

Science Faculty e-Newsletter

Our First-ever **Science Career Fair**



The Science Career Fair, conveniently located at the Podium of the Science Centre

The first ever Science Career Fair was held on 7-8 April 2016 at the Science Centre Podium. Throughout the two days, around 30 companies from a range of fields showcased their company profiles, products and positions offered, attracting nearly 500 students to explore their career opportunities and plan ahead for their career path.

A series of pre-fair talks, panel discussions and presentations were held leading up to the event. Highlights included talks given by school principals; in-service teachers; leading environmental specialists; entrepreneurs; civil servants and financial experts. Students were able to engage in conversations and open up their minds about the different industries that they weren't aware of were science-related.

Aside from on-site exhibitions, students also had the opportunity to visit two companies at their workplace, to get a feel of what life in a specific industry would be like. Two sets of students were lucky enough to have made a trip to CASH Algo Finance Group Limited and BGI Hong Kong at the Hong Kong Science and Technology Parks and Tai Po Industrial Estate respectively. This experience was truly valuable to those who are deeply interested in working in the two fields!

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Off-site Company Tour

To better prepare students' job search and gear up, the Faculty also organised series of events leading up to the Fair, including English workshops, recruitment talks and interview preparation sharings. Thanks to our partnering units including the alumni associations, ELTU and the Pi-Centre.

A lucky draw was also held during the Fair, and a total of 30 winners took home amazing prizes such as VR (virtual reality) Cardboard Headset and Book Coupons! Prizes were distributed in late April.



Students getting in-depth information about job openings and career paths about working in chemical laboratories.



A group of students visited CASH Algo Finance Group Limited's office at the Hong Kong Science and Technology Parks, and were greeted by numerous welcoming staff, who delivered a presentation and a tour around the workplace.



Representatives from the Customs and Excise Department came to share with students about their work and the routes towards being employed by the HKSAR government.

Congratulations to students who successfully won job positions and internship places in their desired company following the Fair.

HKSTP Career Expo at Science Park 2016



CUHK Faculty of Science holding a Booth at HKSTP Career Expo at Science Park 2016

On a warm, sunny Saturday morning of 5 March 2016, the Faculty joined "Career Expo at Science Park 2016", organized by the Hong Kong Science and Technology Parks Corporation as an industry partner. The event attracted over 5,400 visitors, including students, graduates, and job seekers, and a number of visitors visited the Faculty's booth throughout the day.

The HKSTP Career Expo provided a brilliant opportunity for visitors to find out more about the postgraduate study opportunities offered by CUHK Science, and also for visitors to understand more about the Faculty's research fields and funding sources to support their study.

12th Lau Oi Wah Memorial Science Lecture Series



From left to right: Professor Tony Sit, Professor Wu Yilin, Associate Dean (Research) Professor Xie Zuowei, Chairman of Physics Department Professor Dickon Ng, and Professor Gavin Tsui.

Professor Tony Sit then gave us an insider's view on the world of statistical finance with his presentation titled: "Finding Gold Needles in Stacks (of data)". After a short break, the exquisite movements of bacteria were showcased in Professor Wu Yilin's lecture on "Bacteria in Motion".

All three talks were intriguing and sparked the participating students' interest in science, and the day ended following a series of questions posed by participating students and their teachers and parents.

The 12th Lau Oi Wah Memorial Science Lecture Series had been successfully held on 27 Feb 2016. Around 200 secondary school students gathered at Cheng Yu Tung Building LT1 to hear from three of our professors.

The day kicked off with Professor Gavin Tsui's talk on "The Amazing Molecules of the World", taking the audience on a journey through the history of organic chemistry and its implications on drug development.



The audience was captured by the series of animations and videos which illustrate the exquisite movements made by bacteria under the laboratory conditions.

Faculty Exemplary Teaching Award cum Student Awards Ceremony 2016

The Faculty Exemplary Teaching Award cum Student Awards Presentation Ceremony took place at YIA LT1 on 16 Jan 2016.

This day glorified attainment of all staff and students by recognising their outstanding academic excellence in the past year. Awards were presented to staff who successfully delivered quality education to students; students who managed to attained high standards and named on the 2014/15 Dean's List; and students who performed well in large-scale international competitions, including high-flying secondary school students who had outstanding performance at the 2015 IJSO Competition, after being coached and advised by the Faculty.



Aside from students on the Dean's List, Dean Wong also presented admission scholarships to 2015/16 new students, based on the encouraging results from their HKDSE examinations.



