



HKU ENGINEERING CELEBRATES THE ESTABLISHMENT OF Francis S Y Bong Professorship in Engineering

"It is a privilege and an honour to establish an Endowed Professorship for the Faculty of Engineering at the University of Hong Kong, my alma mater.

It is my hope that my contribution will strengthen the Faculty's ability to generate innovative research and enrich the educational experience of future young engineers."

~ **Francis S Y Bong** (BEng 1964)



From left: Prof W C Chew, Mr Francis S Y Bong, Prof Lap-Chee Tsui, and Prof Francis Y L Chin.

"The establishment of Francis S Y Bong Professorship in Engineering demonstrates Mr Bong's dedication to education. It heightens his long term vision and distinctive ideology on the importance of research in university education. On behalf of the Faculty of Engineering, I would like to express my deep heartfelt thanks to Mr Francis Bong once again for his generosity and his dedication to the advancement of education."

~ **Prof W C Chew**, Dean of Engineering

Mr Francis Bong, Mr Bong's family members and close friends, and other HKU members celebrating at the Vice-Chancellor's Lodge.

The Faculty of Engineering would like to share its joy and excitement with alumni and friends about the establishment of "Francis S Y Bong Professorship in Engineering". On February 26, 2009, Mr Francis Bong generously presented a cheque of HK\$10 million to Vice-Chancellor Prof Lap-chee Tsui at the Vice-Chancellor's Lodge. This crucial moment was witnessed by family members and close friends of Mr Bong and HKU members. The donation will be matched dollar-for-dollar by the University.

Mr Bong has always been devoted to the training of young engineers. With the establishment of the Francis S Y Bong Professorship in Engineering, Mr Bong hopes to recruit international talents to strengthen the Faculty, and to contribute to the further development of crucial and innovative research in engineering.

An alumnus of the University of Hong Kong, Mr Bong joins the rank of many who have played a significant role in the building of Hong Kong's physical infrastructure during a critical period of its development. The accomplishments in Mr Bong's illustrious career include notable projects such as the Ap Lei Chau Bridge, Hong Kong Eastern Corridor, Shatin New Town and the award-winning Hong Kong International Airport.

Internationalisation of HKU Engineering – Profiles of International Students and Staff



CHUNG KWET KHONG WENDY WEI KWAN

BEng (Electronic and Communication Engineering) - year one
Department of Electrical and Electronic Engineering

Country of origin: Mauritius

How many years have you lived in Hong Kong? And how many years at HKU Engineering?

Only seven months, will be here for the next two years.

Three things you like most about studying at HKU Engineering

- Very active/lively/interactive faculty: the faculty is willing to listen to what the students have to say about the facilities or about their experiences. The faculty is keen to take measures to solve problems, or to improve. Students older of age are very friendly and approachable.
- Some lecturers are very enthusiastic and passionate—they realise the importance of linking lecture material to applications in the real world in order to make sure that certain concepts are well understood.
- Many facilities are made available to students for projects; the faculty also encourages self-learning. Courses encourage the use of equipment to supplement the learning of concepts in lectures.

What are the advantages and disadvantages of being an international student?

Advantages:

- Communication in English (both written and spoken) is easier since my education has always been in English.
- It is a new adventure coming to HKU. It is more exciting for us than for local students since they will be staying in an environment with which they are familiar.

Disadvantages:

- Part of a minority: at the beginning it is not easy to find those with whom you can spend time with. Approaching local and mainland students was hard at first because of the language barrier. Both groups of students tend to have their network of friends.
- Disoriented: no prior exposure to the culture, the educational system, the landscape. Need some time to adapt.

Do you have culture shock? What is the one thing that you find most difficult to adjust to?

Being of Chinese origin, I would not say that I really suffered from culture shock. However, it took some time for people to understand why I don't speak Cantonese while I say I am Chinese. Mobility is also limited because of the language barrier, but only in the beginning.

Career aspirations - what is the dream job after HKU?

Manager of an engineering company. Knowledge of engineering techniques can be used/applied and at the same time being capable of understanding economic/business issues. The aim is to become as complete an individual as possible.

Interests/Hobbies

Astronomy, Tae Kwon Do

Why Hong Kong? Why HKU Engineering?

Coming to Hong Kong was an opportunity to learn Cantonese. At the same time, Hong Kong was preferred for its relatively lower cost of living (compared to Australia, for example) as well as for its safety.

HKU/HKU Engineering has a very good ranking and HKU has a very good reputation in Asia and worldwide. The high standard of HKU education and high recognition of its degrees worldwide is what makes HKU most attractive. Also, HKU Engineering provides the facilities that students require to make their learning more complete (for example, very well developed library system, numerous labs for use, construction labs for projects, etc.).



Tips on leading a happy student life as an international student

- LEARN CANTONESE and make it known that you are willing to learn. Local students will be delighted and more than willing to help. By showing that you want to know them better, it will be easier to break the ice.
- Don't be shy to talk to the local students. Be open - know your classmates better.
- Participate in various activities/functions, even though they are in Cantonese. It is a good opportunity to broaden your social network to learn/practice Cantonese.
- Visit places in Hong Kong. By knowing the city, it will be easier to connect with the locals - you will be speaking the same "language".
- Follow the HKU motto: "Play hard, work hard". Know your priorities and remain focused. Relax from time to time is good too.



WILLIAM LOASBY

MSc (Eng) in Structural Engineering - graduated in January 2009
Department of Civil Engineering

Country of origin: Britain

How many years have you lived in Hong Kong? And how many years at HKU Engineering?

I am British but was brought up in Luxembourg. I went to England for university where I studied Engineering Science at University College, Oxford. I have lived in Hong Kong since arriving in August 2007 to begin my studies at the University of Hong Kong. I studied my degree programme as a full-time student for 18 months until January 2009.

Three things you like most about studying at HKU Engineering

- During this year and a half I had a tremendous experience living and studying at HKU. The MSc programme in structural engineering is well designed for practising engineers wishing to gain expertise in specific areas or to update their knowledge in areas in which they lack experience. For me, the wide choice of areas of engineering that could be studied was one of the things I liked most about the programme. It allowed me to study specialised subjects such as fire engineering, tall building design and earthquake engineering, as well as to broaden my professional knowledge in related disciplines such as dispute resolution and megaproject management.
- Studying at HKU Engineering I also felt reassured that this scope of subjects was backed up by a wealth of knowledge and understanding among the professors and lecturers. Coupled with the international diversity among the academic body, this added great value and attraction to the HKU experience. Being taught by such an academic pedigree was a privilege!
- One of the most enjoyable things studying on the MSc programme was that, on the strength of its reputation, the Engineering Faculty was often able to attract world-renowned experts to come to HKU to give lectures on their areas of



from government departments and an international engineering consultancy.

What are the advantages and disadvantages of being an international student?

- Being an international student meant that I brought with me a set of experiences from where I had studied and worked previously. So while not being familiar with Hong Kong student life was a challenge to be met, this was an exciting challenge which was about discovering a new student experience and seeing my previous experience from a new perspective. I suppose this could be called culture shock, but it was a positive shock!

Career aspirations - what is the dream job after HKU?

I have just begun full-time employment in an international engineering consultancy in Hong Kong as a structural engineer. Hong Kong has many of the tallest, longest and widest engineering structures so as far as design projects go this is a dream assignment – although unfortunately the Hong Kong working culture is not quite as laid-back as the Australian!

Interests/Hobbies

My three favourite activities in Hong Kong have been:

- Playing football with the HKU PGSA (Postgraduate Student Association) team.
- Going hiking – Hong Kong has fantastic hikes which take you away from all of the hustle and bustle of the city.
- Meeting other international students in my hall of residence, and sampling lots of different food with them (including dim sum and Chinese dessert shops!).



Why Hong Kong? Why HKU Engineering?

Why did I choose to come to HKU? Having worked in both the UK and Australia, I decided that postgraduate study offered the opportunity to experience living in a different part of the world. I chose to come to Hong Kong as the University of Hong Kong stood out as one of the best in Asia, with HKU Engineering as one of its founding faculties.

Tips on leading a happy student life as an international student

My only tip on leading a happy student life as an international student is not to stay locked in your student room – every experience meeting new students and exploring Hong Kong will be worthwhile!



XAVIER DEMEULENAERE

BEng (Mechanical Engineering) - year three
Department of Mechanical Engineering

Country of origin: France

How many years have you lived in Hong Kong? And how many years at HKU Engineering?

First year in Hong Kong and at HKU (since September 2008).

Three things you like most about studying at HKU Engineering

- Studying in an international environment.
- Having the opportunity to choose broadening courses (optional courses in other faculties) in many fields. In France, engineering schools are independent of universities so there is almost no interaction and no opportunities to meet students studying in other fields.
- Choosing my courses. In France, at least in engineering schools, or at least in my home school, we cannot really choose our courses.

What are the advantages and disadvantages of being an international student?

Advantages:

- I have a different way to see/understand the things because I don't have the same background/culture.
- I can learn a new culture.
- I have the opportunity to meet a lot of other exchange students from all over the world.
- I have the opportunity to improve language skills (improve English in my case since it is not my mother tongue, however learning Chinese is very difficult).

Disadvantages:

- It is quite difficult to make friends with local students.
- Because of the use of two languages in Hong Kong, it is difficult to communicate with people (in the street but even at the university) since many people don't speak English. And even if university students speak English, they only use Cantonese when they are together so it is easier to make friends with other exchange students.

Do you have culture shock? What is the one thing that you find most difficult to adjust to?

Of course, when going abroad there is a culture shock. Personally, I think that the way to work/study in France and in China (HK) is totally different, sometimes I don't really understand why people are dealing with some problems in that way since I would have done in a totally different manner. This is especially true for team project.

Career aspirations – what is the dream job after HKU?

Mechanical engineer specialising in motorisation in a carmaker company, after a Master degree at IFP School (France).

Interest/Hobbies

Hiking in HK and travelling around Asia.

Why Hong Kong? Why HKU Engineering?

I choose Hong Kong because I wanted to improve my English so I was looking for a university where the teaching language is English. But I also wanted a different experience from the other students of INSA Toulouse (my home university) by avoiding USA, Canada or UK. Since I was attracted by Asian culture (one of my sisters had worked in Thailand and another one worked in Beijing at that time, and I went to both countries), Hong Kong is a place where these different aspects come together. I chose HKU because it has a partnership with my home university. Of course I was also impressed by the ranking of the university, so I thought it would be a great experience.



Tips on leading a happy student life as an international student

- Be open-minded and try to discover the new culture.
- Try to make some local friends to have an inside look at HK life (I guess joining a hall sport team is a good way to know some other students).
- Like many exchange students, try to travel a little bit (or a lot!) to enjoy your stay in Asia since one can find very cheap and beautiful destinations.



VAN DE LAAR

BEng (Industrial Engineering & Technology Management) - year two
Department of Industrial and Manufacturing Systems Engineering

Country of origin: The Netherlands (Holland)

How many years have you lived in Hong Kong? And how many years at HKU Engineering?

I have been living in Hong Kong since August 2008. Almost one year at HKU Engineering.

Three things you like most about studying at HKU Engineering

- Many international students.
- A lot of activities and field trips.
- Starbucks on campus.

Advantages:

- When you are an international student you learn more during your classes, you also learn a new culture, improve your language skills, and make new international friends.

Disadvantages:

- As an international student, it can be difficult to understand jokes people make especially when they do it in Cantonese.

Do you have culture shock? What is the one thing that you find most difficult to adjust to?

I don't call it a shock but you definitely need to get used to Hong Kong. Before I moved to Hong Kong I always lived in villages and especially not a big city like Hong Kong so the first thing I had to get used to was the number of people living around you. Also Hong Kong is 24/7 there is always something to do even on Sunday (In Holland almost everything is closed on Sunday).

Career aspirations - what is the dream job after HKU?

That's a really difficult question because I don't know yet. There are so many possibilities but one thing I'm sure is that it has to be something with technology and people.

Interest/Hobbies:

My first hobby is spending time with friends. I think this is really

important because between all the studying and working you have to relax and there is no way better than doing it with friends.

The second one is sailing, I love to sail in Holland. I was a sailing instructor and I loved spending time on the water. In Hong Kong I have not sailed that much but, it was really nice the times I did because Hong Kong weather is much better than Holland.

The third is watching a movie. I like watching movies - it is a really good way to get away from all the things around you and relax for two hours.

Why Hong Kong? Why HKU Engineering?

That's an easy answer for me because I moved here with my family. My parents and brother also moved here. It is a nice country to live in, nice weather most of the time so many possibilities to do stuff you like or to try new stuff or of course food. And it's totally different and because if you try something different you always find something new.

HKU is a great university where you can learn a lot. Not only to get your degree but also things you can use for the rest of your life.

Since I was a little kid I had a thing for technology. I always wanted to know how things worked, how they were made. And I still want to know the answer on those questions but now I also want to know how I can do or make things like that myself. And that's why I'm here. Here in Hong Kong and here in HKU Engineering.



Tips on leading a happy student life as an international student

- Make international and local friends.
- Take time to relax.
- Spend time on things you like.



DR GRAZIANO CHESI

Assistant Professor
Department of Electrical and Electronic Engineering

Country of origin: Italy

How many years have you lived in Hong Kong? And how many years at HKU Engineering?

Three years (I joined HKU Engineering when I came to Hong Kong).

Three things you like most about teaching at HKU Engineering

- I teach my own research.
- Students from different departments can take my course (valid for research postgraduate courses).
- Organisation and facilities are very good.

What are the advantages and disadvantages of being a foreign teaching staff?

Advantages:

- Students may be interested (or at least curious!) in attending lectures taught by a foreigner.

Disadvantages:

- I cannot communicate with the students in Chinese (not yet!)

Do you have culture shock? What is the one thing that you find most difficult to adjust to?

Not really. I guess that I have been helped by the fact that my wife is Chinese. The thing I find most difficult to adjust to is probably the narrow space in Hong Kong.



Career aspirations - what is the dream job?

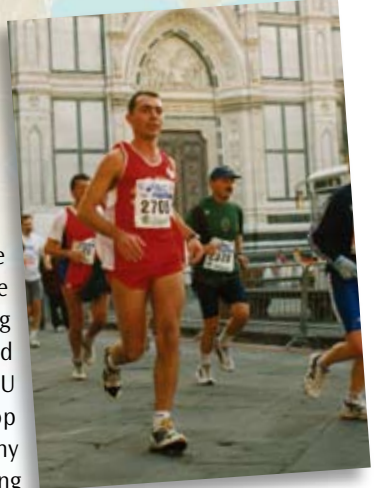
To become a worldwide leader in my research area, internationally recognised for my contributions.

Interest/Hobbies

Perhaps it is not good, but my job is probably my first hobby (never stop thinking about it). I also like to run and play the piano.

Why Hong Kong? Why HKU Engineering?

My case is special as I am here mainly for family reasons (my wife is Chinese). Nevertheless, Hong Kong is well-known for its good universities, in particular HKU which is officially one of the top universities in Asia. There are many talented people in HKU Engineering who are recognised worldwide.



Tips on leading a happy teaching life as a foreign teaching staff

- Stimulate students' curiosity (inventions are found by curious guys).
- Push students to verify what they learn (we never stop to understand a subject).
- Spend a few minutes to entertain students (in my case I share with them something about Italy!).





DR NIKOS MAMOULIS

Associate Professor
Department of Computer Science

Country of origin: Greece

How many years have you lived in Hong Kong? And how many years at HKU Engineering?

About eleven years in Hong Kong and eight years in HKU Engineering.

Three things you like most about teaching at HKU Engineering

- Excellent academic environment.
- Good teaching facilities.
- Reasonable teaching load.

What are the advantages and disadvantages of being a foreign teaching staff?

Advantages:

- Nice treatment from colleagues. I never felt that I'm a foreigner here.
- Use of English in the university.
- Attractive employment benefits.

Disadvantages:

- Cantonese may be required for in-depth communication with students, as some prefer to discuss in their mother language.

Do you have culture shock? What is the one thing that you find most difficult to adjust to?

Culture shock? Not really. It took some time to get used to HK, but it's not as bad as it may sound for someone from overseas. HK people are really friendly and help your way out in almost all circumstances where you might find yourself lost. Of course, you need to learn the language for everyday communication with common people.

I would say the most difficult thing to adjust to might be the environment, including weather and pollution. There is a lot of energy waste, energy-inefficient buildings, energy-inefficient lifestyle (e.g., air-conditioners switched on everywhere, even in the middle of the winter).

