

Faculty of Engineering Newsletter

May 2011

THE UNIVERSITY OF HONG KONG



Happy 100th Birthday!

It is truly an honour to make my contributions to the Faculty through overseeing the centenary celebration programs. Twenty-five years ago, I was involved in the planning and organization of the 75th anniversary celebratory activities for the first time. I met a lot of challenges along the way, but at the same time I gained a lot of experience and met many alumni and friends.

The Faculty of Engineering is one of the two founding faculties of the University of Hong Kong. It has gone a long way to become what it is today. Before the 70s, there were very few female students choosing engineering studies. Also, there were very few engineering jobs because there was insufficient development in public infrastructure. In those days, to make a living was a much harder thing for engineers and other professionals. Today, it is encouraging to know that we have a balanced ratio of male and female graduates in engineering. With the booming economy in the 70s and 80s, the Hong Kong Government started to put a lot of effort into building the necessary infrastructure to support the economic growth and our graduates have definitely played important roles in helping to define the community they live in. The pictures and discussions presented by the alumni in our Centenary Kick-off Ceremony have clearly reminded us how the Faculty of Engineering has been intertwined with Hong Kong's development as a whole. Generation after generation, staff, alumni and students have eventually succeeded in making our Faculty a leading provider of higher education and research in Engineering. As we celebrate our first 100 years of achievements with justifiable pride, we must reflect on our history and look ahead to the future - we must hold on to the best of the past and advance quickly with the best of the future. Indeed, we shall join hands to transform the future in order to live up to the University's mission "to be for China and the World".

To celebrate the 100th anniversary of HKU Engineering, the Faculty will be organizing a series of celebratory programmes in 2011 and 2012. Here are some of the major activities. In July, we will organize an exhibition in Times Square where the major applied research projects of our staff will be showcased to the public. We will also invite renowned scholars and speakers to share their knowledge and insights with our staff and students at centenary lectures and seminars. In 2012, we will organize a large-scale centenary dinner. We plan to invite alumni and friends, government officials, business and industry partners, and many others to join us at this joyful and meaningful event. I trust that our staff, alumni, friends and students will be actively supporting and participating in these celebratory activities.

I look forward to seeing all of you at our centenary events and activities!



Prof K L Mak
Associate Dean (Alumni and Industrial Relations)



Centenary Kick-off Ceremony

April 15, 2011



Prof Lap-Chee Tsui, Vice-Chancellor of HKU, congratulated the Faculty of Engineering for celebrating its centenary in 2011 & 2012



From left: Mr Otto Poon, Mr Joseph Shek Yu Ming, Prof W C Chew, and Dr Cheng Hon Kwan

To celebrate its 100th anniversary, the Faculty of Engineering organized a Centenary Kick-off Ceremony on Friday, April 15, 2011 at Rayson Huang Theatre, HKU. Professor Lap-Chee Tsui, Vice-Chancellor of HKU and Professor Roland Chin, Deputy Vice-Chancellor and Provost of HKU, were the officiating guests. It was a special occasion where alumni and friends, staff and students gathered for a joyful celebration. Some supportive alumni and students went on stage to give wonderful performances and panel discussions.



Guests gathering at the cocktail reception before the ceremony started



Violin Concerto by Mr Alan Kwok Nga Kui and Mr Wun Nga Hsuan Anson



The video of past Deans showing Prof S Y King



From left: Prof Paul Y S Cheung, Ir Edmund Leung Kwong Ho, and Prof Chan Hon Chuen



Five distinguished alumni sharing their thoughts and experience with the audience at the "Alumni Talk Show". From left: Dr Joseph Chow Ming-Kuen, Ir Dr Hon Raymond Ho Chung-Tai, Ir Edmund Leung Kwong-Ho, Ir Mak Chai Kwong and Dr Allan Wong Chi Yan



Live band performance by Mr Ekmanson Poon, Ms Zero Cheung, Ms Queenie Lai, Mr Sonny Cheung, Ms Shan Shan Lee, and Mr Joseph Ng



Prof W C Chew, Dean of Engineering, gave an opening speech at the ceremony



The recipients of Centenary Prizes taking a group photo with Prof Roland T Chin (left), Deputy Vice-Chancellor & Provost of HKU

The Ceremony started with a video that showcased the remarks of several past Deans of Engineering, including Professor S Y King, Professor Vincent W S Leung, Professor Y K Cheung, Professor Y C Cheng, Professor T N Lam, Professor Paul Y S Cheung, Professor Joseph H W Lee, and Professor T S Ng. Professor Lap-Chee Tsui and Professor Roland T Chin also presented prizes to winners of the Engineering Centenary Photo Contest and recipients of Centenary Prizes respectively. The Centenary Prizes were set up specifically to commemorate the 100th anniversary of the Faculty and to recognize outstanding students for their academic performances, leadership qualities, and community services.



From left: Mr Edmund S L Sung, Ir Edgar C P Kwan, Dr Joseph Chow Ming Kuen, and Ir Lo Wai Kwok



Ir Lo Wai Kwok performing the "Dragon Boat Rap" on stage



Dr Hon Raymond Ho Chung Tai chatting with Ir Chow Che King & Mr Kwong Hon Sang



The winners of the Centenary Photo Contest receiving the awards from the Vice Chancellor (right)



Mr Kwong Hon Sang hosting the fun and interesting photo quiz



The student helpers at the Ceremony

Professor Philip Wong Hon-Sum

Department of Electrical and Electronic Engineering, 1982

The contributions of the graduates of HKU to the Hong Kong society are plainly evident – just read the newspapers and view the news on TV. Congratulations, HKU, for the imprints you have left in your graduates' lives and the lives of people touched by your graduates.

In this age of smartphones and the internet, it is really hard to imagine how 120 young adults could share 4 phone lines in the dormitory back then. Almost thirty years after graduation, I still remember the delicious midnight meals cooked in electric rice cookers and heartily shared with all comers.

Everything I need to know about handling interpersonal relationships, building team work, striving for excellence, learning from defeat, accommodating differences in opinions, showing compassion for others – I had learned them from the 120 residents at Ricci Hall. There were 70 students in the Electrical Engineering class. The two students from Ricci Hall and St. John's College mostly came late for class and "shared" (a more politically-correct description than "copied") much of their homework and laboratory reports. These two students are the ones who become professors now.

On a more serious note, it is impossible to sum up my recollections of my study at HKU without paying tribute to my teachers. Here is a tribute to Prof. Y.C. Cheng, my teacher

and mentor. During my final year, I spent most of my time working on the final-year project advised by Professor Y.C. Cheng. I am forever grateful to Prof. Cheng for broadening my horizons and giving me the opportunities to learn, to fail, and to succeed.



Dr. Francis Lung

Department of Mechanical Engineering, 1982

Congratulations to Engineering Faculty's 100th Birthday! We are all proud to be graduates of our Alma Mater as HKU Engineering makes us proud!

Hmm ... recollection of university days? It is such a long and distant memory. I could remember that it was a lot of fun and classmates were very supportive of each other. Actually, we all really needed that mutual support as we would not have had quality time to spend with our beautiful girlfriends otherwise because of those lab and drawing assignments. These assignments really took a lot of time and I used to envy those classmates who came from Hong Kong Polytechnic. They seemed to be able to finish things so quickly.

On lecturers, Prof Tan just joined the university when I was in my first year. He was just a young person, full of energy and liked having fun with the students in his classes. All I could remember about him was snooker. He spent a lot of time discussing how snooker shots could be explained by applied mechanics. It did not come as a surprise when such a question appeared in the final examination.

Question for you: Do you ever understand Prof Duggan's

lectures? I never did. He spoke too fast and the diagrams were too Picasso-like for me. I hope you find him otherwise.

We used overhead projectors during lectures in our student days. Guess who used up a roll of transparency film most quickly within a lecture period? It was Prof Greene, he taught with such enthusiasm that, at the end of every lecture, nearly a whole roll of fully written up transparency film was on the floor.

Oh, one more, I think you all will agree with me on this one: Dr Sainsbury has the best handwriting on earth! I always wondered how he could write so neatly!

Last but not least, I wish Engineering Faculty many happy returns and a fantastic century ahead!



Arthur Chang Che Hung

Department of Computer Science, 1988

Congratulations to the 100th anniversary of Faculty of Engineering! I sincerely wish that the Faculty will continue to grow and prosper!!

The study at University of Hong Kong is for sure one of the most unforgettable experience in my life. In our last year of study, we spent uncountable hours at the computer lab working on our final year projects. We were the first group of "宅男/宅女", staying in the computer lab and communicating day and night in a format which was unusual in those days but now becomes part of our daily life- email and Instant Messenger!! Most of today's computer tools and

languages do not even exist in those days.

It is so amazing to see how fast the computer industry evolves, which I am sure the Faculty will continue to be a key incubator for our future leaders in such a dynamic environment.



Dr. Vincent Lau

Department of Computer Science, 1992

Thanks to the Faculty of Engineering for giving me the chance to explore, to equip myself with a mind set to cope with this fast changing world. It is interesting to see that some instances during my study are linked to some achievements and directions many years later and in coming future



- My undergraduate study in Computer Science and involvement in computer society enable me to develop Q9 software package in home to a HK listed company.
- Some software codes developed in year one became part of my software developed for my part time Ph.D. research topic around 20 years later.
- A hobby during my final year about a micro processor based mice (for maze solving) enabled me to learn electronics in depth and entered consumer electronic product industry and worked in multinational company for creating 100+ products.
- Some voluntary work and ideas in the 1990s became an inspiration; now I am planning a social enterprise to help invisible teens / hikikomor (隱閉青年)



Joelle Woo Oi Chi

Department of Computer Science, 1994

Congratulations to the Faculty of Engineering on its 100th anniversary! It is definitely an exciting and great milestone marking the success of the faculty.

Happy moments stick to my mind. It was a great 3 years studying in HKU. Being one of the graduates of the 1st Information System stream in Computer Sciences, I was trained to understand both IT and business languages. Learning PASCAL and Basic programming seems outdated now but the logical thinking lasts. I still remember how I learnt to use Powerpoint for my final year project presentation by following the steps in the menu. Now it becomes part of my job in marketing it.



Paul Mak Kam Kie

Industrial and Manufacturing Systems Engineering, 1977

I sincerely offer my heartfelt congratulations to the Centenary celebrations. I am so very grateful to the Faculty because my experience and the people I met there have had an immeasurable impact on my life. They have led to my good career and indeed my current good health can be ascribed to the friends I made at the Faculty.

IMSE Class 1977. Because of the Department's small size, it is known for its unity. There were only 20+ in a class in those days, yet we were able to form a soccer team. The rest of the classmates formed the cheer group. Whenever there were matches all of us turned up.



At the 25th Anniversary Dinner of the Department held in 1999, over 600 members of the Department and guests attended. According to DAAO, we made a new record for the attendance number at alumni events.

Dr. William Y. Li

Department of Electrical & Electronic Engineering, 2000

Congratulations to my alma mater on its 100th anniversary. Over the past century, HKU has inspired and groomed young people (including myself who graduated 15 years ago) to become fearless yet sophisticated pioneers of innovation. I wish my alma mater the very best for many more centuries to come.



During my 3 years' study at HKU, I learned from elite researchers with passion. In addition to academic excellence, I appreciate greatly that HKU opens its vast opportunities to everyone, rich or poor. Everyone is treated equally in this big family. I still vividly remember I (still a kid then) nervously emailed the Dean, asking if he could supervise me in my Final Year Project. After meeting with me and understanding my proposal, he did not laugh it off (I did laugh at my

own work years later) but gladly took me as a student. This mentoring relationship did not end after the project; we have remained friends ever since. I appreciate his advice, encouragement, and friendship. It shows me that education is not merely knowledge transfer, but helping young people pursue their dreams. In case you are curious, my mentor is Prof. Paul Cheung.

Dr. Daniel T.K. Yan

Department of Civil Engineering, 1990

HKU Faculty of Engineering, embracing a centennial role in cradling the engineering mastermind of the region who contributed to dovetailing the strengths and needs of the community, has proved itself a key engineer of HK's achievements, for now and for many generations to come.

"We march thru the stream..." and "Engin' Engin' Go..", the Engineering Society song and cheers always trigger my student life flashbacks.

The first class callously disapproved my first university hypothesis – H0: "Civil Engineering Department is coeducational." My cohort showed a lopsided gender percentage to male...at 100-0.

In retrospect, some of my training should be quasi-curriculum. One, Time Management:



how to justify, with innovative excuses, a request for lab rescheduling to make room for hall activities? Two, Public Relations: how to go into other societies' X'mas balls gratis?

Dr. Albert Kwan's (as he then was) timely critique of my final-year project was phenomenal – "Seeing me so late? Very likely you'll fail." Although it was only mid-September by then, I could sense his hilarious smile at heart. That said, the sense of challenge I experienced from such exercise is so useful in my business and doctoral study endeavours.





5th INAUGURATION OF
ENDOWED PROFESSORSHIPS

KINGBOARD PROFESSOR IN MATERIALS ENGINEERING

Prof. A.H.W. Ngan was named Kingboard Professor in Materials Engineering, in the University's 5th Endowed Professorship Inauguration Ceremony held on April 12, 2011. The Kingboard Professorship is established with a generous donation by the Kingboard Chemical Holdings Ltd. to HKU, to support research in materials engineering. In HKU, Endowed Professorships are one of the highest honours bestowed on academics. Prof. Ngan is a leading expert in materials engineering, and his research concerns mainly the atomic-level mechanisms that control the properties of engineering materials. The physical properties of materials in general and mechanical properties in particular are



influenced mainly by the defects that are present inside the material, and so it is the management of these defects, be they voids or cracks or deformation debris, which is important in leading

to the right properties. Prof. Ngan use both experimental and theoretical techniques to study the nature of these defects, and how they control materials behaviour.



"I find my research very meaningful, because as we look back into the history of technology, very often it is the development of the right material that makes a new technology, or an idea workable." Prof Ngan said. "For example, it was the development of aluminium alloys that are both strong and light that made civil aviation possible as we see nowadays. Very often, it is also the limits of materials which impose limits on technologies. I am very grateful to the Kingboard company for the endowment. This is a very important endowment to HKU, and the area is right at the heart of modern technologies, so the donor is truly visionary in their choice. Their support will provide me with sustained research funding so I can focus better on my work."



Mentorship Day

February 22, 2011, Rayson Huang Theatre, HKU

The Faculty of Engineering organised the Mentorship Day this year on February 22, 2010 to provide an opportunity for year one engineering students to meet their non-academic tutors and peer mentors. Professor W.C. Chew, Dean of Engineering; Professor Y.S. Hung, Associate Dean (Knowledge Exchange); Mr Hermann Suen, Chairman of Engineering Society; and Ir Morris S. W. Cheung, Vice President of HKU Engineering Alumni Association – they all shared their thoughts and experiences with students at the event. About 160 freshmen and 80 peer mentors and non-academic tutors attended the event.



William Mong Distinguished Lecture



“Some recent developments in the design and analysis of large driven piles”

By Professor Richard Jardine
Head of Geotechnics
Imperial College London, England

April 18, 2011



“Vehicle dynamics, engineering thought-experiments and Formula One racing”

By Professor Malcolm Smith
Professor of Control Engineering and
Head of Control Group,
Department of Engineering
University of Cambridge, England

January 13, 2011



“Internet-scale data distribution: some research problems”

By Professor M. Tamer Özsu
Professor of Computer Science and University Research Chair
David R. Cheriton School of Computer Science
University of Waterloo, Canada

December 13, 2010



Engineering Distinguished Lecture

“Research challenges and software tools for image-based biomedical modeling, simulation and visualization”

By Professor Chris Johnson
 Director, Scientific Computing and
 Imaging Institute
 University of Utah, USA

March 1, 2011



“Quantum dots: genesis, the excitonic zoo, and nano-photonics”

By Professor Dieter Bimberg
 Executive Director, Institute of Solid State Physics and
 Center of Nanophotonics, Technical University Berlin & Chairman,
 Board of the German Federal Government
 Nanotechnology Centers of Competence
 Germany

January 10, 2011



Faculty Seminars & Talks



“Queueing theory revisited”

By Professor Victor O. K. Li & Professor Guang-Liang Li
 Department of Electrical and Electronic Engineering, HKU

April 21, 2011

Entrepreneurial talk: successful business leaders to share insights on entrepreneurship

April 21, 2011



Co-organized by Young Entrepreneurs Development Council (YDC) and Faculty of Engineering, this entrepreneurial talk aims to instill entrepreneurial spirit in university students through learning and sharing with successful role models. The speakers include Mr. Ricky Wong Wai-kay, Co-founder and Chairman, City Telecom (H.K.) Ltd. & Hong Kong Broadband Network Ltd; Mr. King Leung, Managing Director, Datatrade Limited; and Mr. Raymond Lo, Executive Director, Business Development, China Region, Parsons Brinckerhoff International.

Faculty Seminars & Talks

*Public lecture by Tom Logsdon:
Fly me to the moon*

March 28, 2011

*Jointly organized by Faculty of Engineering and
School of Humanities**“Dealing with: reporters, clients and lawyers”***By Ir Dr. George Greene***Visiting Associate Professor, Department of Mechanical Engineering, HKU
Principal Consultant, Safety, Accident and Failure Experts Ltd. (SAFE)*

March 9, 2011

*“Revitalizing engineering through
innovation and entrepreneurship”***By Professor Paul Y. S. Cheung***Department of Electrical and Electronic Engineering &
Director of Technology Transfer, HKU*

January 31, 2011

*“The Rwandan invasion: how a group of
undergraduate students try to change a country”***By Professor Peter Y. K. Cheung***Head of Electrical & Electronic Engineering and Professor of Digital Systems
Imperial College London, England*

December 17, 2010

*“Research and development of wind turbine
technologies for harnessing wind energy”***By Professor Dennis Y. C. Leung***Department of Mechanical Engineering, HKU*

December 13, 2010



Knowledge Exchange (KE) portal and mobile application officially launched

The Knowledge Exchange (KE) unit of the Faculty of Engineering has launched a new KE web portal recently. Through this KE portal, users can view and download books, software, news media and video contributed from colleagues in the Faculty. Users can also check the upcoming Knowledge Exchange events and search for the right talents for internship or contract research through the portal. Please visit the Knowledge Exchange Portal at <http://www.engg.hku.hk/ke/>. A mobile application for smart phone can also be downloaded from the Appstore <http://itunes.apple.com/hk/app/kemobile/id430285556?mt=8>.



Seminar on Design of Steel Structures according to Eurocode 3

The half-day seminar on design of steel structures according to Eurocode 3 organised by Department of Civil Engineering, The University of Hong Kong was held on December 14, 2010 at the Intercontinental Grand Stanford Hotel, Kowloon, Hong Kong. Four prominent overseas and local academics, researchers and engineers presented and shared their experience on the latest development and

technology in the field of steel structures and the design of steel structures according to Eurocode 3. The lecture notes were edited by the seminar chairman, Professor B. Young. The seminar was attended by over 100 engineers and researchers from various government departments, consultant firms, construction companies and universities. The sponsorship for this seminar from the Vallourec & Mannesmann Tubes is gratefully acknowledged.



The 13th International Symposium on Tubular Structures

The International Symposium on Tubular Structures organised by Department of Civil Engineering, The University of Hong Kong was held during December 15-17, 2010 at the Intercontinental Grand Stanford Hotel, Kowloon, