited to help at the annual Science Alive Programme 2015 under the theme “Chemistry - Why does it matter?”. Students had the chance to work with leading UK science academics and communicators to conduct various activities and experiments for children to learn science through games.

The School of Engineering and Hong Kong Institution of Engineers co-organized the Engineering Day Camp for Secondary School Students 2015. Activities included visits to engineering sites, meetings with engineering professionals and academics, and hands-on workshops facilitated by HKUST professors. At the Innovation and Technology Commission’s annual InnoCarnival, the Center for Global & Community Engagement held 27 workshops, seminars, and robot demonstrations for more than 500 participants in nine days. The Department of Industrial Engineering and Logistics Management co-hosted the 2<sup>nd</sup> My Toy Design Competition, which aimed to foster creativity among secondary and tertiary students, as well as designers, while generating innovative ideas for industry applications. The competition attracted more than 600 entries from over 1,000 participants.

The School of Science, the School of Engineering, and the School of Business and Management, as well as faculty from the School of Humanities and Social Science and Interdisciplinary Programs Office, jointly launched the Underwater Robot Community Engagement Project, which allowed students to share their skills and knowledge with various groups of young people in the community. HKUST students served as mentors, guiding students from Primary four to Form three, as well as those with special education needs, in building underwater robots and preparing them for a competition held on campus.

## **WIDENING HORIZONS**

The School of Business and Management continued its popular HKUST Business Insights Presentation series at which faculty present their research on topical issues at luncheon talks held in the School’s downtown center. The series allowed faculty to engage with a broader audience and fostered on-going dialogue between the School and different sectors of the community. The School’s research centers also played a key role in disseminating academic



knowledge by organizing events, conducting research, and developing cases for corporations. For example, the Value Partners Center for Investing co-hosted six talks with the Hong Kong Society of Financial Analysts while the Tanoto Center for Asian Family Business and Entrepreneurship Studies organized two seminars.

The Division of Humanities co-organized a series of lectures with the Hong Kong Museum of History, with 14 talks given during the year. In addition, public exhibitions and lectures were held by the University Library. Scientific and technological displays included “Discovering the Universe”, “Isomorphism of Humans and Nature”, and “Design Thinking”.

The “Science-for-Lunch” series was organized for the fourth year, with sponsorship from Maxim’s Group this year. Ten HKUST professors gave presentations on their innovative research and discoveries, focusing on topics such as big data, cancer, and air quality. Participants included business and community leaders.

### SUPPORTING WORLD-CLASS TEACHING AND LEARNING

The Second Inauguration Ceremony of Named Professorships was held in April 2015 to honor four outstanding faculty members and their benefactors. The professorships were made possible by donations from four long-standing contributors to higher education: Jebson Educational Foundation, Wong Check She Charitable Foundation, The Swire Group Charitable Trust, and Li & Fung. Three further professorships were established by Jebson Educational Foundation, Tencent Charity Foundation Limited, and Lam Woo Foundation Ltd during the year. Named professorships ensure the University maintains its excellence in education and research by giving due recognition to exceptional faculty.

A donation from the Wong Chak Chui Charitable Foundation provided support for the University’s development and the establishment of the International Enrichment Scholarship. The scholarship offers assistance to financially needy School of Business and Management students to participate in overseas activities that offer valuable enrichment experience, such as competitions and community projects. In recognition of this generosity, the Lee Shau Kee Business Building lecture theater was named after the late Mr Wong Chak Chui.

Mr Ho Ting Sik, who supported the establishment of Mr & Mrs Ho Ting Sik Visitor Information Center 10 years ago, made another donation for the Center’s revamp. In October 2014, Mr and Mrs Ho Ting Sik officiated at the opening ceremony of the renovated Center, which was furnished with advanced and user-friendly display technology. The Center provides comprehensive and latest information about the University for visitors and members of the HKUST community.

Several donations were also made to enhance educational and research activities. iFlight Technology Company Limited supported research projects in the Department of Computer Science and Engineering and Department of Electronic and Computer Engineering; Mr and Mrs Ian Tang made a gift for general university development; Lee’s Pharmaceutical Holdings Ltd established scholarships for students of the elite International Research Enrichment program; Paul and Eileen Lin Endowment Trust sponsored HKUST Connect programs; the Orr Foundation made a donation to the Caltech-HKUST Visiting Associates Program to enhance collaboration between the two institutions and broaden exposure of HKUST’s junior faculty; and Hoi Wan Trading Company Limited and Mr Daniel Yu supported Life Science research.

### PROPELLING FORWARD ALUMNI TIES

The flagship HKUST Alumni Endowment Fund had gone from strength to strength since its launch in 2012. To date, over \$18 million had been received, including \$1 million in matching donations from alumna Ms Wenyan Jiang in July 2014. Investment return of around \$600,000 was used to support initiatives for enriching the university life of HKUST students.

The HKUST Convocation Committee continued to strengthen relationships between alumni, the University and the community as well as contribute to the University’s strategic development. Mr Alvin Lam was elected President of the HKUST Alumni Association (also known as A1) in October 2014 and Convocation Chairman in April 2015. In line with its vision of “Alumni Inspire Alumni”, the A1 team organized monthly events catering to alumni’s different interests. To serve alumni better, the HKUST Alumni Association Limited was officially inaugurated in October 2014.

The alumni network expanded further over the year, with three alumni chapters being set up in Boston, Chicago, and Northern California. To renew and strengthen ties, alumni events were held locally and overseas. Hong Kong highlights included the homecoming reunion celebrations for the Class of 2004 and 1995, Young Alumni Happy Hour, and Golf Day. Further reunions were held in Europe, Mainland China, Saudi Arabia, Latin America and the US. President Prof Tony F Chan and Vice-President for Institutional Advancement Dr Eden Y Woon attended local and overseas activities to update alumni participants on the latest news about HKUST development.

In 2014-15, alumni received a number of awards, which highlighted their wide-ranging contributions to their respective fields and the community. Among them were: Dr Michael Lee (Second Prize, 2014 Inno-China Entrepreneurship Competition), Mr Wesley Lee (Young Industrialist of the Year Award 2014), Ms Carrie Tang (Hong Kong Youth Service Award 2014), Dr Pingzhong Tang (1,000 Talented Youth Award for young scientists in China), Mr Frank Wang (Top 10 Innovators in China by *Forbes Magazine* China edition), and Mr Rupert Woo (Second Prize, Award for Outstanding Young Conductor in Hong Kong and Audience Award for Most Popular Conductor, Second International Conducting Competition for Chinese Music 2014).





# INTERNATIONAL AND MAINLAND STRATEGY

HKUST extended Mainland engagement through research, academic, and industry partnerships while strengthening its international profile through delegations overseas, participating in leading global forums and forging partnerships

## MAINLAND PLATFORMS

### Building a Strategic Presence

HKUST's Mainland China platforms in Guangzhou, Shenzhen, and Foshan, individually and as a whole, added further dimensions to the University's capabilities for research, teaching and learning. Strategically positioned in the Pearl River Delta region of the Mainland, they effectively raised HKUST's presence and provided valuable opportunities for collaborations with other academic research institutions and industry.

In 2014-2015, Fok Ying Tung Research Institute in Guangzhou served as the knowledge transfer hub for the University. In addition, the Shenzhen Research Institute continued to play a vital role in University's innovation and technology advancement in the Mainland and has developed extensive collaborations with research institutions and enterprises. Shenzhen PKU-HKUST Medical Center concentrated on biomedical basic research, teaching and training and the HKUST LED-FPD Technology R&D Center at Foshan focuses on light-emitting diode research and development.

### Active Interchange

More than 510 faculty and students participated in cultural exchanges, community services and academic programs through a collaborative scheme administered by the Ministry of Education. In addition, the University received more than 70 high-level delegations from Mainland China in 2014-15, comprising over 800 delegates from industry, government and academia. Among those visiting were Prof Jianguo Hou, Vice-Minister of the Ministry of Science and Technology, and Prof Chunli Bai, President of the Chinese Academy of Sciences.

Preparations for the 14<sup>th</sup> National Challenge Cup, jointly hosted by HKUST and Guangdong University of Technology,

got into full swing during the year. The contest is a premier national competition for top university students to showcase extra-curricular scientific and technological inventions. This marked the first time that a Hong Kong university has co-hosted the event.

President Prof Tony F Chan participated in the 2<sup>nd</sup> US-China University Presidents Forum held at Rice University in Houston in June 2015, together with delegates led by Madame Liu Yandong, Vice Premier of China. He shared HKUST's experience in educating talent and research collaborations with our Mainland and US counterparts.

In an informative talk at HKUST in November 2014, Dr Mingkang Liu, first Chairman of the China Banking Regulatory Commission, shared his views on challenges and opportunities in the information age.

### Building Industry Connections

The University management and faculty worked on developing student internships, job placements, research collaborations, and executive training opportunities with leading Mainland enterprises, including Alibaba, Aviation Industry Corporation of China, BGI, Digital China, Tencent, Vanke, and other major enterprises. The University also cooperated closely with Lenovo, a strategic industrial partner in the areas of R&D collaboration, internship, job placement, and executive training. President Tony F Chan and Vice-President for Institutional Advancement Dr Eden Y Woon met Dr Jack Ma, Founder and Chairman of Alibaba in Hangzhou in April 2015 to explore cooperative opportunities. Alibaba held recruitment talks and a technology forum at HKUST.

Dr Eden Y Woon strengthened links with leading Mainland companies at the invitation-only Yabuli China Entrepreneurs Forum in February 2015.