Career aspirations - what is the dream job?

Being an academic is already a dream job for me. It gives me flexibility to do my research and I enjoy teaching.

Interest/Hobbies

I enjoy hiking or walking on a nice winter day. Shopping in Mong Kok is another favourite. I'm not a big sports fan, but occasionally I like playing basketball.



Why Hong Kong? Why HKU Engineering?

Hong Kong is a fun city to live in. Although its density sounds scary, you can easily escape within an hour to an outlying island or a mountain peak and be as close to the nature as if you were living in a tropical island. Density is also nice sometimes, especially on Sunday evenings watching the crowds streaming on the streets of Mong Kok or Causeway Bay. Nightlife is excellent with a wide range of local and international features. So, Hong Kong has nothing to be jealous of when compared to other big cities.

HKU Engineering is an excellent faculty. Again, nothing to envy. We are able to attract high-quality local and mainland students. The resources provided by the University and external grants are sufficient for conducting top-tier research and training excellent research students.

Tips on leading a happy teaching life as a foreign teaching staff

- Try to speak slow and work out your accent so that the local students can understand most of your teaching.
- Try to learn at least some basic Cantonese.
- Get used to the hot and humid summers and the pollution as soon as possible.
- Get addicted to the excellent local food.
- Go to the senior common room on Friday evenings and mix with international colleagues at HKU.



Reconstruction of Zheng Dong Jie Kindergarten in Chongzhou, Sichuan Province

On May 12, 2008, a massive earthquake hit the Sichuan Province, which resulted in the total destruction of the Zheng Dong Jie Kindergarten in Chongzhou. The building had a history of 80 years.

“Operation Concern”, a Hong Kong charitable organisation, has raised HK\$5 million to assist the Chongzhou community to rebuild the kindergarten at the existing site. They have also invited the Department of Civil Engineering of The University of Hong Kong (the department) to assist in the project. According to the agreement signed with the local government, the design, tendering and project management of the new school building would be handled by a team of volunteers from the department. This is the third project to be taken up by the department’s volunteers under the ‘Ming De Projects’ (明德工程). The department’s student volunteers have previously completed the ‘Ming De Lou’ (明德樓) and ‘Ge Wu Lou’ (格物樓) in Guangxi.

Students of the department were eager to participate in this project as they value the opportunity of being involved in the reconstruction of Sichuan. From September 2008 onwards, over 70 year one to year three students have joined the team of volunteers. Their first task was to prepare a design for the new building. The design not only has to comply with the Mainland’s required standards for sustainable development and environmental protection, but also be able to withstand an earthquake intensity of 8 on the Richter scale.

To comply with the national standards, the new kindergarten would occupy an area of 4000 square metres, with 12 classrooms for 360 students. Each classroom has an activity room, dormitory and wash closets. The students would share the common



Scheme design in progress.



Discussing the scheme design.



Student project team and teachers of Zheng Dong Kindergarten.

gymnasium, art room, library, offices, conference room, medical treatment room and kitchen...etc. As the original plot of land was long and of irregular shape, it added to the difficulties in devising a good design.

In order to come up with a user friendly design, the students visited the site and carried out a detail survey twice in mid September 2008. They also held meetings with teachers and parents to find out their expectations of the new nursery and visited other model kindergartens in Chengdu. With the help of the teachers of the department, 36 year three students eventually managed to come up with four different initial designs. In early November 2008, the students visited Chongzhou for the third time and presented their designs to the teachers of the kindergarten and collected their feedback.

In 2009, year one and year two students were invited to join the team to work on the scheme design, with the intention that they will carry the project through after their seniors graduate. Alumni who were former volunteers of Ming De Projects also joined in as advisors. Through these alumni, a group of young architects, structural engineers, lawyers and building services engineers have volunteered to participate in this project.

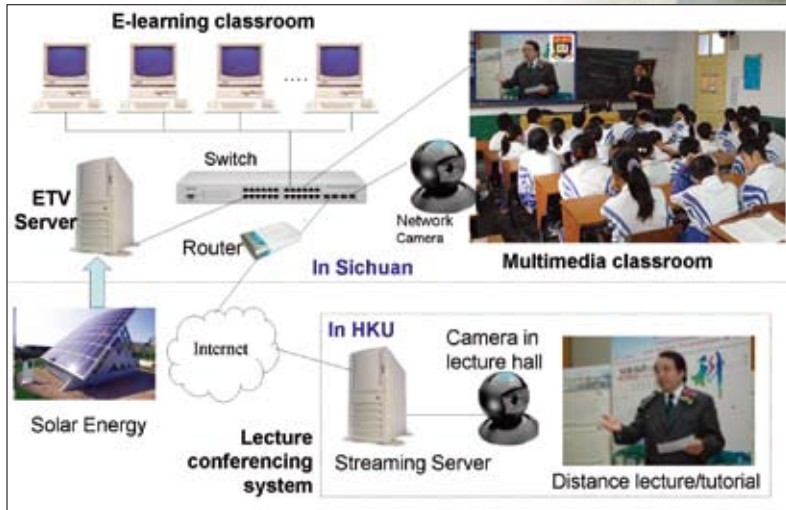
The department is particularly grateful to the Lee Hysan Foundation for their generous donation to support the students, enabling them to participate in this meaningful venture.



A model of the design scheme

HKU Engineering Teachers and Students working on a Sichuan Reconstruction Project

E-learning and Renewable Energy for a Reconstructed Primary School



The system to be installed in Sichuan

A team of teachers and students from the Department of Electrical and Electronic Engineering is collaborating with the 512 Young Engineers Alliance in contributing to the reconstruction project for a primary School in Sichuan Deyang.

Dr Wilton Fok, Dr Philip Pong, Dr Y C Wu and Dr Alfred Yu will lead a team of 40 students to Sichuan from late July to early August 2009 to install e-learning and renewable energy facilities. The team will contribute their knowledge in electronic communication, computer, information and electrical engineering to set up some multimedia classrooms, computer rooms and solar energy system in the reconstructed school. Many HKU departments including the Centre of Development and

Resources for Students (CEDARS), Faculty of Education, General Education Unit, Computer Centre, Initiative of Clean Energy and Environment and Medical Engineering are the collaborating parties of this project. The project is being funded by the Sichuan Earthquake Roundtable Fund. CLP Power and Jiawei SolarChina Co Ltd are the sponsors of the renewable energy team.

The team welcomes any kind of sponsorship, including cash, children books, toys, shirts, etc. to support the initiative. Those interested in sponsoring this project can contact Dr Wilton Fok at 28578490 or by e-mail: wtfok@eee.hku.hk. For more details about the project, please refer to: www.eee.hku.hk/~sichuan



EEE teachers delivered gifts to the students in the primary school.



From left: Ng Ka Wai (CivE-Law2), Wan Mei Yin (CivE2), Dr Wilton Fok, Dr Samson Tam, Dr Raymond Ho, Chris Suen (LESCM2), Felix Lin (InfoE2), Yvonne leong (EComE2), Yiu Chui Ming (CivE2) attending the tram exhibition kick-off ceremony.

袁家小学重建教学楼工程由香港512年青工程师大联盟援建
树立企业安全形象 促进安全文明生产



Dr Wilton Fok, Dr Y C Wu, Dr Alfred Yu, together with Dr Raymond Ho, the Legislative Councillor of the Engineering Constituency, conducted a site visit to the Deyang Yuanjia Primary School for preparing the installation this summer.



香港大學
THE UNIVERSITY OF HONG KONG



Symposium on Disaster Management

With distinguished speakers from Chinese Academies and overseas

Date: May 9, 2009 (Saturday)

Time: 8:45 am - 5:00 pm

Venue: Wang Gungwu Lecture Hall
The University of Hong Kong

Officiating Guest: Mrs. Carrie Lam Cheng Yuet Ngor, JP 林鄭月娥, JP
Secretary for Development, Development Bureau
The Government of the HKSAR

Welcoming Address by: Professor Richard Y.C. Wong 王于漸教授
Deputy Vice-Chancellor and Provost
The University of Hong Kong

Distinguished Speakers:

Professor S.P. Chow

周肇平教授
Pro-Vice-Chancellor and Vice-President
Chair Professor of Orthopaedics & Traumatology
Department of Orthopaedics & Traumatology
HKU

Professor C.F. Lee

李焯芬院士
Member of CAE
Director, School of Professional and
Continuing Education
HKU

Professor Joseph H.W. Lee

李行偉教授
Pro-Vice-Chancellor and Vice-President
Redmond Chair of Civil Engineering
Department of Civil Engineering
HKU

Professor Li Deren

李德仁院士
Member of CAS & CAE
Chairman of the Academic Commission
Wuhan University, PRC

Professor Li Licheng

李立涅院士
Member of CAE
Secretary General
China Southern Power Grid Co., Ltd.

Professor Arthur F.T. Mak

麥福達教授
Head and Chair Professor
Department of Health Technology & Informatics
PolyU

Professor James J. Mori

Disaster Prevention Research Institute
Kyoto University, Japan

Professor Wang Sijing

王思敬院士
Member of CAE
Professor, Institute of Geology & Geophysics
Chinese Academy of Sciences, PRC

Mr. Wilson M.F. Wong

黃莫輝先生
Deputy Secretary General
Hong Kong Red Cross

Professor Felix F. Wu

吳復立教授
Chair Professor of Electrical Engineering
Department of Electrical & Electronic Engineering
HKU

Co-organized with:



Faculty of Engineering
HKU

Supported by:



The Hong Kong
Institute of Architects



The Hong Kong
Institution of Engineers



CPD Credit: The Symposium is considered suitable for 1 CPD-day credit. A Certificate of Attendance will be issued to those who attend all sessions.

Enquiries: 22194779 / 22194707 **Email:** enggfac@hkucc.hku.hk

Free admission, please register via the Symposium website: www.hku.hk/research/disaster/

Engineering Distinguished Lecture

Prof Dov Jaron, Calhoun Distinguished Professor of Engineering in Medicine, School of Biomedical Engineering, Science and Health Systems, and Professor of Electrical Engineering, Drexel University, USA, delivered a lecture entitled "Mathematical modeling of Nitric Oxide Transport in the Microcirculation" in HKU on March 17, 2009.



Prof Paul Y S Cheung presenting a souvenir to Prof Dov Jaron.

Faculty Seminar Series

To encourage cross-disciplinary exchange among departments and encourage synergism among researchers, the Faculty of Engineering has organised three faculty seminars in the first quarter of 2009.

Chemical Reaction Inspired Metaheuristic for Optimisation*

Prof Victor Li, Associate Dean (Research)
January 15, 2009

**Joint work with PhD student Albert Y S Lam*

January 15

Visualisation of Living Biology – MRI Technology, Caveates and Future Directions

Prof Ed X Wu, Programme Director,
Bachelor of Engineering Programme in Medical Engineering
February 9, 2009

February 9

March 13

Mechanical Behaviour of Small Materials

Prof A H W Ngan, Department of Mechanical Engineering
March 13, 2009

Revamping PPPs' Symposium

This Symposium on PPPs (Public Private Partnerships) was organised by CICID HKU (Centre for Infrastructure & Construction Industry Development, based in the Department of Civil Engineering, HKU) on February 28, 2009 at HKU. It was the first event of the CIB Task Group on PPP (CIB: International Council for Research & Innovation in Building & Construction).



The Symposium consisted of two parts: a morning seminar and an afternoon workshop. The Seminar attracted an audience of over 200 with diverse interests in PPP, from a range of public and private sector organisations in Hong Kong, as well as from academia and overseas. Of these, over 60 participants deliberated on the way forward under specific PPP sub-themes, in focus groups and combined sessions at the afternoon workshop. Keynote speakers were Mrs Carrie Lam, Secretary for Development, HKSAR and Mr John Fitzgerald, Deputy Secretary, Department of Treasury and Finance, Victoria, Australia. Other speakers were from Australia, China, Denmark, Greece, Hong Kong SAR, Malaysia, Netherlands, Singapore, South Africa, UK and USA. The presentations and papers covered a wide spectrum of hot topics on "Revamping PPPs" as per Programme and Proceedings at http://www.hku.hk/cicid/3_events.htm.

The Second International Symposium on Innovative Design of Steel Structures

The Second International Symposium on Innovative Design of Steel Structures, organised by Department of Civil Engineering, The University of Hong Kong was successfully held on December 5, 2008 in the Intercontinental Grand Stanford Hotel, Kowloon, Hong Kong.

The opening address of the Symposium was delivered by Professor

W C Chew, Dean of Engineering, HKU, and the closing remarks was delivered by Ir Siu-Tack Chan, Chairman of the Joint Structural Division of HKIE & IStructE. Nine prominent overseas and local academics, researchers and engineers presented and shared their experience on the latest development and technology in the field of steel and composite structures. The chairman of the symposium was Dr B Young.

Professor H H P Fang, Chair Professor of Environmental Engineering, hosted a one-day retreat on February 14, 2009 for 14 environmental engineering professors from HKU, UST and PolyU, plus 37 postdoctoral fellows and research students. During this gathering, each professor gave a 25 minutes' presentation on his/her latest research, followed by Q&As, as well as discussion on possible future collaborations. Subjects discussed included environmental technologies related to water, wastewater, sludge, soil and solid wastes.

Professor Fred H Kulhawy, Professor of Civil/Geotechnical Engineering of Cornell University, USA, delivered the Fifth Lumb Lecture on December 1, 2008 at the Lecture Theatre of the Central Library. The title of the Lecture was "Uncertainty, Reliability and Foundation Engineering". The event was well attended by over 230 engineers, academics and students.

Professor Mohan Kumaraswamy gave a keynote speech at the 'Konstruksi Indonesia 2008 International Conference' in Jakarta from October 29 to 30, 2008. The Conference was opened by the President of Indonesia and was on 'Construction Sector Policy & Sustainable Development'. Prof Kumaraswamy spoke on "Relational Integration and Value Networks in PPPs".

Professor Mohan Kumaraswamy was invited to present a series of 'International Talks' to a large group of public and private sector participants at Yogyakarta, Indonesia on November 1, 2008. His 3 talks were on "Improving Project Management Practices", "Construction Industry Development" and "PPPs for Infrastructure Development". This event was attended by about 90 public and private sector leaders and academics.

Professor J H W Lee has been appointed by the Chief Executive as a member of the Advisory Council on the Environment from January 2009 for a two-year period.

Professor Joseph H W Lee was elected to the Fellow of the Royal Society of Engineering of UK in July 2008. As Britain's national academy for engineering, the institution brings together the country's most eminent engineers from all disciplines to promote excellence in the science, art and practice of engineering.

Dr S T Smith presented a paper entitled "Behaviour of handmade FRP spike anchors" at the Twentieth Australasian Conference on the Mechanics of Structures and Materials (ACMSM20), Toowoomba, Australia, from December 3 to 5, 2008, of which he was a Member of the International Scientific Committee. In addition, he delivered an invited lecture at the ACMSM20 pre-conference International Workshop on Fibre

Composites in Civil Infrastructure (FCCI), from December 1 to 2, 2008, entitled "Review of design guidelines for FRP-strengthening design of RC structures".

Dr R K L Su and **Dr H H Tsang** organised a one-day public lecture on "Earthquake Design Loading: from a Hong Kong Perspective" on December 13, 2008 at the University, in collaboration with Professor Nelson T K Lam of the University of Melbourne, Australia and Professor John L Wilson of Swinburne University of Technology, Australia. The lecture was well attended by professionals and academics in Hong Kong and Macau.

Dr J Yang was elected to be a board member and vice president of ASCE Hong Kong Section 2008-2009.

Dr Albert T Yeung presented two papers at Seoul, Korea in August 2008 on "Electrical impedance spectroscopy of porous media" and "Effects of chelating agents on the zeta potential of cadmium-contaminated natural clay" with his research students Ying-Ying Gu and Maxwell S W Mak at the 7th Symposium on Electrokinetic Remediation. He also presented a seminar "Management of construction and demolition (C&D) materials in Hong Kong" at Korea Institute of Construction Technology.

Dr Albert T Yeung attended the Board of Governors' meeting of Region 10 (International Region) of the American Society of Civil Engineers (ASCE) at Reston, Virginia, USA in October 2008.

Dr Albert T Yeung went to Wuhan, China in October 2008 to attend the celebration ceremony for the 50th anniversary of the Institute of Rock and Soil Mechanics, Chinese Academy of Sciences and to present the seminar "Electrokinetics – geotechnical and geoenvironmental engineering applications".

Dr Albert T Yeung presented the invited lecture "Underwater vacuum preloading for in-situ improvement of marine clay" at the Symposium on Ground Improvement Techniques organised by the Macau Association for Geotechnical Engineering in Macau in November 2008.

Dr Albert T Yeung presented a technical seminar in December 2008 on "Electrokinetic extraction of contaminants from fine-grained soil" to URS Corporation in Baton Rouge, Louisiana, USA. He also attended the 2nd International Press-in Association International Workshop and received a 2nd IPA Research Grant Award in New Orleans, Louisiana. He presented his winning research proposal "Use of tactile pressure sensors to evaluate the stress distribution behind an earth retaining structure induced by press-in piling" at the workshop.

Canadian Computing Competition (CCC) is the de facto national programming competition of Canada, which is attended by thousands of high school students each year. Hong Kong and Beijing are the only two cities outside of Canada that run an extension of the competition. The Department of Computer Science at HKU had the great honor again to serve as the sole local organiser of this important event in Hong Kong in 2009. 103 students from 19 schools participated in the Contest on February 25, 2009.



Prof Francis Chin was an invited speaker for the ASI Symposium on Bioinformatics and Data Mining held at the Hong Kong Baptist University from February 26 to 27, 2009. He was the plenary speaker for the International Symposium on Education and Computer Science (ECS 2009) held in Wuhan, China from March 7 to 8, 2009. He was also an invited speaker for the joint workshop of Beijing, Hong Kong and Kyoto on Computational Mathematics, Computer and Systems Sciences (CMCSS) held in Kyoto, Japan from March 14 to 15, 2009.

The Fifth Annual IFIP WG 11.9 International Conference on Digital Forensics was successfully held at National Center for Forensic Science, Orlando, Florida, USA, January 25 to 28, 2009. The IFIP Working Group 11.9 on Digital Forensics is an active international community of scientists, engineers and practitioners dedicated to advancing the state of the art of research and practice in the emerging field of digital forensics. Over 60 participants from different parts of the world attended the conference. Dr K P Chow, Associate Director of Center for Information Security and Cryptography (CISC) of the Department of Computer Science, and 3 of his PhD students, attended the conference and presented 3 accepted research papers.

The 7th International Conference on Cryptology And Network Security (CANS 2008) was successfully held at HKU SPACE Town Centre, from December 2 to 4, 2008. The event was organised by the Department of Computer Science, The University of Hong Kong (HKU) and supported by the Center for Information Security and Cryptography, HKU, The Cyberport Institute of Hong Kong, HKU, and the Department of Computer Science, City University of Hong Kong. Dr Lucas Hui of the Department of Computer Science, HKU, was the General Chair of this event. Over 40 participants from different parts of the world attended

the conference. The event provided an excellent opportunity for them to build a bridge between research on cryptography and network security, and to share their expertise on all aspects of network security. Previous CANS conferences were held in Taipei (2001), San Francisco (2002), Miami (2003), Xiamen (2005), Suzhou (2006), and Singapore (2007).

Prof Francis Chin has been appointed as a member of the Advisory Committee of the Institute of Information Science (IIS) at the Academia Sinica in Taiwan from September 2007 to August 2010, and was invited to attend the Advisory Committee Meeting from November 28 to 29, 2008 in Taipei.

The Hong Kong Olympiad in Informatics (HKOI) Award Presentation Ceremony was held on December 19, 2008 at the Rayson Huang Theatre, The University of Hong Kong. Over 100 participants attended the ceremony. HKOI is an annual programming competition for secondary school students in Hong Kong co-organised by the Education Bureau of HKSAR Government and the Hong Kong Association for Computer Education (HKACE), with the Department of Computer Science of The University of Hong Kong as the supporting organisation.



A team of Electrical Engineering year three students: Lee Lap Cho Eldon, Wong Tsz Chung Peter and Li Wing Yiu, and their supervisor Dr Wilton Fok were interviewed by the Commercial Radio Hong Kong in a live broadcast programme "881 Clear Day" in the morning of February 25, 2009.

The team had won the Silver Award in the HSBC Young Entrepreneur Award 2008 and the Silver Award in the National Challenge Cup 2008 for an entrepreneurial idea to create a business in "Green Roof Engineering". Recently, this idea has raised a lot of public interests and the team was invited to share their views and suggestions with the public through the air.

Prof Paul Y S Cheung has been appointed as the Chair of the IEEE Medal of Honor Committee in 2009. Medal of Honor is the highest medal in the IEEE. It is awarded to a candidate identified as having made an exceptional contribution or an extraordinary career in the IEEE fields of interest. Past recipients include Marconi, Terman, Nyquist, Shannon, Gabor, Kalman, Noyce, Shockley, Gallager, Zadeh and Grove. The 2008 Medal of Honor recipient was Gordon Moore, co-founder of Intel.

Dr Wilton Fok has been appointed as a technical advisor of the Robocon 2009 Hong Kong Contest organised by the Radio Television Hong Kong. He was also elected as a council member of the Internet Professional Association for the 2009-2010 session.

Dr Fok encouraged all students in Hong Kong to be proactive and innovative in their career development: "Instead of waiting for a chance to come, we could be more proactive in creating new opportunities for our future."

*From left:
The anchor Mr Wong Wing,
Wong Tsz Chung Peter (EE3),
Dr Wilton Fok, Li Wing Yiu (EE3),
Lee Lap Cho Eldon (EE3) and
Mr Yeung Chun Yiu.*



Dr Wilton Fok was appointed as one of the technical advisors of the Employees Retraining Board, HKSAR. He will serve the board to give advice on curriculum design, assessment framework and content, course development and assessment review to ensure that the courses respond to industry needs.

Dr Philip W T Pong established a chapter of IEEE Magnetics Society in Hong Kong, the first Magnetics Society chapter in China. This Chapter will organise technical activities in Hong Kong and they also aim at serving Shenzhen, Guangzhou, and Southern China at large. The Hong Kong Chapter will strive towards the mission of promoting the interaction and research collaboration between academic institutes and industries.

Boeing - Cathay Pacific Engineering Internship Programme 2009

Our level two students, Ivan Lau Tsz-Lam and George Ng Chun-Ting, received the Boeing-Cathay Pacific Engineering Internship Programme award this year. They will start their 6-month internship programme in the Boeing Company in Seattle, USA in January 2010. Congratulations to their fabulous efforts and our best wishes for their exciting time spent in Boeing.

The Boeing-Cathay Pacific Engineering Internship Programme award is a 6-month engineering training programme jointly offered by the Boeing Company and Cathay Pacific Airways for Hong Kong students who are pursuing second year of degree study in mechanical engineering. The internship is very competitive as there are only 4 places each year. The selected candidates will be employed by Boeing to receive a 6-month training at the Boeing Company, Seattle, USA. The roundtrip airfares to Seattle will be sponsored by Cathay Pacific Airways.



The selection interview was held on March 4, 2009 at the Department of Mechanical Engineering of HKUST.

Prof Dennis Y C Leung organised the 1st International Conference on Applied Energy from January 5 to 7, 2009 in Hong Kong with about 180 local and overseas participants.

Prof Dennis Y C Leung delivered a keynote speech at the 1st International Workshop on Environmental Risk and Health Care in China from January 15 to 17, 2009.

City ventilation of Hong Kong

Prof Yuguo Li, Department of Mechanical Engineering

Ventilation of a city defines the ability of removing airborne pollutants and heat from a city. High-rise buildings, typically 40–60 stories, are “packed together”, along the 17 km long northern shore of Hong Kong Island, presenting one of the most beautiful high-rise skylines in the world and also a challenging city ventilation problem. The east-west principal street urban morphology coincides with the easterly prevailing winds in Hong Kong. The external air enters our city and carries away airborne pollutant and heat generated in the city.

One interesting question is what happens during no-wind conditions in Hong Kong. Our hypothesis is that in the morning, the heating of the slope of the Peak Mountain produces upslope flows, drawing air from the bottom of the slope where the city is. At the same time, the exterior surfaces of high-rise buildings are also heated up and upward convection flows are produced. The ground level air in the city is presumably replaced by the air from the Victoria Harbour or above. At night, the opposite occurs, and surface cooling produces downslope flows along the hill and downward wall flows long the building surfaces. Cool air falls to the city street level. The slope flows and wall flows dominate the city ventilation when the large-scale flows (or mesoscale sea-land breezes) are weak, i.e. no-wind conditions. Our preliminary work shows that the city ventilation rate in Hong Kong due to slope and wall flows can be between 0.5 and 2 air change per hour, i.e. within an hour, there is an air flow of half to 2 times of the city volume being supplied into our city. Further studies will identify the impact of building height, density and land reclamation (narrowing our harbour) on city ventilation.

Our work on city ventilation of Hong Kong is also expected to provide scientific basis for urban planning for better urban air



An infrared photo of the surface temperature profiles of Hong Kong on 15 March 2008 16:00. The color scale indicates the surface temperature. It can be seen that some building surfaces are much warmer than others. We suggest that the warmer building and mountain surfaces than ambient air create upward buoyancy flows to drive natural ventilation of the city.

quality in other cities. Rapid urbanisation is currently under taking in the Mainland China. In 2000, there were 379 cities with a population of > 100,000, 130 cities >1 million, 6 cities >5 million. There are 40 billion m² buildings in 2005 in China, and by 2020, 30 billion m² more buildings will be built. At the same time, 20 of the world's 30 most polluted cities are in China today, largely due to high coal use and motorisation.

City ventilation is, to some degree, the coupling of the urban canopy flow and the atmospheric boundary layers. The wind conditions around a building (length 1-10 m) is associated with that of the neighborhood scale (length 100 m – 1 km) close to the building, which is associated with the whole city scale (length 1-10 km) wind, and then the regional scale (length 50-200 km) wind and finally the global-scale atmospheric flows. We thus need a new and accurate aerodynamic turbulence model capable of considering the whole city airflow pattern, which is a combined scientific problem of computational fluid dynamics, porous turbulence modeling and urban meteorology.

This project is supported by a RGC grant.

Fireboat Alexander Grantham

Dr Albert Yeung, Department of Civil Engineering

In collaboration with Fugro Geotechnical Services Ltd, a team from the Department of Civil Engineering was commissioned by the Leisure and Cultural Services Department of the Hong Kong SAR Government to perform the structural health monitoring for the fireboat Alexander Grantham. The HKU team is composed of Ir Peter K K Lee, Ir Dr Albert T Yeung, Ir Prof L G Tham, Ir Dr Francis T K Au, and Ir Dr Ray K L Su. The team was selected for their extensive experience in the monitoring of Tsing Ma Bridge, Kap Shui Mun Bridge, Ting Kau Bridge, Ngau Chi Wan Fire Station, and various construction projects on vibrations induced by percussive piling.

The fireboat Alexander Grantham was built by Hong Kong & Whampoa Dock Co Ltd and went into service in 1953. Before it was decommissioned in 2002, it had served as the flagship of the Hong Kong Fire Services Department's fireboat team, responding to fire alarms and conducting rescue operations both in Hong Kong's waters and along the shoreline. Given the profound historical significance of the fireboat Alexander Grantham,

the Hong Kong Museum of History acquired the fireboat for its collections, refitting it and opening it to the public in the purpose-built Fireboat Alexander Grantham Exhibition Gallery in Quarry Bay Park, Hong Kong. The awarded contract requires us to give professional assessment of the structural health of the fireboat on a regular basis to ensure the structural integrity of the fireboat and public safety.



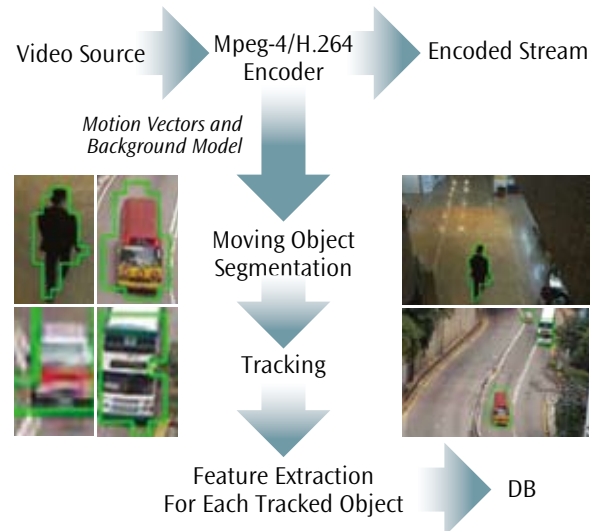
Fireboat Alexander Grantham in Quarry Bay Park

“Video Analysis”

Department of Computer Science

As digital images and videos are becoming more and more popular forms of digital media in the last couple of years, the traditional textural information processing techniques do not seem to be equally applicable and appropriate for these media types. As such, CISC started to research into video and image processing back in 2003. Over the years, CISC has completed a number of research projects, which are mostly sponsored by ITC together with the support from video related industries, on video compression, video analytics, video and image enhancement, video restoration, video retrieval, video watermarking, video distribution and management, etc. Most of the forefront technologies resulted from these research projects are not only recognised by the academics through CISC's publications, but also have been successfully transferred to a number of companies to enrich their product portfolios and to increase their competitiveness against worldwide competitors. CISC is

System Overview



currently working on efficient video processing technologies on stream processors, H.264 video encoding technologies for video surveillance, super-resolution and advanced restoration techniques for forensic purposes.

HKUEEE/ASTRI joint integrated circuit (IC) design projects

Dr N Wong, Department of Electrical and Electronic Engineering

The integrated circuit (IC) design team of Dr N Wong has collaborated with the Hong Kong Applied Science and Technology Research Institute (ASTRI) Company Limited to work on IC research and design projects. These projects have resulted in research papers and fabrication of IC chips licensed to industrial customers. Undergraduate and postgraduate students have also been recruited to ASTRI, as well as other companies in the Hong Kong Science & Technology Parks, to be IC designers. The following shows two sample outcomes from the HKUEEE/ASTRI joint effort.

Charge-coupled device (CCD) Image Processor (Oct 2007)

- CCD sensors and cameras find widespread use in industrial and civilian applications, but most CCD solutions are proprietary or captive.
- ASTRI and HKUEEE have produced a color CCD solution featuring analog frontend (AFE), analog-to-digital converter (ADC) and digital signal processor (DSP).
- Field programmable gate array (FPGA) platform has also been utilised to prototype image processing algorithms such as character and image overlay, zooming, as well as edge/motion detection.



Bandgap Voltage Reference (Aug 2008)

- Bandgap voltage reference is a circuit for providing a relatively constant voltage signal independent of temperature and power supply line fluctuations.
- Such reference circuits are widely used in power or electronic systems such as computer motherboards, analog-to-digital converters, and switched-mode power supplies.



HK\$7.5M Funding to Combat Shopfloor Bottleneck

Professor George Huang, Department of Industrial and Manufacturing Systems Engineering

Enterprise shopfloors have been gradually upgraded with enterprise information systems to improve decision and operational processes to cope with ever increasing competition in the global market. Such decision support systems require intensive data from shopfloor processes in order to operate effectively. However, the collection of the right field data at the right time for the right purpose in the right format has been a critical bottleneck in manufacturing and logistics enterprise decision processes. Professor George Huang and his team, together with colleagues from other HKU units, has proposed to apply RFID technologies and develop an easy-to-deploy and simple-to-use shop-floor information infrastructure for manufacturing companies to achieve real-time and seamless dual-way connectivity and interoperability between application systems at enterprise, shop-floor, work-cell and device levels. Pilot studies are being conducted within industrial collaborators. The use of this technology will allow enterprises to improve shopfloor productivity and quality, reduce the wastes of manufacturing resources, cut the costs in manufacturing logistics, reduce the risk and improve the efficiency in cross-border customs logistics and online supervision, and improve the responsiveness to market and engineering changes.

Commenced in July 2008, this two-year project has received HK\$7.5 million funding from the Innovation and Technology Commission of Hong Kong Government and sponsorships from industrial partners. Please visit the project webpage at <http://www.autom.hk/> for more details.



Prof W C Chew, Dean of Engineering, was selected as a recipient of the 2008 Chen-To Tai Distinguished Educator Award of the IEEE Antennas and Propagation Society for outstanding contributions to education in the fields of electromagnetic theory and computational electromagnetics. This award recognises an outstanding educator who has made exceptional contributions to the field of antennas and propagation through teaching, research, and the direction of graduate students.

Prof W C Chew received the award at the Awards Banquet of the 2008 IEEE International Symposium on Antennas and Propagation and 2008 USNC/URSI National Radio Science Meeting, July 5 to 11, 2008.

Prof W C Chew received Chen-To Tai Distinguished Educator Award from Prof Jennifer Bernhard, President of IEEE AP Society.

Professor Herbert H P Fang received 2008 State Scientific and Technological Award

Professor Herbert H P Fang, Chair of Environmental Engineering in the Department of Civil Engineering, recently received one of China's most prestigious awards. On January 9, 2009, Professor Fang became the co-recipient of the 2008 State Scientific and Technological Award (SSTAs)- 2nd Level. The presentation ceremony took place at the Great Hall of the People in Beijing presided by President Hu Jintao.

The award was given for the successful applications of a biotechnology, developed by Professor Fang at his Environmental Biotechnology Laboratory, to clean up the wastewater from a number of petrochemical plants, refineries and oil fields. Co-recipients of the Award were Professor Fang's collaborators from South China University of Technology and Ministry of Petrochemicals. This technology was to design and control proper process conditions, such as dissolved oxygen level, hydraulic and sludge retention times, at various sections of the wastewater treatment system according to the complex characteristics of the wastewater. By

applying this novel bio-technology, the toxic organic nitrogenous pollutants in these wastewaters were effectively converted first to nitrate by nitrifying bacteria and subsequently to harmless nitrogen gas by de-nitrification bacteria.

Prior to receiving this national Award, Professor Fang and his collaborators had received the Scientific Technology Award – 1st Class in 2007 from the Guangdong Province Government, and the Technology Advanced Award – 1st Class in 2006 from the Ministry of Education. When asked for comment, Professor Fang said: "I am glad that the technology developed for industrial pollution control at HKU's laboratories has been found to have useful applications in China."



STAFF AWARDS

At the Award Presentation Ceremony for Excellence in Teaching and Research held in Rayson Huang Theatre on February 19, 2009:

- Dr T M Wong received the 2008 Research Output Prize on the paper "A simple model for forecast of coastal algal blooms", co-authored with Professors J H W Lee and I J Hodgkiss.
- Dr B Young received the University Outstanding Teaching Award.



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Dr Albert T Yeung was given the 1st Prize of Civil Engineering Papers of the Year Award 2008 of the Hong Kong Institution of Engineers by the Secretary for Development, Mrs Carrie Lam,

at the annual dinner of the HKIE Civil Division on November 7, 2008. The title of the award winning paper is "Design of a mobile biometric authentication and global positioning system and its applications in construction management."

Dr Albert T Yeung was one of the five winners of the 2nd International Press-in Association (IPA) Research Grant Award. He was invited to attend the 2nd IPA International Workshop and an award ceremony held on December 12, 2008 in New Orleans, Louisiana, USA. He was conferred a testimonial and grant by the IPA Honorary President Akio Kitamura and invited to make a 15-minute presentation of his award winning research proposal to all the attendees.



STUDENT AWARDS

Mr Chan Chun Wing (Year 3 BEng student) was awarded Best Final-year Geotechnical Project Award 2008-09 by the HKIE Geotechnical Division.

Mr Ching Ho Jerome, Mr Cheng Kai Tsun Nicholas and Mr Chan Wai Hei (Year one BEng students) were awarded the HKU Foundation Entrance Scholarship 2008-09.

Mr Jacky K H Chung, PhD research student supervised by Professor M M Kumaraswamy, received Best Paper Award - 2nd runner - up - for his conference paper at the 1st Nanshan District Academic Forum of PhD Candidates from Shenzhen, Hong Kong, Macao and Taiwan in collaboration with the 196th Tsinghua University PhD Candidates Academic Forum at the Graduate School of the Tsinghua University in Shenzhen on November 29, 2008. The paper was entitled "Development of An Integrated Collaborative Briefing Network for Infrastructure Projects in Hong Kong" and co-authored with M M Kumaraswamy and Joe Weiwu Zou.

Nine year one BEng students were awarded the Engineering Outstanding Students Scholarship 2008-09:

Mr Chung Chi Hang
Mr Kong Chun Pang
Mr Lee Chak Yin Charles

Mr Li Ho Ming
Mr Li Siu Man
Mr Tang On
Mr Wong Ngai Fung
Mr Yeung Wai Kit
Mr Yin Ka Yau

Miss Pelin Ikiz (Year two BEng student) was awarded the Rosita King Ho Foundation Scholarship 2008-09.

Mr Alan Lu, who completed an MSc in Infrastructure Project Management in 2008, received the Tony Toy Memorial Award (Merit Award) for his 'outstanding dissertation' on "Benefits from Value Engineering" at The 9th International Value Management Conference organised by The Hong Kong Institute of Value Management on October 29, 2008 in Hong Kong. His MSc project was supervised by Professor M M Kumaraswamy.

Mr Shiu Kwan Tai Ivan (2008 graduate) won the Best Final-year Project Award 2008 of the American Society of Civil Engineers Hong Kong Section. He did his final year project entitled "Ductility of High-Strength Concrete Beams Partially Prestressed with Unbonded Tendons" under the supervision of Dr F T K Au. Mr Shiu is studying for his LLB at HKU. Mr Shiu was also awarded Best Student Award 2008-09 by the HKIE Geotechnical Division.

Mr Tam Cheuk Wai (2008 graduate) was the 1st runner up of the Best Final-year Geotechnical Project for 2008-09 awarded by the HKIE Geotechnical Division.

Ms Lijuan Tao, an MPhil Research student, received the 'The International Journal for Construction Innovation (Emerald Publishing) Award for the "Best BuHu Research Paper 2009" (BuHu: Built & Human Environment) at the" BuHu 9th International Postgraduate Conference (IPGRC 2009) held on January 28 & 29, 2009, for her paper, co-authored with Professor M M Kumaraswamy, entitled "Identifying Contractor 'Input' Factors for Predicting Performance Levels - A case study in Hong Kong".

Mr Thoe Wai (PhD student) won the Best Master Thesis Award 2008 of the American Society of Civil Engineers, Hong Kong Section. His MPhil thesis entitled "Integrated River Management of the East River - Field Studies, Hydrologic and Water Quality Modelling" was completed under the supervision of Professor J H W Lee.

Mr Ye Lin and Mr Zhou Jianhui (PhD students, right) were awarded the University Postgraduate Fellowships 2008-2009.

STUDENT AWARDS

Mr Chan Sze Hang, a final year BEng(CompSc) student, received the HKMA Information Technology Management Club Scholarship 2008-09. Mr Chan was admitted to the programme in 2006 through the Early Admission Scheme of the University, and was awarded both the HKU Foundation Entrance Scholarship and the Entrance Scholarship in Computer Science.

Mr Cheung Tang Lung, a BEng(CompSc) Year two student, was awarded the CMA and Donors Scholarship 2008. This scholarship was donated by the Chinese Manufacturers' Association of Hong Kong for students coming from disciplines that are closely related to industry. Mr Cheung is currently on exchange in the University of California, Davis (UC Davis) through the HKU Worldwide Undergraduate Student Exchange Scholarship.

The HKU "Far" team has advanced to the World Finals of the ACM International Collegiate Programming Contest 2009, one of the most prestigious competitions in the world, where 7,109 teams from 1,838 universities in 88 countries on six continents compete at 259 sites. The "Far" team, coached by Dr Reynold, is composed

of three contestants (Mr Ng Kwong Hei, Mr Hui Yan Ting, and Mr Yip Lik Yau) and one reserve member (Mr Yung Tsz Ho). The Far team will compete with 99 other teams from April 18 to 22, 2009 in Stockholm.

Mr Mei Lijun has been selected for a PhD Fellowship by IBM, an extremely intense competition among several hundred nominations world wide. Lijun is a PhD student in service-oriented testing under the supervision of Prof T H Tse. His publications include papers in the 30th International Conference on Software Engineering (ICSE 2008), the IEEE International Conference on Web Services (ICWS 2008), and the 18th International Conference on World Wide Web (WWW 2009). He was awarded a Hong Kong and China Gas Co Ltd Scholarship, a Hung Hing Ying Scholarship, and a Best Tutor Award.

