



Science Faculty e-Newsletter

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BRING YOU AND YOUR

FAMILY **GOOD HEALTH**

AND **GOOD LUCK.**

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Faculty Exemplary Teaching Award *cum* Dean's Honours List Presentation Ceremony

Bright smiles and a strong sense of accomplishment were prevalent at the Faculty Exemplary Teaching Award 2014 and Dean's Honours List 2013/14 Presentation Ceremony, held on 7 February 2015 at LT1, Yasumoto International Academic Park. This year, the Faculty convened to honour seven teachers for demonstrating their dedication and achievements in teaching and learning, including:

- Professor Jerome Ho-lam Hui (Life Sciences)
- Professor Lau Kwok-fai (Life Sciences)
- Professor Chan Man-chor (Chemistry)
- Professor Ronald Lok-ming Lui (Mathematics)
- Professor Emily Shuk-chi Ching (Physics)
- Professor Tony Sit (Statistics)
- Professor Amos Pui-kuen Tai (Earth System Science)

A total of 227 students of the Faculty earned their way into the Dean's Honours List, a recognition of their academic merit and also encouragement for them to continue striving for excellence in their studies. Besides being congratulated by Faculty Dean Professor Henry Nai-ching Wong, teachers of each major programme were present to celebrate these students' fine achievements.

The Faculty also took the occasion to congratulate the awardees and mentors of two international competitions. Trained by nine mentors hailing from three School/Departments of the Faculty, six local secondary school students won a total of three gold medals and three silver medals at the 11th International Junior Science Olympiad 2014 (IJSO). The latest instalment was held between 2-11 December 2014 in Mendoza, Argentina, where some of the world's bright minds under 15 years of age gathered to test their abilities

in problem solving, critical thinking, and experimentation, with the aim of promoting interest in science among students.

In addition to students and mentors of the 11th IJSO, the Faculty also honoured the achievements of five Science Faculty students on their Gold Medal win at the International Genetically Engineered Machine 2014 Competition (iGEM). The awardees were as follows:

- Mr. Loo Fong-chuen (Biochemistry)
- Mr. Leung King-pong (Biology)
- Miss Chang Chih-chieh (Cell and Molecular Biology)
- Mr. Seak Chi-u (Cell and Molecular Biology)
- Mr. Ho Cho-tai (Mathematics)

Congratulations once again to all the students and teachers who were recognized for their achievements at the ceremony.

More Photos

Fine Results at Research Assessment Exercise 2014

Conducted every seven years by the University Grants Committee (UGC), the Research Assessment Exercise (RAE) 2014 results were announced in January 2015. Research endeavours of UGC-funded institutions were judged by panels of international experts of their overall quality profiles in terms of the quality of research outputs, research grants, and esteem measures.

The Science Faculty has reviewed the latest results, and is pleased with the fine level of research being conducted within our Faculty. In particular, for instance, the Faculty is happy to share that the following units had obtained impressive proportions of their research activity rated as being “excellent” (for external competitive peer-reviewed research grants and esteem measures)/“internationally excellent” (for research outputs) or above:

- Life Sciences - 44%
- Chemistry - 66%
- Mathematics & Statistics - 73%
- Physics - 73%

Also taking into account activity deemed as “very good” or with “international standing”, the units have achieved the following results:

- Life Sciences - 80%
- Chemistry - 94%
- Mathematics & Statistics - 93%
- Physics - 95%

The Faculty understands that these fine results are the fruits of the hard work and dedication of our teachers, staff, and research personnel, and we shall continue to support and foster a culture of innovation and research.

Humanitarian Qualities the Cornerstone of Excellence in Scientific Pursuits

On 9 January 2015, the Science Faculty was honoured to host a public lecture together with the Department of Mathematics and the Institute of Mathematical Sciences, delivered by Professor Yau Shing-tung, Distinguished Professor-at-Large and Director of the Institute of Mathematical Sciences at CUHK. Held in LTB6, Ho Tim Building, the talk “Science and Humanity” attracted a full house of audience eager to hear Professor Yau share how the humanities and science are mutually important.

Drawing from his observations of the development of the sciences and the accumulation of scientific knowledge over the course of history, Professor Yau demonstrated that the proliferation of scientific ideas in the West can be largely attributed to the use of axioms and philosophy as the foundation of the thinkings and ideas. An interesting comparison was made between a poem by famous Chinese poet Su Shi (蘇軾) and Einstein’s general relativity, where both had spent a considerable amount of time and energy into a conundrum that their fellow poet or physicist would have given up on long ago. It was the perseverance, passion, and keen insight of Su Shi and Albert Einstein that led them to ultimately

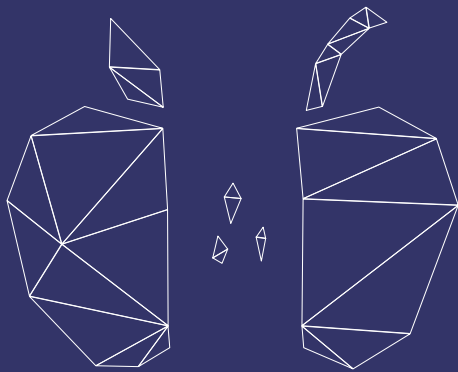
produce magnificent work.

Professor Yau’s lecture elicited an enthusiastic response from the audience. This interesting and insightful lecture, Professor Yau hoped, would inspire budding scientists to not only concentrate on developing a thirst for scientific knowledge, but also nurture their interest in the arts and humanities.

To review the lecture online, please [click here](#) (available in Cantonese only).



Members of the audience came from all walks of life, including a number of humanities students eager to learn from Professor Yau’s sharing.



EXCELLENCE IN RESEARCH

Faculty Incentive Fund for Strategic Development and New Initiatives in Research

The Science Faculty has received funding from the University for a period of three years to establish initiatives, beginning with HK\$7.8M in 2014/15. Five different schemes have been devised by the Faculty to further enhance research performance, with the aim of helping the Faculty of Science reach “world-class” faculty status.

Support would be provided in several areas, including major grant projects, annual external competitive grants, organizing international conferences, receiving incoming research exchange students, and recruiting promising PhD students. It is hoped that through the five schemes, the Faculty would give our teachers and students a boost in their research endeavours while facilitating a fruitful exchange of innovative ideas.

The Schemes have been announced to all academic units of the Faculty in January 2015, and the Schemes are as follows:

- Scheme I** Funding for Area of Excellence (AoE), Collaborative Research Fund (CRF), and Theme-based Research Scheme (TRS) projects
- Scheme II** Research incentive to encourage staff to apply for RGC General Research Fund (GRF) or Early Career Scheme (ECS)
- Scheme III** Support for Organizing International Conferences
- Scheme IV** Support for Hong Kong PhD Fellowship Scheme
- Scheme V** Matching for CUHK Summer Research Placement Programme for Non-local Students

For enquiries, please contact the Science Faculty Office.

Welcome On Board

In Term 2 of 2014/15, the Science Faculty has welcomed three new faculty members to our family:

☞ Professor Kang Byung-ho
Associate Professor, Life Sciences

Professor Kang aims to understand the molecular mechanisms underlying the biogenesis of membrane-bound organelles in eukaryotes. To do so, he employs a range of microscopy techniques, especially electron tomography that reveals sub-cellular structures in 3D at nanometer-level resolutions.

☞ Professor Luo Haiwei
Assistant Professor, Life Sciences

Professor Luo's work focuses on microbial evolution and ecology. He makes use of genomic and bioinformatic methods to explore the genetic diversity in ocean bacteria and archaea.

☞ Professor Gavin Chit Tsui
Assistant Professor, Chemistry

Utilizing the power of homogeneous catalysis, Professor Tsui strives to develop highly efficient and selective methods for synthesizing pharmaceutical and functional molecules.



Student Achievement

On 31 January 2015, Year 1 student Miss Cheung Wan-ching (Science Programme) was bestowed the 2014-2015 Beacon Uprising Outstanding Student Award by Beacon College for excellence in academics. For her continued pursuit of self-betterment and proven academic achievement, the Beacon College has awarded a scholarship to Miss Cheung.

Hearty congratulations on her fine achievement!

Recent External Grants Obtained

In the recent months, a number of competitive external research grants have been obtained by members of the Science Faculty, including the following:

- ☞ UGC Funding Scheme for Teaching and Learning Related Proposals
 - Establishment of New Paradigm with Feasible Models in Teaching and Learning Science for Problem Solving and Future Development
Principal Investigator (PI): Professor Poon Wai-yin (Statistics)
Funded Amount: HK\$10.0M
- ☞ The French National Research Agency (ANR)/Research Grants Council (RGC) Joint Research Scheme 2014/15
 - Refining the bioactivity of P42, a hit therapeutic peptide, and developing a combined therapeutic peptide approach for treating Huntington's Disease
PI: Professor Edwin Ho-yin Chan (Life Sciences)
Funded Amount: HK\$2.5M
- ☞ CRF 2014/15
 - Marine Genomics: Crustacean evolution and aquaculture
PI: Professor Chu Ka-hou (Life Sciences)
Funded Amount: HK\$7.2M
 - EXPO and Autophagosome in Plants
PI: Professor Jiang Liwen (Life Sciences)
Funded Amount: HK\$8.4M
 - Non-planar Polycyclic Arenes: From Molecules to Materials
PI: Professor Miao Qian (Chemistry)
Funded Amount: HK\$6.3M
 - A Tier-2 Computing Center for Fundamental Physics
PI: Professor Chu Ming-chung (Physics)
Funded Amount: HK\$4.0M
- ☞ National Natural Science Foundation of China (NSFC)/RGC Joint Research Scheme 2014/15
 - Synthesis and Enantioselective Transformation of Carborane-fused Cyclobutenes and Alkenylcarboranes
PI: Professor Xie Zuowei (Chemistry)
Funded Amount: HK\$1.1M
 - On Mathematical Theory of the Compressible Fluid-dynamical Equations
PI: Professor Xin Zhouping (Mathematics)
Funded Amount: HK\$1.1M
 - Metal/Oxide Nanostructures as Plasmonic Catalysts for the Synthesis of Organic Molecules
PI: Professor Wang Jianfang (Physics)
Funded Amount: HK\$1.1M



UPCOMING DATES AND EVENTS

Monthly Meetings with Dean of Science

Professor Henry Nai-ching Wong, Dean of Science, has arranged monthly staff meetings in an informal setting. Sessions in the first quarter of 2015 are as follows:

Date and Time

27 February (Friday), 3:30pm - 4:30pm

26 March (Thursday), 3:30pm - 4:30pm

24 April (Friday), 3:30pm - 4:30pm

Venue

SC25, Charles Kao Building

CN Yang Reading Room (SC126)

CN Yang Reading Room (SC126)

The 11th Lau Oi Wah Memorial Science Lecture Series

The captioned event will be held from 9:30am to 12:30pm on Saturday, 7 March 2015. For details and registration, please visit the [event website](#).

Career Expo at Hong Kong Science Park

This year, the Faculty of Science will be co-organizing the captioned event, sharing our programmes available for undergraduate and postgraduate studies with prospective students. The event will be held on Saturday, 14 March 2015. Please stay tuned to the [official website](#) for further details.

Invitations for Application

Health and Medical Research Fund (HMRF) ([details](#))

Deadline: 23 February 2015 (Monday)

2015 National Natural Science Foundation of China (NSFC) ([details](#))

Deadline: 6 March 2015 (Friday) at 6:00pm

Croucher Senior Research Fellowship Scheme ([details](#))

Deadline: 20 March 2015 (Friday)

Science Faculty e-Newsletter

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