### DEEPENING INTERNATIONALIZATION

Internationalization is a key area for strategic development at HKUST, extending from global thought leadership and international institutional ties to strategic alliances, collaborations and exchanges for faculty and students. During the year, the University effectively raised its profile and standing around the world.

#### Thought Leadership

In January 2015, President Chan led a delegation to the World Economic Forum Annual Meeting in Davos, Switzerland, and for the first time presented a specifically named HKUST IdeasLab session. In Davos, HKUST was the only Asian university to conduct an IdeasLab, where four professors shared their expertise on the seamless merging of virtual realities and the physical world. The President also participated in the Global University Leaders Forum, discussing trends in university-industry collaborations in the 21<sup>st</sup> century with over 20 presidents from top universities. In September 2014, the University held its third specifically named HKUST IdeasLab session at the Annual Meeting of New Champions of the World Economic Forum in Dalian, also known as the “Summer Davos”. Discussion focused on how human experience would be enhanced by emerging technologies.

In June 2015, President Chan attended the X<sup>th</sup> Glion Colloquium, based in Geneva, to discuss balancing external responsibilities with university priorities and constraints with an exclusive community of around 20 university leaders.

He was the only university president invited from China. Members of the University’s senior management were also invited to speak at Going Global, an annual forum hosted by the British Council, and the Entrepreneurial University Leaders Programme, jointly developed by the UK’s National Council for Entrepreneurship in Education, Oxford University and Universities UK.

#### Global Connectivity

To build wider international partnerships, President Chan led delegations to Mexico and Central Europe in November 2014 and May 2015 respectively.

The tour to Mexico enjoyed tremendous support from the Consul General who traveled together with the HKUST delegation. The six-day trip encompassed the key cities of Mexico City, Monterrey and Guadalajara, and meetings with eight leading universities. Visits included the National Autonomous University of Mexico, the largest university in Latin America with over 200,000 students, Monterrey Institute of Technology and Higher Education, recognized as the MIT of Mexico, and University of Monterrey, an elite private university. Other destinations included four science and technology institutions, and six government entities, including Creative Digital City and the National Council of Science and Technology.

The tour to Central Europe covered Hungary, Poland and the Czech Republic. The delegation met presidents and senior management of 13 top universities, four science and

technology institutions, including the European Institute of Innovation and Technology, Polish Academy of Sciences and Czech Science Foundation, as well as two government entities. President Chan delivered talks at universities such as the Budapest University of Technology and Economics, University of Warsaw and Czech Technical University in Prague.

Media interviews with President Chan were conducted, and alumni gatherings were held in both Mexico and Central Europe, apart from meeting with business leaders and think tanks. All in all, both visits incentivized Mexican and European institutions to strongly consider Asia, particularly Hong Kong, as a world-class education and entrepreneurship hub for students and researchers.

HKUST established three further strategic partnerships under the Targeted Strategic Partnerships initiative, namely Regents of the University of Minnesota, Rice University and Technion – Israel Institute of Technology. These institutions joined existing partners University of Southern California, École Normale Supérieure, École Polytechnique Fédérale de Lausanne, Technische Universität München and Shanghai Jiao Tong University to make a total of eight. The University's Sponsorship Scheme for Targeted Strategic Partnerships is established to encourage scholars to develop and sustain collaboration with these targeted partners as well as to provide incentives to kick off initiatives and add value to the existing partnerships across diversified disciplines. Thus far, there are over 30 collaboration projects under the

Scheme including joint workshops at HKUST and partner universities, academic and research exchange involving faculty and students, and joint research publications and successful grant applications with institutions like the National Natural Science Foundation of China and Hong Kong's Research Grants Council.

## Growing Network

HKUST's worldwide network of 250 universities and institutions continued to grow. The University entered into agreements with leading global universities including the University of Pennsylvania, Smith College, University of British Columbia, University of Campinas and National Autonomous University of Mexico. This network enabled students to widen their outlook and global connections through academic and research exchange as well as internships at first-class institutions such as MIT and the European Organization for Nuclear Research (CERN). In addition, close to 120 international delegations visited HKUST during the year.

Regionally, HKUST continued to play a leading role in the Association of East Asian Research Universities and Association of Pacific Rim Universities. In Hong Kong, President Chan hosted a reception for consuls general from across five continents in October 2014. HKUST was also the only university in Hong Kong invited to participate in the "Study in France" Virtual Education Fair in November 2014 for the second consecutive year.







# ORGANIZATION AND RESOURCES

The University restructured administrative units, extended campus facilities, and made further enterprising efforts on sustainability

## ADVANCING ACADEMIC ADMINISTRATION

The University announced its Academic Registry would be formally established on 1 July 2015 following the merger of the Office of Academic Quality and Undergraduate Studies and the Academic Records and Registration Office. The amalgamation enabled the University to re-organize and streamline the two offices, consolidate leadership and management, and improve communication and operational efficiency in academic administration.

## STAFF RECOGNITION

Three staff members were presented with the President's Outstanding Service Award in November 2014 in recognition

of their outstanding service that contributes to the betterment of their work units and the University. A further 163 faculty and staff members who have worked at the University for 20 years received the Long Service Award to recognize their loyalty to the University community.

To shore up the culture of service excellence on campus, the University organized regular seminars on legal, ethical and management issues commonly encountered in public institutions and the education profession. The well-received Wellness Program series was again offered.

## CAMPUS DEVELOPMENT

It is of strategic importance to plan campus land use in a



holistic fashion while fulfilling HKUST's strategic vision and needs. The University management sought Council's approval for an update to the Campus Master Plan which covers zone planning and prioritization of future facilities when the appropriate opportunity arise, including a new indoor sports center, 1,000-seat multi-purpose auditorium, 110-apartment research postgraduate apartment tower, 1,200-bed undergraduate residence and the water sports center.

With the completion of the Cheng Yu Tung Building, an additional 10,000 sqm of space for state-of-the-art laboratories, teaching facilities, and offices became available to enrich the University's research and working environment for students and faculty.

L'hotel Group was appointed to manage the Conference Lodge, which hosted its first guests at the end of July 2015 with the arrival of Gordon Research Conference delegates. The Lodge enabled the University to transform facilities previously used for visitors and part-time students studying executive programs into accommodation for full-time students. Housing for students remained a high priority, and the hostel in Tseung Kwan O would provide an extra 520 bed spaces for the University's students.

In the Piazza, the Hub student center, student services offices and training rooms, and refurbishment of the bookshop and Tsang Shiu Tim Art Hall were completed, along with the opening of a commercial coffee shop. The renovated Mr & Mrs Ho Ting Sik Visitor Information Center and the University Souvenir Shop added to the user-friendly new-look Piazza.

## EXPLORING SUSTAINABILITY

The University continued its drive to transform the campus into a "learning laboratory" for sustainability education and research. In line with learning beyond the classroom, operations staff members have started to adopt roles as sustainability teachers and mentors. With such support, students worked on group projects to explore issues related to the University's food services, purchasing policies, and green buildings. They also designed and planted HKUST's first campus orchard.

The Sustainable Campus Leadership Program developed hands-on green campus projects, including a feasibility study on renewable energy installations, and the building of a new vegetative green wall. Students also tested behavior theories to ascertain whether psychological nudges could shift wasteful habits toward more sustainable action.





# GOVERNANCE

Three main bodies constitute HKUST's governance structure, namely the Court, Council and Senate, all of which operate in accordance with the University Ordinance and Statutes



## THE COURT

The Court is the University's highest advisory body and held two meetings during the review period. In October 2014, key areas for strategic development, such as HKUST core values, student life enrichment, an enhanced innovation and entrepreneurship culture, and campus master planning, were actively discussed. Members also reviewed a new corporate video showcasing the achievements of faculty and vibrancy of students' campus life. In April 2015, the Court enthusiastically exchanged views on proposed celebratory activities for the University's 25<sup>th</sup> Anniversary.

## THE COUNCIL

The Council is the University's highest governing body. It was recorded with deep sadness that the University's fourth Council Chairman, Dr Marvin KT Cheung, passed away on 13 September 2014. The Hon Andrew Liao Cheung-sing was subsequently appointed as the fifth Council Chairman on 6 March 2015. During the interim period, Mr Martin Y Tang, Council Vice-Chairman, led the Council as Acting Chairman.

The Hong Kong University Grants Committee (UGC) commissioned a consultancy study to review the system of governance across all UGC-funded institutions. Representatives of the Council, management, staff and students took part in interviews with the consultant in April 2015. A comprehensive report with recommendations is expected by the end of 2015.

## THE SENATE

The Senate, the supreme academic body, is responsible for setting and reviewing academic policies of the University. During the year, a number of new programs were introduced while modifications were made to specific programs to enhance program administration and to keep abreast of the needs of students.

In May 2014, the Senate Research Committee set up a task force to review University policies governing research ethics and integrity. After thorough consultation with various stakeholders, and taking into consideration good practices of research universities within Hong Kong and overseas, the Senate eventually adopted a streamlined approach whereby all HKUST researchers, including current and former staff and students, were brought under the same set of policy guidelines and regulations.





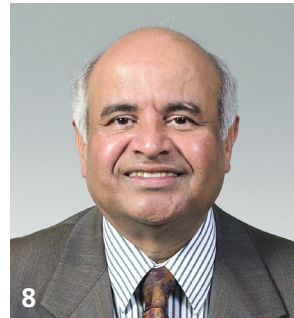
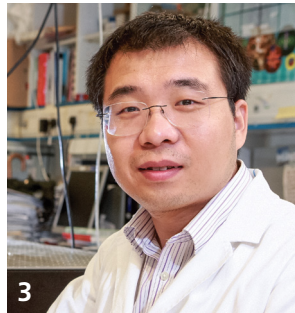


# AWARDS AND RECOGNITIONS

Faculty members and students have received numerous honors and accolades over the year. The following list is not exhaustive.

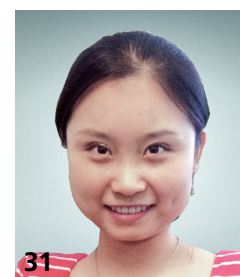
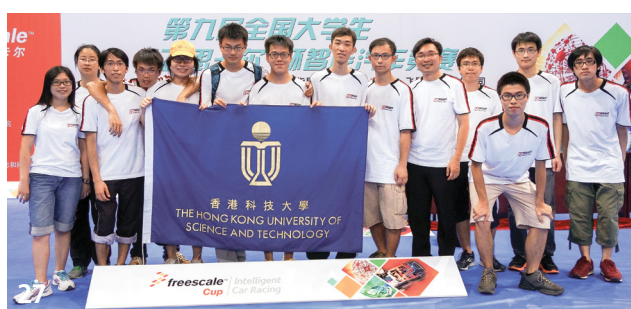
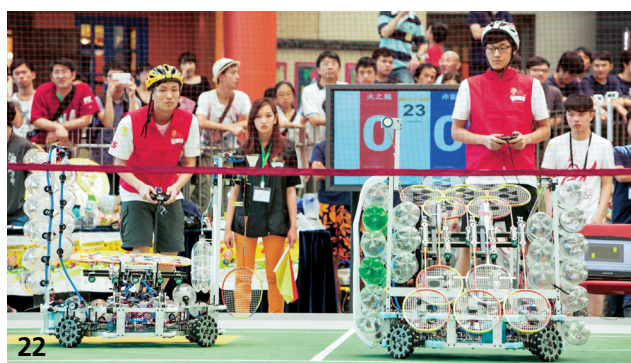
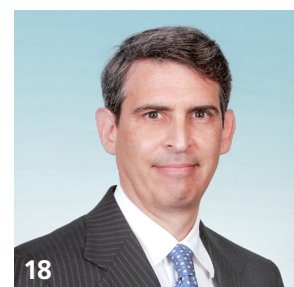
## FACULTY

- 1 Profs Weijia Wen, Sheng Ping, Wing Yim Tam, Department of Physics, Prof Shihe Yang, Department of Chemistry, and Prof Hongru Ma, Shanghai Jiao Tong University, were awarded a State Natural Science Award, Second Class, by the State Council of the PRC for their "Structural and Physical Mechanism Investigation for Giant Electrorheological Fluid" research.
- 2 Prof Jianping Gan, Division of Environment and Department of Mathematics, received a State Natural Science Award, Second Class, from the State Council for work exploring dynamic changes and coupling correlations in the South China Sea and nearby tropical sea areas.
- 3 Prof Yilong Han, Department of Physics, received a Higher Education Outstanding Scientific Research Output Award (Science and Technology), Second Class in Natural Science, from the Ministry of Education for work on "Field-driven Emergent Properties and Physical Mechanisms in Complex Systems". Prof Han was also awarded the 2014 Achievement in Asia Award by the International Organization of Chinese Physicists and Astronomers.
- 4 Prof Huamin Qu, Department of Computer Science and Engineering, was awarded a Higher Education Outstanding Scientific Research Output Award (Science and Technology), Second Class in Scientific and Technological Progress, from the Ministry of Education for research focused on "Modeling, Analysis and Clinical Applications of Medical Image Data".
- 5 Prof Bing Zeng, Department of Electronic and Computer Engineering, received a Higher Education Outstanding Scientific Research Output Award (Science and Technology), Second Class in Natural Science, from the Ministry of Education.
- 6 Prof Tom Cheung, Division of Life Science, and Prof Kam Tuen Law, Department of Physics, were honored with Croucher Innovation Awards by the Croucher Foundation.
- 7 Prof Ching W Tang, Department of Chemistry, Department of Electronic and Computer Engineering and Department of Physics, received the 2014 Nick Holonyak Jr Award from the Optical Society of America.
- 8 Prof Vijay Bhargava, Department of Electronic and Computer Engineering, was awarded the Killam Prize 2015 by the Canada Council for the Arts.
- 9 Prof Mansun Chan, Department of Electronic and Computer Engineering, and his team received a Second Class Award in the Natural Science Category of the 2014 Shenzhen Science and Technology Award.
- 10 Prof Lei Chen, Department of Computer Science and Engineering, was awarded the ACM SIGMOD 2015 Test of Time Award.
- 11 Prof Vidhan Goyal, Department of Finance, won the "Citations of Excellence Award" organized by Emerald Group Publishing.
- 12 Prof James Lee, Dean of Humanities and Social Science, received the Tsinghua Journal Parkson Best Article Award.
- 13 Prof Ricky Lee, Department of Mechanical and Aerospace Engineering, received the 2014 Calvin W Rice Lecture Award from the American Society of Mechanical Engineers.
- 14 Prof Ho Yin Mak, Department of Industrial Engineering and Logistics Management, was awarded the 2014 INFORMS Energy, Natural Resources, and the Environment Young Researcher Prize.





## AWARDS AND RECOGNITIONS



- 15** Prof Ting Chuen Pong, Department of Computer Science and Engineering, and his team won the Natural Sciences Award and first runner-up in the Hybrid Learning Category of Wharton-QS Stars Awards 2014: Reimagine Education.

## FELLOWS & BOARD MEMBERSHIPS

- 16** Prof Nancy Ip, Dean of Science, was elected a Foreign Associate of the US National Academy of Sciences.
- 17** Prof Irene Lo, Department of Civil and Environmental Engineering, was elected an Academician (Technical and Environmental Sciences) of the European Academy of Sciences and Arts.
- 18** Prof Michael Altman, Department of Physics, became a Fellow of the American Physical Society.
- 19** Prof Pascale Fung and Prof Patrick Yue, Department of Electronic and Computer Engineering, were elected Fellows of the Institute of Electrical and Electronics Engineers.
- 20** Prof Joseph Lee, Department of Civil and Environmental Engineering, was awarded Honorary Membership of the International Association for Hydro-Environment Engineering and Research.
- 21** Prof Richard So, Department of Industrial Engineering and Logistics Management, was elected a Fellow of the International Ergonomics Association.

## STUDENTS AND RESEARCHERS

The HKUST Robotics Team comprising 59 students from different departments gained many different awards over the year.

### Robocon Teams

- 22** Champion, Third Runner-up, Robocon 2015 Hong Kong Contest

### Remotely Operated Vehicle (ROV) Team

- 23** Championship, Explorer Class, 10<sup>th</sup> Hong Kong/Asia Regional IET/MATE Underwater Robot Challenge
- 24** Overall Second Runner-up and Sharkpedo Award, MATE International ROV Competition 2015
- 25** Ms Rayan Armani, Dual Degree Program in Technology and Management, Marty Klein MATE MARINER Award, MATE International ROV Competition 2015
- 26** Mr Johannes Thomas Maria Jaeger, School of Business and Management, Engineering Evaluation Most Valuable Presenter “MVP” Award, MATE International ROV Competition 2015

### Smart Car Teams

- 27** Second Class Award, two Third Class Awards, Certificate of Merit, 9<sup>th</sup> Freescale Cup Smart Car Competition, South China Region
- 28** PhD students Mr Jan Engels, Chemistry, and Mr Langston Suen, Chemical and Biomolecular Engineering, and MBA student Mr Adam Antal, came first in the TiE Business Plan Competition Hong Kong Chapter. The team also won the championship and the Asia Rising Star Award in the Asian Finals in Delhi, India.
- 29** The Unmanned Aerial Vehicle Team won the Best Collision Avoidance Award and Best Technical Paper Award in the 2014 International Aerial Robotics Competition.
- 30** Ms Kimberly Vanessa Cheung, Division of Life Science, won the Bronze Medal at the Women’s Team Foil Fencing event at the 2014 Incheon Asian Games.
- 31** PhD students Ms Wei Bi and Ms Yanjiao Chen, Computer Science and Engineering, were awarded 2014 Google Anita Borg Memorial Scholarships Hong Kong.



- 32** MPhil student in Technology Leadership and Entrepreneurship Mr Wing Hong Chan won a Merit Award in the Tertiary Student Project category in the Asia Pacific ICT Alliance Awards (APICTA) 2014.
- 33** Undergraduates Mr Haoran Chen, Mr Chi Cheung Choi, Ms Michelle Jia Ying Lee, Mr Yuyang Xie and Mr Yuanhang Zhu, Mechanical and Aerospace Engineering, gained the first runner-up place in the first and largest national aircraft design competition, organized by the Aviation Industry Corporation of China.
- 34** A team of three MPhil students in Technology Leadership and Entrepreneurship, Mr Jitesh Chhabria, Mr Wing Hong Chan and Mr Wing Hang Yip, won the championship and HKSTP Technopreneur Award (Gold Award) in the YDC E-Challenge 2015. The team also gained the Gold Award in the JEC Outstanding Engineering Project Awards 2015.
- 35** A team of six Mechanical and Aerospace Engineering students, Mr Kin Lap Chung, Mr Ho Wang Chung, Mr Tze Kin Fan, Mr Chun Ting Ng, Mr Koon Nam Wong and Mr Siu Hong Wu, won the Most Innovative Design Award in the 4<sup>th</sup> Greater China Region Design Competition 2015.
- 36** MPhil students Mr Tuo Shi, Mechanical and Aerospace Engineering, and Mr Yan Wan, Electronic and Computer Engineering, received Asian Future Leaders Scholarships 2014-15.
- 37** PhD student Mr Feng Ni, Mechanical and Aerospace Engineering, and undergraduate Mr Chun Sing Poon, Electronic and Computer Engineering, received the Global Youth Innovator Award at the 2015 International Contest of Application in Nano-micro Technology (iCAN) Consumer Electronics Show.
- 38** BEng and MPhil graduate Mr Frank Wang, Electronic and Computer Engineering, was named one of the Top 10 Innovators in China by *Forbes China*.
- 39** A team of undergraduate students Ms Sandy Lok Sang Cheng, Global Business, Mr Henry Ho Ming Chow, Ms Joyce Wing Tung Lam and Mr Billy Kwai Yin Lee, Quantitative Finance, won the champion of the SCMP/IFPHK Financial Planner Awards 2014 (University Student Category).
- 40** Accounting undergraduates Mr Lincoln Chan, Ms Nicole Li, Ms Coco Tong and Mr Andy Wong, won the championship and Best Written Report Award in the Qualification Programme Case Analysis Competition, organized by the Hong Kong Institute of Certified Public Accountants. Mr Wong was also named Best Presenter.
- 41** Four Global Business students, Mr Ryan Cheng, Ms Cherry Wong, Mr Ray Liu and Ms Hillary Juan, took the top spot in the Belgrade Business International Case Competition, held in Serbia.
- 42** Undergraduates Mr Philip Yizu Huang, Mr Allen Tong, Mr Derrick Qi and Mr James Wang, won the championship of the local final of the Chartered Financial Analyst Institute's Research Challenge 2014-15 (Hong Kong).
- 43** A team of marketing undergraduates, Ms Alberta Lowe, Ms Charmaine Ng and Mr Hayden Cheung secured the championship at the Hong Kong Finals of the L'Oreal Brandstorm Contest.
- 44** Mr Charles Shun Kit Wong, Risk Management & Business Intelligence Program, won the Champion of Hong Kong Outstanding Business Students Award 2015.







### HONORARY GRADUATES

- Prof Chih Ming Ho, Ben Rich-Lockheed Martin Chair Professor, UCLA
- Dr Michael Hoi Hung Mak, SBS, JP, former HKUST Council Vice-Chairman
- Sir Michael Moritz, KBE, Chairman of Sequoia Capital
- Prof Muming Poo, Paul Licht Distinguished Professor in Biology, University of California, Berkeley
- Prof Yu Xie, Otis Dudley Duncan Distinguished University Professor of Sociology, Statistics and Public Policy, University of Michigan

### HONORARY FELLOWS

- Mr Nicholas Brooke, SBS, JP, Chairman of Professional Property Services Ltd
- Mr Ronald Kee Young Chao, Vice-Chairman of Novel Enterprises Ltd
- Dr Steven J DeKrey, President of the Asian Institute of Management
- Prof Charles G Sodini, LeBel Professor of Electrical Engineering, Massachusetts Institute of Technology and Adjunct Professor, Department of Electronic and Computer Engineering, HKUST





## HKUST MEDALS

- 45** Mr Andrianto Lie and Mr Leviero, Computer Science and Engineering, won the HKUST President's Cup.
- 46** Parle, a team formed by Mr Hamza Zia, Mr Ben Tiede, Ms Jenny Kang and Mr Rikiya Masuda, won the President's Prize, Best Business Plan Presentation and Student Prize in the fifth annual HKUST One Million Dollar Entrepreneurship Competition.
- 47** Year 2 Physics student Mr Yue Yu received the 2015 Mr Armin and Mrs Lillian Kitchell Undergraduate Research Award.
- 48** Prof Garvin Percy Dias, Information Systems, Business Statistics & Operations Management, Prof Yong Wang, Economics, Prof Derrald Stice and Prof Ping Sheng Koh, Accounting, Prof Kasper Meisner Nielsen, Finance, and Prof Stephen Nason, Management, were awarded the Franklin Prize for Teaching Excellence.
- 49** Prof Chun Man Chan, Civil and Environmental Engineering, received the Michael G Gale Medal for Distinguished Teaching.
- 50** Mr Sam Ngai Chun Shek, Mechanical and Aerospace Engineering and President of the HKUST Students' Union 2013-14, was awarded the Stephen Cheong Kam-chuen Medal for Distinguished Service to the Student Body.
- 51** Prof May Yi Shaw and Mr Bo Xu, Division of Humanities, won the HKUST Common Core Course Excellence Award 2014 for the course "Identity Goes Global: From Border Crossing to Boundary Remaking".



# CALENDAR OF EVENTS

## 2014



### JULY

- Vice-President for Institutional Advancement Dr Eden Woon and Prof James She, Department of Electronic and Computer Engineering, held seminars at the 2014 Tencent Forum on "Big Data Connections in the Future" in Beijing.
- The Department of Computer Science and Engineering co-organized the 10<sup>th</sup> International Conference on Multimedia Information Technology and Applications (MITA 2014) at HKUST, together with the Korea Multimedia Society and Yonsei University.



### AUGUST

- HKUST signed a memorandum with Guangdong University of Technology on co-hosting the 2015 "National Challenge Cup", a competition originating in Mainland China and known as the "Olympiad of Science and Technology" for university students. It was the first time a Hong Kong university had arranged to co-host the event in the Cup's 25-year history.

### SEPTEMBER

- A HKUST IdeasLab session on emerging technologies was held at the Annual Meeting of the New Champions of the World Economic Forum, known as the "Summer Davos", in Tianjin. Four School of Engineering professors took part.
- The University co-hosted the second My Toy Design Competition with the Hong Kong Toys Council and The Toys Manufacturers' Association of Hong Kong Limited.



## OCTOBER

- Nobel Laureate in Literature Mr Gao Xingjian spoke on contemporary Chinese literature at the University.
- The Kellogg-HKUST Executive MBA (EMBA) program was ranked No.2 in the world in the *Financial Times'* global Executive MBA Ranking survey.
- The renovated Mr and Mrs Ho Ting Sik Visitor Information Center opened, using advanced and user friendly display technology to provide a comprehensive source of University information.

## NOVEMBER

- HKUST held its 22<sup>nd</sup> Congregation, conferring honorary doctorates on five distinguished academics and community leaders.
- Mr Ronnie C Chan, Hang Lung Group Chairman, shared his insights on the future of Mainland China and Hong Kong in the next decade at the UC RUSAL President's Forum.
- The Department of Physics organized the HKUST IAS Focused Program on Scattering Amplitudes, the first major workshop in Asia devoted to recent advances in scattering amplitudes in quantum field theory, and the HKUST IAS Symposium on Light Science and its Applications.



## DECEMBER

- The University's Fok Ying Tung Research Institute Building officially opened at the Nansha IT Park in Guangzhou and agreements were signed on setting up the National Supercomputer Center in Nansha and education, research and industry collaboration projects to foster knowledge transfer and research collaboration between Hong Kong and Mainland China.
- HKUST ranked 16<sup>th</sup> in the World Global Employability University Survey and Ranking 2014. The University took the top spot in Greater China.
- The Department of Management hosted the Management and Organization Review Inaugural Research Frontier Conference.
- The second HKUST-University of Southern California Joint Workshop on Big Data Applications and HKUST-University of Southern California Forum on 3D Printing: Research and Practice were held.



# 2015



## JANUARY

- HKUST achieved outstanding ratings in the University Grants Committee's Research Assessment Exercise 2014, achieving world-leading (four stars) and internationally excellent (three stars) levels for 70% of its research submissions, the highest among all other local institutions.
- President Prof Tony F Chan led a delegation to the World Economic Forum in Davos, Switzerland, where HKUST was the only Asian university to conduct an IdeasLab, its first at a "Winter Davos". Four School of Engineering professors discussed technologies that could lead to the seamless merging of physical and virtual worlds.
- The School of Business and Management and Chartered Alternative Investment Analyst (CAIA) Association announced an academic partnership to promote alternative investment education across Asia.
- Members of the State Key Laboratory of Molecular Neuroscience organized the Croucher Advanced Study Institute "Alzheimer's Dementia in a Global Context" workshop at HKUST, in partnership with the Alzheimer's Association of the United States.



## FEBRUARY

- A HKUST Leadership and Public Policy Executive Education forum discussed the way forward for democratic development in Hong Kong. Dr Vincent Lo, Chairman of Shui On Group and former HKUST Council Chairman, chaired a panel discussion, with leading public figures among the panelists.
- The Graduate Commons opened, enabling postgraduate students across all Schools to engage in ideas exchange and collaborative learning in an informal and welcoming environment.
- The Department of Mechanical and Aerospace Engineering and HKUST Student Branch of the American Institute of Aeronautics and Astronautics jointly organized the first AERO DAY on campus.



## MARCH

- The Wong Chak Chui Charitable Foundation made a donation to boost education and research development and to set up the Wong Chak Chui International Enrichment Scholarship. In recognition, the University named the Lee Shau Kee Business Building lecture theater after the late Mr Wong Chak Chui.
- The second Hackathon@HKUST, a 24-hour university student-led coding event, widened its scope to encompass students and alumni from other local universities, attracting over 200 participants.