Mr Pan Guodong, a Computer Science PhD student, has been selected by INRIA to undertake an internship from April 2009 for four months at the Research Centre located at Rhone-Alpes in France. Mr Pan will be joining the "PERCEPTION" research team to work on a project titled "Robust Estimation of Multiple Moving Objects from One or More Videos".

Mr Sun Feng, a PhD student, has been awarded the HKSAR Government Scholarship for the academic year 2008-09.

Mr Yuan Wenjun, an MPhil student, has been offered a 6-month internship at the Max Planck Institute for Informatics (MPII) in Germany to conduct research on information technology. Mr Yuan is currently writing a thesis in the area of data engineering under the supervision of Prof David Cheung. He will start work at MPII on a project titled "Query processing in functional ontologies" in the coming summer of 2009.

Mr Wong Chak Lim and Mr Wong Shing Ki, first year BEng(CompSc) students, received the "Engineering Outstanding Students Scholarships" 2008-09.

Mr Zhang Zhenyu and Mr Jiang Bo, have been selected for an Excellent Paper (First Class) Award for their presentation of a paper entitled "Debugging through evaluation sequences: a controlled experimental study" at the 196th Tsinghua University Doctoral Academic Forum held in Shenzhen, China from November 28 to 29, 2008. Zhang and Jiang are PhD students in software testing and analysis under the supervision of Prof T H Tse.



Group photo of HKU teams.

The HKU teams have achieved great success in the IBM DB2 UDB Inter-University Programming Contest held on February 6, 2009. HKU assembled five teams, and our best team won the 2nd runner-up award out of 37 strong teams selected from seven universities in Hong Kong and one university in Macau. The HKU winning team, coached by Dr Reynold Cheng, consisted of Lau Si Kit, Lau Ka Wai, and Li Tang, who are Year two students of the BBA (IS)/BEng(CS) double degree programme. Each of them received a trophy and shared a cash award of HK\$9000 for the team.



Group photo of all contestants from different universities.



HKU Team receiving their 2nd runner-up trophies.

STAFF AWARDS



EEE Faculties and Research Students won the ICT Award

A team of teachers and research students of the Department of Electrical and Electronic Engineering won the Bronze ICT Award supported by the HKSAR Government – Best Lifestyle Award 2008. The ICT Award is one of the most prestigious awards in information and communication technology in Hong Kong. The winning project: “Mobile Learning Platform” received the Bronze Award in this ICT Award. The award was presented in the Hong Kong Convention



and Exhibition on February 9, 2009 and was followed by a celebration dinner hosted by the HKSAR Financial Secretary Hon John Tsang. The winning project was evolved from the research output of a TD-SCDMA Award and later a Teaching Development Grant project. The winning project has also been deployed in the Inter-school Mobile Quiz Contest on Olympic knowledge held in July 8, 2008.

Prof K T Chau attended the Chang Jiang Scholar Programme 10th Anniversary Ceremony which was held in the Great Hall of the People, Beijing on December 5, 2008, and was conferred the Chang Jiang Chair Professorship by the Ministry of Education, China. This Professorship is one of the most prestigious academic awards in China, aiming to attract overseas academics to lead research activities in mainland universities. In the



coming years, Prof Chau will lead the research of electric vehicle technology in the Southeast University in Nanjing.

Dr Edmund Lam was recently appointed as a Topical Editor for the Journal of the Optical Society of America A (JOSA A) on a three-year term handling manuscripts pertaining to image processing. JOSA A is devoted to developments in any field of classical optics, image science, and vision. Dr Lam also received an Outstanding Young Researcher Award from HKU in a ceremony held in February 2009.

STUDENT AWARDS

EEE Students won two Excellence Awards in the 2008 Samsung Joint Universities Creative Technology Talents Award

Two teams of EEE students won two Excellence Awards in the 2008 Samsung Joint Universities Creative Technology Talents Awards. The final was held in the Hong Kong Cyberport on February 16, 2009. Twelve teams shortlisted from the first round of 56 teams presented and demonstrated their innovative ideas to the judging panels.

One team called "Elite Innovators" comprised four Information Engineering year two students - Cheng Ka Chung, Cheng Ho Yin, Wong Wing Kit and Ho Chun Yin-won an Excellence Award with their prototype using an old refrigerator as an organic food incubator. Another team called "Green Revolution" comprised of students from Electrical and Electronic Engineering - Kelvin Ma (EE-1), Chan Yee Wah (MedE-1) and Chan Pui Wai (MedE-1) - won another Excellence Award with their project of perfume printer. The team received assistance and advice from Mr C L Chan and Dr Wilton Fok.



*The team "Green Revolution":
Chan Yee Wah (MedE-1),
Chan Pui Wai (MedE-1),
Ma Tsun Ting (EE-1) and their
project advisor Dr Wilton Fok.
The project was perfume printer.*



*The team "Elite Innovators"
Cheng Ka Chung, Cheng Ho Yin,
Wong Wing Kit and Ho Chun Yin
with their product turned from
an old refrigerator into an organic
food incubator.*

Our PhD student **Mr Kevin C Chan** received the 2008-2009 Swire Scholarship for postgraduate research in magnetic resonance imaging (MRI) under the supervision of Prof Ed X Wu. He has also been awarded the Li Po Chun Postgraduate Scholarships 2007-08 and Dr Lo Kwee Seong Education Foundation Travel and Conference Grants 2007-08.

Fung Ka Hon and **Hung Pui Ki** were awarded the Engineering Outstanding Students Scholarship 2008-2009. The scholarships are awarded to year one students who performed excellently in the HKAL examinations.

A team of Electrical Engineering final year students including **Lee Lap Cho Eldon, Wong Tsz Chung Peter, Li Wing Yiu** and **Yu Chung Fan Raphael** won the Silver Award in the 6th National Challenge Cup, which was held in Sichuan University from November 16 to 18, 2008.



STAFF AWARDS

Prof James Lam received an Outstanding Researcher Award from HKU.

Prof Dennis Y C Leung was the recipient of the Outstanding Earth Champion Hong Kong 2008 awarded by the Earth Champions Foundation.

Prof Alfonso H W Ngan was among three outstanding scholars of the University of Hong Kong (HKU) who were awarded the prestigious Senior Research Fellowship and Senior Medical Research Fellowship by the Croucher Foundation on March 24, 2009 in recognition of their excellent scientific achievements and contributions to the international scientific community. Prof Ngan's current research focuses on discovering how submicron-sized materials behave mechanically and developing theoretical understanding of such behavior.

STUDENT AWARDS

Mr So Ngai Hin and **Mr Ng Chun Wai**, both level three students, received the BUDA Group-UtilityINFO (HK) Limited Prize 2008-09.

Mr Kenneth Yung Hon Yi and **Mr Law Cheuk Kit** won a champion and second prize respectively for "A new electrical plug design for elders" and "One-arm-drive wheelchair" in the 2008/09 Hong Kong Youth Design Competition held in Science Museum on March 14, 2009.



Engin' Nite

Engin' Nite is an annual formal dinner for engineering students to communicate with alumni and professionals. It strengthens the connection among students from different departments and provides a great opportunity for students to enjoy themselves before the final examination.

Orientation Camp

Every year, there are many games in the orientation camp which provide a chance for freshmen to understand the University, the Faculty and the Engineering Society. Engineering students are welcome to serve as helpers at the Orientation Camp and share their experiences with freshmen.



Joint-Institution Christmas Party

A Christmas party will be jointly organised by several student representative bodies of the joining institutions. All engineering students are welcome to join.

NEW ACTIVITY THIS YEAR

Tennis and Kick-boxing Training

Tennis and kick-boxing are now popular sports among youngsters. We hope to promote these sports and believe that flexibility and body strength can be enhanced.

NEW ACTIVITY THIS YEAR

Engin' Festival

The Engin' Festival has been a tradition of Engineering Society, HKUSU since 1983. This year, a forum, welfare week, super-pass dinner and sports activities will be held during the Engin' Festival in order to raise awareness of this tradition among our members. The aim of the Engin' Festival is to broaden members' vision and to provide them with an opportunity to communicate with people internally and externally.

Graduate Mentor Scheme

Established by H.K.U. Engineering Alumni Association, the main objective of this scheme is to create a long-term relationship between the mentors and the mentees. A mentor would be assigned to each student so that they can gain valuable experiences by sharing ideas with their mentors.



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