From left to right: Professor Fong Wing Ping, Professor Chan Ting Fung, Professor Chan Man Nin, Professor Wong Nai Ching Henry (Dean of Science), Professor Lee Hung Kay, Dr Fong Wing Chung, and Dr Tong Shiu Sing.

Aside from certificates, book coupons were also included as a gift to the students to acknowledge their efforts, as well as encouraging them to undertake further challenges and to support them in their studies and research.

Congratulations!



CUHK Programme Exploration Day

CUHK's first Programme Exploration Day for JUPAS applicants was held on 16 May 2016. This day saw 200 students visiting the Faculty and joining in on laboratory tours and consultation sessions organised by individual programmes.

The day was a fruitful one and students benefitted from the diversity of activities also held by other Faculties and Colleges.

A couple of students shared, with our prospective students, what being a student at CUHK is like. The two students took the chance to introduce their major and their typical day from their own perspective, which helped to give a more realistic view of the Faculty and the university.



A Science student introducing his life at CUHK, as well as covering topics such as General Education courses, participating in extracurricular activities (e.g. student societies) and his life living in the hostels on campus.

University-life sharing sessions were also delivered to prospective students to give them a more realistic and personal view of what being a CUHK student is liike. At the end of the day, all participating students, went home having a better knowledge about the uniqueness studying science at the Faculty of Science of CUHK.



Faculty Research Day 2016

The Science Faculty Research Day was successfully held on a rainy day, 16 June 2016. The theme of the day was Mathematical Sciences, and over 70 Faculty staff and students joined the event to get to know more about the field. On the day, 3 distinguished speakers from our own Faculty: Professor Lui Lok Ming Ronald; Professor Gu Ming Gao; and Professor Wong Hoi Ying gave three exceptional lectures about their recent research, and fundamentally changed the audience's perception about the world of mathematical sciences.



Over 60 Faculty staff and students gathered early in the morning to listen to a series of inspiring lectures delivered by our own Faculty researchers.

The rain definitely did not put off our Faculty members' interest and passion to hear from the researchers. First, Professor Lui took us on a journey through the mathematical applications on medical imaging, and shared with us his findings of mapping specific features onto a standard sphere for easy comparison - a crucial factor in the world of medical examinations.

Professor Gu then described the algorithms behind DeepMind's AlphaGo construction and explained statistical learning's importance in our lives, with a hint towards the future.

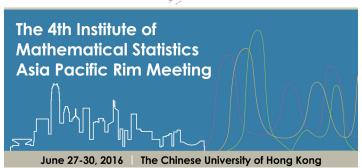
Finally, Professor Wong explained the mechanisms behind risk management and the role of big data in its development; and outlined its application on the stock market. Overall, this year's Research Day was fruitful and has debunked the myths about the world of mathematics.



The 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting







The Department of Statistics hosted The 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting from 27-30 June 2016 at Yasumoto International Academic Park (YIA). The event provided a platform for scientific communications and collaborations within the research community in Asia Pacific!

The Meeting featured leactures presented by worldrenowned scientists in statistics and probability as well as leading specialists in the area. There was also

opportunity for participating parties to share their recent research through paper and poster presentations.

Overall, it was a fruitful meeting and it certainly enhanced participants' breadth of knowledge in the field.





2016 JUPAS Interviews for Broad-based Science

The 2016 JUPAS Admission Interviews were held on 5-6 May 2016 at the Cheng Yu Tung Building. The event went smoothly and over 600 S6 students were interviewed by more than 40 professors. The Faculty would like to express sincere gratitude to all professors who took time to meet with our potential students.



School of Life Sciences organised Inter-University Postgraduate Symposium in Biochemical Sciences



Participants were eager to see poster presentations in the open area.

The 2016 Hong Kong Inter-University Postgraduate Symposium in Biochemical Sciences was held at Lee Shau Kee Building on 11 June 2016. This Symposium was supported by the Research Grants Council Postgraduate Students Conference/Seminar Grants, and was first initiated in 2010.

This year, the Symposium was jointly organized by our School of Life Sciences, the Division of Life Science of the Hong Kong University of Science and Technology, and the School of Biomedical Sciences of the University of Hong Kong, with an aim to promote inter-institutional and inter-disciplinary communications among postgraduate students and faculty members in the field of Biochemical Sciences. Professor Gong Xiaohua from UC Berkeley and Professor Law Ping Yee from the University of Minnesota were keynote speakers of the event.

Among the 101 abstracts received, 12 of them were selected for stage presentations while the rest were presented as posters. Mr. Chen Zhefan Stephen (from the Biochemistry Programme) was awarded a Stage Presentation Prize, and Mr. Liu Pak Lun Baggio (from the Cell and Molecular Biology Programme) was awarded a Poster Presentation Prize.



Shining Beuty of Mathematics: Sculptures Display

The Science Faculty Centre for Promoting Science Education joined hands with students of the Department of Mathematics to create three sculptures which shows

the artistic aspect of mathematics.

The sculptures were created through mathematical modelling and weeks of handson work, and resulted in three stunning works of arts and science.

These sculptures were displayed just outside the Science Centre from 21 to 30 June, and had certainly caught the attention of those passing by. What a great action to promote the beauty of mathematics to the public!









Edwin Lo (left) and Grace But (right) were crowned Champion and 1st runner-up at the CUHK Research Poster Exhibition.

Life Sciences PhD Students awarded for research excellence

Molecular Biotechnology PhD student Lo, Chun Yeung (Edwin) has been crowned Champion, whilst Food and Nutritional Sciences student But Wing Chiu (Grace) named 1st Runner-up for "Best Poster Presentation" at the CUHK Research Poster Exhibition on 12 May 2016.

Organised by the University Library System, the exhibition embraces research and aims to share knowledge gained by rising academicians and students.



Professor Tong Shiu Sing credited by General Education Unit

General Education has been a core value of education at CUHK since its establishment. The formulation of general education courses aims to broaden intellectual perspectives of students. In recent years, the General Education Unit has begun credit teaching staff to recognise their efforts and dedications to promoting non-major-related knowledge to our students. Each year, the General Education Unit judging panel reviews the quality and content of the teaching for the past 2 years, and presents the Exemplary Teaching Award in General Education to

a few outstanding teaching staff of the university.

This Year, Professor Tong Shiu Sing from the Department of Physics was presented the Exemplary Teaching Award by Pro-Vice-Chancellor (Education) Professor Poon Wai Yin, for his devotion in popularising Physics knowledge with his intriguing lectures in astronomy, whilst inspiring students not to take knowledge for granted, and stay humble, thus prompting students to think critically and independently.

We are sure that Professor Tong's ideals of education can be spread, and benefit more students in the coming years. Congratulations!



Professor Tong Shiu Shing (left) receives award from Pro-Vice Chancellor (Education) Professor Poon Wai Yin.



Professor Wong Po Keung receives award in Natural Sciences

Professor Wong Po Keung from the Environmental Science Programme, School of Life Sciences, has received the second-class award in the Natural Sciences from the Ministry of Education Higher Education Outstanding Scientific Research Output Awards 2016.

Professor Wong's research on the "Mechanisms and Applications of the Newly-developed, Highly-efficient Photocatalysts on the Degradation of Toxic Organic Matter" (新型高效光催化劑在毒性有機物降解的應用 及其機理研究).



2016 at the Hong Kong Awards Ceremony at CityU.



Professor Edwin Chan and Professor Jacky Ngo's team gives hope for rare diseases



Professor Edwin Chan (left) and Professor Jacky Ngo shows

Life Sciences Professors Edwin Chan and Jacky Ngo's interdisciplinary research team has been studying a group of rare neurological disorders collectively termed as polyglutamine (polyQ) diseases, including Huntington's Disease (HD) and several types of spinocerebellar ataxias (SCAs), and has recently discovered a drug candidate P3, a 13-amino acid peptide, which can neutralize toxic RNA and rescue neurodegeneration.

Professor Chan's team has now applied for a United States patent to protect this technology, as the drug has the potential

to be developed into therapeutic usage giving hope to individuals who suffer from rare neuronal diseases. See this research in more details here: https://youtu.be/UlixLPEFJhM



Professor Shao Qiman's research project receives State Natural Science Award 2015

Professor Shao Qiman, Chairman of the Department of Statistics, has won the second-class State Natural Science Award (SNSA) 2015. He and his partner, HKUST Mathematics Professor Jing Bingyi, researched on "Selfnormalised Limit Theory & Stein's Method", which relates to the field of probability and statistics, and their findings have been widely used in high dimensional statistical inference and in controlling the false discovery rate. The discovery may also be applied to big data, playing an important role in statistical analysis.