## APRIL

- HKUST held the second inauguration ceremony for its Named Professorship Program to honor four outstanding faculty members and their donors.
- The University received a generous donation from the Paul and Eileen Lin Endowment Trust to support students' participation in service learning activities.
- Student Innovation for Global Health Technology (SIGHT), a hands-on undergraduate platform to generate innovative solutions to international healthcare problems, and the School of Engineering co-organized a workshop for local high school students on enhancing health through sustainable technology and the community service spirit.
- The Second Science Toy Design Competition was launched at HKUST together with NSI International Inc, a leading designer and manufacturer of educational toys in the US.



## MAY

- The Student Chapter of the Association for Computing Machinery and the Student Chapter for Women Students were founded at HKUST.
- The Department of Physics organized the Gordon Research Conference on String Theory & Cosmology: New Ideas Meet New Experimental Data.

## JUNE

- The University conferred Honorary Fellowships on four distinguished leaders.
- The School of Business and Management and Global Alliance in Management Education, previously CEMS, held the first corporate benchmarking conference in Asia.
- The Department of Computer Science and Engineering co-organized Google Tech Summer Camp 2015 with Google China at HKUST.
- Two Gordon Research Conferences were arranged by the Department of Physics on Particle Physics: Prospects of Particle Physics at the 13TeV Large Hadron Collider and Topological & Correlated Matter: Advances in Topological Phases of Matter in Crystalline Solids and Cold Atom Systems respectively.
- The HKUST 2015 One Million Dollar Entrepreneurship Competition saw more than 100 teams participate in the event.



# FACTS AND FIGURES

## STUDENTS

### STUDENT ENROLMENT (as of 30 Sep 2015)

School / Area	Undergraduate	Postgraduate		Total
		Research	Taught	
Science	2057	503	221	2781
Engineering	3275	1116	943	5334
Business and Management	3259	112	1412	4783
Humanities and Social Science	214	73	138	425
HKUST Fok Ying Tung Graduate School	0	10	0	10
Joint School/Interdisciplinary Programs	360	39	48	447
<b>TOTAL</b>	<b>9165</b>	<b>1853</b>	<b>2762</b>	<b>13780</b>

### NON-LOCAL STUDENT ENROLMENT (2014-15)

Home Country	Undergraduate	Postgraduate		Total
		Research	Taught	
Mainland China	674	1378	1248	3300
Other Asian Countries	546	153	168	867
Rest of the World	123	54	180	357
<b>Total</b>	<b>1343</b>	<b>1585</b>	<b>1596</b>	<b>4524</b>

### UNDERGRADUATE EXCHANGES (2014-15)

Host / Destination Region	Exchange-in	%	Exchange-out	%
Mainland China	41	3.9	56	5.8
Asia	233	22.3	160	16.7
North America	379	36.3	300	31.3
Central and South America	1	0.1	1	0.1
Europe	382	36.6	430	44.9
Australia and New Zealand	8	0.8	11	1.2
Africa	0	0	0	0
<b>Total</b>	<b>1044</b>	<b>100</b>	<b>958</b>	<b>100</b>

### GRADUATE NUMBERS (2014-15)

School / Area	Undergraduate	Postgraduate		Total
		Research	Taught	
Science	526	93	114	733
Engineering	766	268	690	1724
Business and Management	748	25	796	1569
Humanities and Social Science	41	21	166	228
HKUST Fok Ying Tung Graduate School	0	40	0	40
Joint School/Interdisciplinary Programs	106	19	33	158
<b>Total</b>	<b>2187</b>	<b>466</b>	<b>1799</b>	<b>4452</b>

## EMPLOYMENT (2014)

	Undergraduate	Postgraduate			
		PhD	MPhil	Taught Master (Except MBA)	MBA
<b>Employment Situation</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Employed	83.6	71.7	34.9	73.8	77.9
Further Studies	12.6	1.5	45.6	7.5	0
Returned to Home Country or Emigrated	2.2	22	12.1	13.1	0
Others	1.6	4.8	7.4	5.6	22.1
<b>Employment Situation by Industry</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Commerce and Business	61.6	12.4	41.7	51.3	96.1
Engineering and Industry	24.1	4.4	18.8	35.9	3.9
Education	7.3	83.2	37.5	7.4	0
Government and Related Organizations	3.2	0	2.1	4.6	0
Community and Social Services	3.7	0	0	0.8	0

## FACULTY

### FACULTY MEMBERS (as of 30 Jun 2015)

School / Area	Regular	Visiting	Total
Science	131	19	150
Engineering	167	21	188
Business and Management	136	26	162
Humanities and Social Science*	87	63	150
Interdisciplinary Programs	10	0	10
<b>Total</b>	<b>531</b>	<b>129</b>	<b>660</b>

\*The teaching staff of the Centre for Language Education are included following its merger with SHSS on 1 July 2012.

## RESEARCH

### NO. OF NEW RESEARCH PROJECTS AND FUNDING (2014-15)

	Number	Funding (in HK\$M)
UGC	371	77.8
RGC	204	164.7
Others	349	279.3
<b>Total</b>	<b>901*</b>	<b>521.8**</b>

\* No. of projects does not add up due to projects with multiple sponsors.

\*\* Includes R&D projects administrated by R and D Corporation and Mainland platforms. Excludes R-portion i.e. on-costs, PI costs and HSS Premium provided by RGC for ERG projects.

### NO. OF PATENTS (2014-15)

Filed	199
Granted	73



<b>INTERNATIONAL RANKINGS</b> <i>(As of 31 October 2015)</i>	
<b>HKUST</b>	<b>NO. 2 IN THE WORLD</b> (World's Top 50 Universities Under 50, QS Top 50 Under 50 2014)
	<b>NO. 5 IN ASIA</b> (Asia's Top 300 Universities, QS Asian University Rankings 2015)
	<b>NO. 28 IN THE WORLD</b> (World's Top 800 Universities, QS World University Rankings 2015/16)
	<b>NO. 59 IN THE WORLD</b> (World's Top 800 Universities, Times Higher Education World University Rankings 2015/16)
	<b>NO. 14 IN THE WORLD</b> (Global Employability University Ranking 2015, Emerging)
<b>SCHOOL OF SCIENCE</b>	<b>NO. 2 IN HONG KONG, NO. 14 IN ASIA</b> (Asia's Top 100 Universities in Natural Sciences, QS Asian University Rankings 2015)
	<b>NO. 2 IN HONG KONG, NO.29 IN THE WORLD</b> (World's Top 400 Universities in Natural Sciences, QS World University Rankings 2015)
	<b>NO. 15 IN ASIA</b> (Asia's Top 100 Universities in Life Sciences and Medicine, QS Asian University Rankings 2015)
	<b>NO. 2 IN HONG KONG, NO. 25 IN THE WORLD</b> (World's Top 200 Universities in Chemistry, QS World University Rankings by Subject 2015)
	<b>NO. 33 IN THE WORLD</b> (World's Top 200 Universities in Mathematics, QS World University Rankings by Subject 2015)
	<b>NO. 1 IN HONG KONG, NO. 44 IN THE WORLD</b> (World's Top 200 Universities in Materials Sciences, QS World University Rankings by Subject 2015)
	<b>NO. 51-100 IN THE WORLD</b> (World's Top 200 Universities in Environmental Sciences, QS World University Rankings by Subject 2015)
<b>SCHOOL OF ENGINEERING</b>	<b>NO. 1 IN HONG KONG, NO. 8 IN ASIA</b> (Asia's Top 100 Universities in Engineering and Technology, QS Asian University Rankings 2015)
	<b>NO. 1 IN HONG KONG, NO. 14 IN THE WORLD</b> (World's Top 400 Universities in Engineering and Technology, QS World University Rankings 2015)
	<b>NO. 1 IN GREATER CHINA, NO. 16 IN THE WORLD</b> (World's Top 100 Universities in Engineering and Technology, Times Higher Education World University Rankings 2015/16)
	<b>NO. 1 IN ASIA, NO. 8 IN THE WORLD</b> (World's Top 200 Universities in Computer Science and Information Systems, QS World University Rankings by Subject 2015)
	<b>NO. 17 IN THE WORLD</b> (World's Top 200 Universities in Engineering - Civil and Structural, QS World University Rankings by Subject 2015)
	<b>NO. 1 IN HONG KONG, NO. 19 IN THE WORLD</b> (World's Top 200 Universities in Engineering - Electrical and Electronic, QS World University Rankings by Subject 2015)
	<b>NO. 2 IN GREATER CHINA, NO. 27 IN THE WORLD</b> (World's Top 200 Universities in Engineering – Chemical, QS World University Rankings by Subject 2015)

	<p><b>NO. 2 IN HONG KONG, NO. 39 IN THE WORLD</b> (World's Top 200 Universities in Computer Science, Academic Ranking of World Universities by Shanghai Jiao Tong University 2015)</p> <p><b>NO. 1 IN HONG KONG, NO. 31 IN THE WORLD</b> (World's Top 200 Universities in Engineering – Mechanical, Aeronautical and Manufacturing, QS World University Rankings by Subject 2015)</p> <p><b>NO. 2 IN HONG KONG, NO. 40 IN THE WORLD</b> (World's Top 200 Universities in Engineering/Technology and Computer Sciences, Academic Ranking of World Universities by Shanghai Jiao Tong University 2015)</p>
<b>SCHOOL OF BUSINESS AND MANAGEMENT</b>	<p><b>KELLOGG-HKUST EMBA PROGRAM: NO. 2 IN THE WORLD</b> (Global EMBA Rankings, <i>Financial Times</i> 2015)</p> <p><b>FULL-TIME MBA PROGRAM: NO. 14 IN THE WORLD</b> (Global MBA Rankings, <i>Financial Times</i> 2015)</p> <p><b>NO. 10 IN ASIA</b> (Asia's Top 100 Universities in Social Sciences and Management, QS Asian University Rankings 2015)</p> <p><b>NO. 2 IN GREATER CHINA, NO. 26 IN THE WORLD</b> (World's Top 400 Universities in Social Sciences and Management, QS World University Rankings 2015)</p> <p><b>NO. 2 IN ASIA, NO. 18 IN THE WORLD</b> (World's Top 200 Universities in Business and Management Studies, QS World University Rankings by Subject 2015)</p> <p><b>NO. 1 IN GREATER CHINA, NO. 20 IN THE WORLD</b> (World's Top 200 Universities in Statistics and Operational Research, QS World University Rankings by Subject 2015)</p> <p><b>NO. 2 IN ASIA, NO. 17 IN THE WORLD</b> (World's Top 200 Universities in Accounting and Finance, QS World University Rankings by Subject 2015)</p> <p><b>NO. 1 IN GREATER CHINA, NO. 30 IN THE WORLD</b> (World's Top 200 Universities in Economics and Econometrics, QS World University Rankings by Subject 2015)</p> <p><b>NO. 1 IN ASIA, NO. 21 IN THE WORLD</b> (University of Texas at Dallas (UTD) Top 100 Business School Research Rankings 2015, based on research contributions in 2010-2014)</p> <p><b>NO. 1 IN ASIA, NO. 50 IN THE WORLD</b> (World's Top 200 Universities in Economics/Business, Academic Ranking of World Universities by Shanghai Jiao Tong University 2015)</p> <p><b>NO. 3 IN GREATER CHINA, NO. 72 IN THE WORLD</b> (World's Top 100 Universities in Social Sciences, Times Higher Education World University Rankings 2015/16)</p>
	<p><b>NO. 10 IN ASIA</b> (Asia's Top 100 Universities in Social Sciences and Management, QS Asian University Rankings 2015)</p> <p><b>NO. 2 IN HONG KONG, NO. 26 IN THE WORLD</b> (World's Top 400 Universities in Social Sciences and Management, QS World University Rankings 2015)</p> <p><b>NO. 37 IN ASIA</b> (Asia's Top 100 Universities in Arts and Humanities, QS Asian University Rankings 2015)</p> <p><b>NO. 76-100 IN THE WORLD</b> (World's Top 200 Universities in Social Science, Academic Ranking of World Universities by Shanghai Jiao Tong University 2015)</p> <p><b>NO. 3 IN GREATER CHINA, NO. 72 IN THE WORLD</b> (World's Top 100 Universities in Social Sciences, Times Higher Education World University Rankings 2015/16)</p>
<b>SCHOOL OF HUMANITIES AND SOCIAL SCIENCE</b>	<p><b>NO. 10 IN ASIA</b> (Asia's Top 100 Universities in Social Sciences and Management, QS Asian University Rankings 2015)</p> <p><b>NO. 2 IN HONG KONG, NO. 26 IN THE WORLD</b> (World's Top 400 Universities in Social Sciences and Management, QS World University Rankings 2015)</p> <p><b>NO. 37 IN ASIA</b> (Asia's Top 100 Universities in Arts and Humanities, QS Asian University Rankings 2015)</p> <p><b>NO. 76-100 IN THE WORLD</b> (World's Top 200 Universities in Social Science, Academic Ranking of World Universities by Shanghai Jiao Tong University 2015)</p> <p><b>NO. 3 IN GREATER CHINA, NO. 72 IN THE WORLD</b> (World's Top 100 Universities in Social Sciences, Times Higher Education World University Rankings 2015/16)</p>



# APPENDICES

## APPENDIX I: COURT, COUNCIL AND SENATE

As of 30 June 2015

### COURT MEMBERSHIP

	Chairman	Dr John C C Chan, GBS, JP
	Honorary Chairmen	Dr the Hon Sir Sze-Yuen Chung, GBM, JP Dr Vincent H S Lo, GBS, JP
<b>Ex-Officio Members</b>	Chairman of the Council	The Hon Andrew Liao Cheung-Sing, GBS, SC, JP
	Treasurer of the University	Mr John B Harrison
	President of the University	Prof Tony F Chan, JP
	Executive Vice-President & Provost	Prof Wei Shyy
	President of the Alumni Association	Mr Alvin Lam
	Chairman of the Staff Association	Mr Donny K M Siu
<b>Honorary Members</b>	The Hon Sir David Akers-Jones, GBM, JP Dr Robin Y H Chan, GBS, JP Mr Ronnie C Chan Dr Thomas T T Chen Dr Christopher Cheng, GBS, OBE, JP Dr Henry Cheng, GBS Dr Cheng Hon-Kwan, GBS, OBE, JP Mr Paul M F Cheng, JP Mr Linus W L Cheung, JP Dr Raymond K F Ch'ien, GBS, JP Dr Alice Chiu, BBS, JP Dr Stephen Chow, SBS, JP Dr Chow Yei Ching, GBS Dr Kenneth H Fang, GBS, JP Dr William K Fung, SBS, JP Mr Hu Fa-Kuang, GBS, CBE, JP Mr Herman S M Hu, BBS, JP Mr Lester G Huang, JP Dr Simon S O Ip, JP Dr Roger King	Mr Walter P S Kwok, JP Dr Lau Wah-Sum, GBS, JP The Hon Lau Wong-Fat, GBM, GBS, JP Dr the Hon Charles Y K Lee, GBM, GBS, JP Dr the Hon Lee Shau-Kee, GBM Dr the Hon Andrew K N Li, GBM Ms Kai-Yin Lo, SBS Mr Winston Yau-Lai Lo, SBS Dr the Hon Lui Che-Woo, GBM, GBS, MBE, JP Mr Tim Lui Tim-Leung, BBS, JP Dr Anthony Neoh, SC, JP Mr David Teng Pong The Hon Sin Chung-Kai, SBS, JP Mr Kenneth Ting Woo-Shou, SBS, JP Dr Lawrence T Wong Dr Wilfred Y W Wong, SBS, JP Ms Marjorie Yang, GBS, JP Dr Geoffrey M T Yeh, SBS, JP Dr Larry C K Yung
<b>Appointed Members</b>	Mr Bernard Auyang Dr Anissa Chan, MH, JP Dr Charles S C Chan, BBS, JP Dr Ian Chan Yau-Nam, MH Ms Ronna W Chao Mr Herbert S Cheng Jr Mr Donald Chia, JP Ms Lai-Yuen Chiang, JP Dr Paul M Y Chow, GBS, JP Mrs Susan Chow Mr Ian C W Fok, SBS, JP Mr David Fong Man-Hung, BBS, JP Mr Tim Freshwater Dr Patrick Y B Fung, JP Mrs Rossana Wang Gaw Dr Aron H Harilela, JP Ms Katherine Hung Siu-Lin Mr Hans Michael Jebesen, BBS	Mr David W H Lee Mr Herbert S K Lee Mr Marcus C W Lee Ms Margaret Lee Pui-Man Ms Rose Lee Wai-Mun, JP Dr Raymond Leung Siu-Hong Mr Sing-Cheong Liu, JP Mr Colin Lo Chor-Cheong Mr Raymond C Lo Mrs Noelle Lu Dr Ronald Lu Mr Francis Lui Yiu-Tung Dr Michael H H Mak, SBS, JP The Hon Abraham Shek Lai-Him, GBS, JP Mr James E Thompson, GBS Mr Wang Shi Mrs Christine Wong, SBS Mr Billy Yung Kwok-Kee

<b>Appointed Senate Representatives</b>	Prof Che-Ting Chan Prof Karl Herrup	Prof Charles W W Ng Prof Peiyuan Qian
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## COUNCIL MEMBERSHIP

	Chairman	The Hon Andrew Liao Cheung-Sing, GBS, SC, JP
	Treasurer of the University	Mr John B Harrison
	President of the University	Prof Tony F Chan, JP
	Executive Vice-President & Provost	Prof Wei Shyy
	Vice-President	Dr Eden Y Woon, JP, <i>Institutional Advancement</i>
	Deans	Prof Khaled Ben Letaief, <i>Dean of Engineering</i> Prof Nancy Y Ip, MH, JP, <i>Dean of Science</i>
<b>Academic Members of the Senate</b>	Prof Christopher Yu-Hang Chao	Prof Roger Shu-Kwan Cheng
<b>Chairman of Convocation</b>	Mr Alvin LAM	
<b>Elected Staff Member</b>	Mr Donny K M Siu	
<b>Elected Student Member</b>	Mr Avishek Kedia	
<b>Members Not Being Employees or Students of the University</b>	Mr Oscar V T Chow Ms Anita Fung Yuen-Mei, BBS Mrs Yvette Yeh Fung Ms Teresa Ko Yuk-Yin, JP Mr Quinn Y K Law, SBS, JP Mr Michael Lee Tze-Hau, JP The Hon Starry Lee Wai-King, JP	Ms Catherine K C Leung Mr Maximilian Y K Ma Mr Kyran Sze Mr Wong Tat-Sum Samuel Ms Woo Chun-En Jennifer Mr Michael Wu Wei-Kuo Mr Patrick Yeung Wai-Tim

## SENATE MEMBERSHIP

	Chairman	Prof Tony F Chan, President
	Executive Vice-President & Provost	Prof Wei Shyy
	Vice-Presidents	Mr Mark Hodgson, <i>Administration and Business</i> Dr Eden Y Woon, <i>Institutional Advancement</i> Prof Joseph Hun-Wei Lee, <i>Research and Graduate Studies</i>
<b>School of Science</b>	Prof Nancy Y Ip, <i>Dean</i> Prof Michael S Altman Prof Bradley A Foreman Prof Karl Herrup Prof Guochen Jia	Prof Zhenyang Lin Prof Jiannong Wang Prof Yang Wang Prof Jun Xia
<b>School of Engineering</b>	Prof Khaled Ben Letaief, <i>Dean</i> Prof Christopher Chao Prof Guohua Chen Prof Ravindra S Goonetilleke Prof Jangkyo Kim Prof Jun-Shang Kuang	Prof Christopher K Y Leung Prof Ross D Murch Prof Fugee Tsung Prof Qiang Yang Prof King-Lun Yeung



APPENDIX I: COURT, COUNCIL AND SENATE *(continued)*

<b>School of Business and Management</b>	Prof Jitendra V Singh, <i>Dean</i> Prof Kevin C W Chen Prof Sudipto Dasgupta Mr Sean Ferguson Prof Mingyi Hung Prof Siu-Fai Leung	Prof J T Li Prof Anaimalai V Muthukrishnan Prof Emily M Nason Prof James Y L Thong Prof Shaohui Zheng
<b>School of Humanities and Social Science</b>	Prof James Lee, <i>Dean</i> Prof Yongshun Cai	Prof Billy K L So Prof Kellee Tsai
<b>HKUST Fok Ying Tung Graduate School</b>	Prof Jingshen Wu, <i>Acting Dean</i>	
<b>Dean of Students</b>	Prof Kar-Yan Tam	
<b>XJTU-HKUST Joint School of Sustainable Development</b>	Prof Jingshen Wu, <i>Dean</i>	
<b>Interdisciplinary Programs Office</b>	Prof King-Lau Chow, <i>Director</i> Prof Jimmy Fung	Prof I-Ming Hsing
<b>Elected Members of the Academic Staff</b>	Prof Furong Gao	Prof Andrew Miller
<b>Co-opted Members of the Academic Staff</b>	Prof David K Banfield Prof Che-Ting Chan Prof Ravindra S Goonetilleke Prof Robert K M Ko	Prof Karl W K Tsim Prof Henry Tye Prof Min Yan
<b>Directors</b>	Mr Robert Brashear, <i>Academic Records and Registration</i> Ms Diana L H Chan, <i>Library</i>	Mrs Pandora Yuen, <i>Student Affairs</i>
<b>Student Representatives</b>	President of Students' Union (Vacant) Miss Jessica Cheuk-Ka Ng, <i>Undergraduate Representative</i> Mr Timothy Tin-Chung Chu, <i>Postgraduate Representative</i>	

## APPENDIX II: ATTENDANCE OF MEMBERS AT COUNCIL MEETINGS

Date of meeting	Total number of Council members	Number of members present	Percentage of members present
29 October 2014	26	23	89%
14 April 2015	27	25	93%

## APPENDIX III: ACADEMIC ADVISORY COMMITTEES

### School of Science Advisory Committee

**PROF MARVIN COHEN**

University Professor,  
Department of Physics,  
University of California, Berkeley, USA

**PROF ROGER E HOWE**

Professor,  
Department of Mathematics,  
Yale University, USA

**PROF ROBERTO KOLTER**

Professor,  
Department of Microbiology and  
Immunology,  
Harvard Medical School, USA

**PROF JEAN-MARIE LEHN**

Director of the Supramolecular  
Chemistry Laboratory,  
Institut de Science et d'Ingénierie  
Supramoléculaires (ISIS), Université Louis  
Pasteur, Strasbourg, France

**PROF PATRICK LEE**

William & Emma Rogers Professor of Physics,  
Division Head, Atomic, Biological,  
Condensed Matter and Physics,  
Massachusetts Institute of Technology,  
USA

**PROF GEORGE PAPANICOLAOU**

Robert Grimmett Professor in Mathematics,  
Department of Mathematics,  
Stanford University, USA

**PROF RANDY SCHEKMAN**

Howard Hughes Investigator and Professor  
of Cell and Developmental Biology,  
Department of Molecular and Cell Biology,  
University of California, Berkeley, USA

**PROF XIAODONG WANG**

Director and Investigator,  
National Institute of Biological Sciences,  
Beijing, China

**PROF WEITAO YANG**

Philip Handler Professor of Chemistry,  
Department of Chemistry,  
Duke University, USA

**PROF KING-WAI YAU**

Professor of Neuroscience,  
The Solomon H. Snyder Department of  
Neuroscience, Johns Hopkins University,  
USA

### School of Engineering Advisory Committee

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and Environmental Engineering,  
The University of Texas at Austin, USA

**PROF VINCENT POOR**

Dean of School of Engineering and  
Applied Science,  
Michael Henry Strater University,  
Professor of Electrical Engineering,  
Princeton University, USA

**PROF YINYU YE**

K. T. Li Chair Professor of  
Engineering Management Science &  
Engineering Director,  
Industrial Affiliates Program,  
Stanford University, USA

**IR DANIEL M. CHENG, MH, JP**

Managing Director,  
Dunwell Enviro-Tech (Holdings) Ltd

**IR DR ANDREW CHAN KA-CHING**

Chairman of Arup Group Trusts,  
Arup Group

**MR PINDAR WONG**

Chairman,  
VeriFi (HK) Limited

**MR VICTOR NG**

Managing Director,  
Micom Tech Limited

**MR STANLEY HUI HON-CHUNG**

Member of the Chinese People's  
Political Consultative Conference

**IR DR HON LO WAI KWOK**

Member of the Legislative Council,  
Hong Kong

### School of Business and Management Advisory Council

**DR WILLIAM FUNG KWOK LUN**

SBS, OBE, JP, Group Chairman,  
Li & Fung Limited

**PROF SALLY BLOUNT**

Dean,  
Kellogg School of Management,  
Northwestern University

**MR LOUIS MCDANIEL BOWEN**

Chairman and Chief Executive Officer,  
Asia Capital Management Limited and  
China Advisors Limited

**DATO' CHEAH CHENG HYE**

Chairman and Co-Chief  
Investment Officer,  
Value Partners Group Limited

**MR PHILIP CHEN**

GBS, Managing Director,  
Hang Lung Properties Limited

**MR ERIC FOK KAI SHAN**

Vice President, Fok Ying Tung Group

**DR FU YUNING**

Chairman,  
China Resources

**MS WENDY GAN**

Director,  
Strategy Limited

**MR AKHIL GUPTA**

2015 Advanced Leadership Fellow,  
Harvard University

**MR BENJAMIN HUNG PI CHENG**

JP, Executive Director and Chief Executive  
Officer, Standard Chartered Bank  
(Hong Kong) Limited

**DR HANS MICHAEL JEBSEN**

BBS, Chairman, Jebson & Co. Limited

**MR KEITH KERR**

JP, Chairman,  
The Development Studio Limited

**MS TERESA KO YUK YIN**

JP, China Chairman,  
Freshfields Bruckhaus Deringer

**MR MANOJ KOHLI**

Managing Director,  
Bharti Enterprises Limited



APPENDIX III: ACADEMIC ADVISORY COMMITTEES *(continued)***MR ANISH LALVANI**

Chairman,  
Euro Suisse International Limited

**DR JACK LAU**

Chief Marketing Officer,  
Hong Kong Applied Science and  
Technology Research Institute Company  
Limited

**MR MICHAEL LEE**

JP, Director,  
Oxer Limited

**MS NISA LEUNG**

Managing Partner,  
Qiming Venture Partners

**MR LIU SING CHEONG**

JP, Chairman,  
My Top Home (China) Holdings Limited

**DR VINCENT H S LO**

GBS, JP, Chairman,  
Shui On Holdings Limited

**MS CATHERINE LEUNG**

Managing Director,  
Serica Partners Asia Limited

**MRS NOELLE LU**

Executive Director,  
Greenhill Investments Limited

**MRS MARGARET LEUNG**

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Managing Director,  
Chong Hing Bank Limited

**MR ANTHONY NIGHTINGALE**

CMG, SBS, JP, Director,  
Jardine Matheson Holdings Limited

**DR KAREN REDDINGTON**

Regional President,  
FedEx Asia Pacific

**MR WEIJIAN SHAN**

Chairman and CEO,  
PAG

**MR SUKANTO TANOTO**

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Chief Executive Officer,  
Orient Overseas Container Line Limited

**DR ALLAN WONG CHI YUN**

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Group Chief Executive Officer,  
VTECH Holdings Limited

**MR DOUGLAS WOO CHUN KUEN**

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**DR ROSANNA WONG YICK MING**

DBE, JP, Executive Director,  
The Hong Kong Federation of Youth Groups

**MR THOMAS JEFFERSON WU**

Managing Director,  
Hopewell Holdings Limited

**MR ARTHUR YUEN KWOK HANG**

JP, Deputy Chief Executive,  
Hong Kong Monetary Authority

**MS JOY XU JING HUI**

Global Head of HR (Global CHRO),  
Sandoz, Novartis

**MRS BETTY YUEN SO SIU MAI**

Vice Chairman,  
CLP Power Hong Kong Limited

**MR SHENGMAN ZHANG**

Chairman,  
Asia Pacific, Citi

## School of Humanities and Social Science Advisory Committee

**PROF ANGELA KI CHE LEUNG**

Chair Professor of History,  
Joseph Needham-Philip Mao Professor in  
Chinese History, Science & Civilization,  
Hong Kong Institute for the Humanities  
and Social Sciences,  
The University of Hong Kong

**PROF LYDIA LIU**

Wu Tsun Tam Professor in the  
Humanities, Professor of Chinese and  
Comparative Literature,  
Columbia University

**PROF ANDREW WALDER**

Denise O'Leary and Kent Thiry Professor,  
Department of Sociology,  
Stanford University

**PROF KENNETH POMERANZ**

Department Chair,  
University Professor of Modern Chinese  
History and in the College,  
University of Chicago

**PROF YUNXIANG YAN**

Professor,  
Department of Anthropology, UCLA

## Interdisciplinary Programs Office Advisory Board

**PROF YUE CHEE YOON**

Associate Provost (Graduate Education),  
President's Office,  
Nanyang Technological University

**PROF ARUP K CHAKRABORTY**

Robert T Haslam Professor of Chemical  
Engineering, Professor of Chemistry,  
Professor of Physics, Professor of Biological  
Engineering, Director, Institute for Medical  
Engineering and Science,  
Massachusetts Institute of Technology  
(Chair of the Advisory Board of the HKUST  
Division of Biomedical Engineering)

**PROF DONALD R BLAKE**

Professor, Chemistry, School of  
Physical Sciences, Professor, Earth System  
Science, School of Physical Sciences  
University of California, Irvine  
(Chair of the Advisory Board of the  
HKUST Division of Environment)

## APPENDIX IV: FINANCE

### OVERVIEW

The consolidated statement of comprehensive income for the year 2014/15 shows a deficit after taxation of \$5 million (surplus of \$602 million for 2013/14). The deficit for 2014/15 primarily reflects the impact of the changes to the University's investment income which for 2014/15 was a loss of \$132 million compared with a gain of \$512 million for 2013/14. This masked the steady progress on underlying performance of the University. Removing the impact of investment income the performance of the University activities reflect a surplus for 2014/15 of \$127 million compared with \$90 million for 2013/14 as shown below.

	2014/15 \$million	2013/14 \$million	Variance
<b>Surplus from operation excluding investment income</b>	127	90	37
<b>Investment income</b>	(132)	512	(644)
<b>(Deficit) / Surplus for the year</b>	(5)	602	(607)

Investment returns can be volatile in the short term. The University's Finance Committee reviews the performance of the University's financial investments on a regular basis and believes that the investments are appropriately diversified to help mitigate market volatility over the medium to long term.

The financial health of the University can be judged by the level of its reserves. As at 30 June 2015, the University reserves amounted to \$5,401 million.

### CONSOLIDATED INCOME AND EXPENDITURE

The consolidated income for 2014/15 decreased to \$3,828 million (\$4,198 million for 2013/14). Excluding the above mentioned impact of investment income, the underlying consolidated income increased to \$3,960 million (\$3,686 million for 2013/14) primarily due to additional supplementary grants from the University Grants Committee, and an increase in tuition fee income.

Consolidated expenditure for the year increased to \$3,833 million (\$3,604 million for 2013/14) mainly attributable to the general pay adjustment on salaries, additional staffing and other resources for supporting the higher student enrollment population and increased spending on research activities.

### SEGMENT RESULTS

Segment results are also distorted due to the impact of the movements in investment income year on year. Commentary on the underlying surplus/deficit is as follows:

#### University Grants Committee ("UGC") Block Grant-funded Activities

This operating segment showed a break-even position (\$126 million surplus for 2013/14). After excluding the negative impact

of investment income of \$29 million (positive \$115 million for 2013/14), the underlying result was a surplus of \$29 million (\$11 million surplus for 2013/14). This was due to increases in the operating expenses being less than the higher Block Grant/ supplementary allocation from UGC.

#### Self-Financing Continuing Professional Education Programs ("CPEP"), Research and Other Activities

The operation of self-financing CPEP activities and research activities, without allocation of investment income, showed a 56% increase in surplus to \$119 million (\$76 million for 2013/14) mainly driven by the offering of new programs, higher student enrollment and higher tuition fees, as well as the surplus from completion of commercial research contracts.

Other Activities showed a deficit of \$35 million (surplus of \$128 million for 2013/14). After excluding the negative impact of investment income of \$32 million (positive \$126 million for 2013/14), the underlying performance of Other Activities was a deficit of \$3 million (surplus of \$2 million for 2013/14).

#### Donations and Related Activities

After completion of the 6<sup>th</sup> Matching Grant Scheme, recognized donations income stayed at a steady level. While this segment showed a deficit of \$89 million (surplus of \$272 million for 2013/14), after excluding the negative impact of investment income of \$71 million (positive \$271 million for 2013/14), the underlying result was a deficit of \$18 million (surplus of \$1 million for 2013/14). This was mainly caused by timing differences between recognition of income and expenditure incurred.

### CAPITAL EXPENDITURE

The completion of the Research and Academic Building has enhanced the University's teaching and research facilities. The Conference Lodge, a new on-campus hospitality facility, also largely completed during the year, caters for the accommodation needs of visitors and overseas students for various academic and research activities and events. Other in-progress construction projects include new on-site student residences, an additional 520 off-campus student hostel rooms in Tseung Kwan O and the Multi-Purpose Auditorium.

As at 30 June 2015, the total commitments for approved construction projects and other capital items amounted to \$2,087 million: \$103 million of which will be funded by deferred income on hand, \$1,054 million from existing reserves, \$240 million by approved but yet to be received UGC grants, \$100 million by pledged donations, and \$590 million from UGC grants under application.

### OUTLOOK

Taking the opportunity of the 25<sup>th</sup> Anniversary of the University in the coming year, the University will be putting concerted efforts into fund-raising to secure further donations. With the recent unstable environment in the investment market, the University will remain cautious in its financial management and ensure it maintains adequate reserves for its future plans and goals.



# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the Year ended 30 June 2015

	2015 \$million	2014 \$million
<b>Income</b>		
Government Subventions and Grants	2,241	2,081
Tuition, Programmes and Other Fees	1,030	948
Interest and Investment Income	(96)	562
Donations and Benefactions	86	84
Auxiliary Services and Other Income	347	324
Transfers from Capital Reserves	220	199
	<b>3,828</b>	<b>4,198</b>
<b>Expenditure</b>		
Learning and Research		
Instruction and Research	2,447	2,257
Library	104	99
Central Computing Facilities	127	111
Other Academic Services	97	88
	<b>2,775</b>	<b>2,555</b>
<b>Institutional Support</b>		
Management and General	241	215
Premises and Related Expenses	548	587
Student and General Education Services	237	217
Other Activities	32	30
	<b>1,058</b>	<b>1,049</b>
	<b>3,833</b>	<b>3,604</b>
<b>(Deficit) / Surplus from operation for the year</b>	<b>(5)</b>	<b>594</b>
Share of Result of an Associate	1	8
Share of Result of a Joint Venture	(1)	0
<b>(Deficit) / Surplus for the year before taxation</b>	<b>(5)</b>	<b>602</b>
<b>Taxation</b>	<b>0</b>	<b>0</b>
<b>(Deficit) / Surplus for the year after taxation</b>	<b>(5)</b>	<b>602</b>
<b>Other comprehensive income / (loss) for the year</b>		
Items that may be reclassified subsequently to income and expenditure:		
Unrealised gain on Available-for-Sale Financial Assets	3	1
Transfer from Capital Reserves to consolidated statement of comprehensive income	(220)	(199)
Exchange differences arising from retranslation	1	(1)
	<b>(216)</b>	<b>(199)</b>
<b>Total comprehensive (loss) / income for the year</b>	<b>(221)</b>	<b>403</b>
<b>Transfers to / (from):</b>		
Capital Reserves	(219)	(201)
University Grants Committee ("UGC") Block Grant Reserves	0	126
Donations and Matching Grants Reserves	(88)	273
Other Reserves	83	204
Investment Revaluation Reserve	3	1
	<b>(221)</b>	<b>403</b>

# CONSOLIDATED BALANCE SHEET

As at 30 June 2015

	2015 \$million	2014 \$million
<b>Non-Current Assets</b>		
Property, Plant and Equipment	4,813	4,551
Intangible Assets	6	21
Held-to-Maturity Financial Assets	71	108
Available-for-Sale Financial Assets	22	19
Financial Assets at Fair Value through Profit or Loss	4,171	4,295
Interest in an Associate	64	66
Interest in a Joint Venture	(1)	0
	9,146	9,060
<b>Current Assets</b>		
Held-to-Maturity Financial Assets	37	5
Inventories	0	1
Accounts Receivable and Prepayments	202	257
Bank Deposits with Original Maturity over Three Months	1,661	1,375
Cash and Cash Equivalents	687	787
	2,587	2,425
<b>Current Liabilities</b>		
Accounts Payable and Accruals	660	547
Provision for Staff Benefits	163	154
Deferred Income	659	604
Tax Payable	1	2
	1,483	1,307
<b>Net Current Assets</b>	1,104	1,118
<b>Total Assets Less Current Liabilities</b>	10,250	10,178
<b>Non-Current Liabilities</b>		
Provision for Staff Benefits	22	22
<b>NET ASSETS</b>	10,228	10,156
<b>Capital Reserves</b>	4,819	4,572
<b>UGC Block Grant Reserves</b>	1,257	1,255
<b>Donations and Matching Grants Reserves</b>	2,568	2,811
<b>Other Reserves</b>	1,576	1,513
<b>Investment Revaluation Reserve</b>	8	5
<b>TOTAL FUNDS</b>	10,228	10,156





PHOTO CREDIT: Chun-fai Kwok









香港科技大學

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