The SNSA is China's most prestigious award in the field of natural science, and is also one of the five categories of awards under the State Science and Technology Awards launched by the State Council.



Professor Shao Qiman (right) and Professor Jing Bingyi received the SNSA in Beijing. (Photo from China Daily)



Professor Chen Zhenyu's research selected by ACS

Professor Chen Zhenyu from the Food and Nutritional Sciences Programme, School of Life Sciences, has recently been selected as the recipient of the "Advancement of Application of Agricultural and Food Chemistry Award" by the American Chemistry Society's Agricultural and Food Chemistry Division (AGFD).



Professor Chen will receive a monetary award, as well as a plaque and sponsored air-travel to the US to attend the prize presentation at the AGFD Banquet this August. He shall also present his research at the AGFD Symposium to provide an overview of his findings to participating ACS members.



CUHK Chemistry alumni and ex-lecturer awarded Order of Canada

Professor Sham Tsun Kong has been named an Officer of the Order of Canada on 30 June 2016. Professor Sham was a CUHK student from 1967 - 1971, where he read Chemistry for his first degree. Upon graduation, he furthered his studies at the University of Western Ontario and returned to CUHK from 1985 to 1987, as a lecturer, where he spent time sharing his knowledge with his fellow students.

Professor Sham is now a Tier I Canada Research Chair; a Fellow of the Royal Society of Canada; and recipient of the prestigious John C. Polanyi Prize of the Canadian Society for Chemistry. He has over 440 peer-reviewed papers and more than 8,000 citations; more than 600 citations last year alone to his credit.

The Order of Canada is one of Canada's highest civilian honours. It recognises outstanding achievements of an individual's dedication and service to the community and the country.



Professor T. K. Sham, alumnus from the Class of 1971 (photo from Western University News Files)



Faculty Announcements

CUHK is now LIGO's partner institute!



The CUHK Faculty of Science is proud to be one of the collaborating members of the Laser Interferometer Gravitational-wave Observatory (LIGO), among 1,000 scientists around the world. CUHK is the first and only member in the scientific collaboration in Hong Kong to this date.

Assistant Professor Tjonnie Li, Department of Physics, has been working on LIGO's research projects prior to joining CUHK, and shall continue doing so be leading the gravitational-wave group at the university.

The partnership between CUHK and LIGO shall provide Faculty members and students with multiple opportunities to work on gravitational physics, and shall prove to be a link between the Faculty to a network of scientists. The department will also gain access to data from the LIGO's collaborators, and will be able to contribute towards the project through knowledge exchange and other research activities.

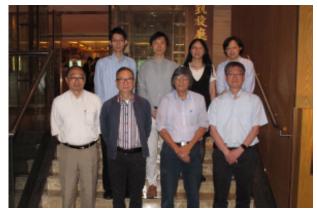




Professor Tjonnie Li (right) shares the pride of being LIGO's partner with Professor Dickon Ng, Chairman of Physics Department.

Farewell to our fellow Faculty members

As the year comes to a close, we shall bid farewell to a number of staff who shall retire after the end of July. The 5 retiring Faculty members are:



A few retiring members of staff joined the Deanery team for lunch on 14 June 2016.

Unit Member

Department of Chemistry Professor Tony K.M. Shing
School of Life Sciences Dr Chung Kwok Cheong
School of Life Sciences Professor Kwan Hoi Shan
School of Life Sciences Professor Wong Chong Kim
School of Life Sciences Ms Wong Shui Ching

A farewell luncheon was held on 14 June 2016 to celebrate their years of hard work and service, and to express our greatest gratitude for their utmost devotion to the Faculty. They will now move onto a new chapter of their lives, and the Faculty wishes them a fruitful and enjoyable retirement.

CALL FOR APPLICATIONS



Nano and Advanced Materials Institute Limited (NAMI) Research Support

Year-round Application in batches

Details: NAMI Website



Quality Education Fund

Year-round Application

Details: **QEF Website**



Year In, Year Out Enjoy a Wonderful Summer!

The 2015/16 academic year is coming to a close. Examinations are done, and the summer has begun. Some students will opt for the summer semester, whilst others will take on internships or take holidays. Meanwhile, professors eagerly continue their research and attend conferences as well as earning themselves a well-deserved holiday.

The past year was undoubtedly fruitful, but it would have a different without your participation. We look forward to your continuous support in the next academic year. Enjoy a great summer holiday!

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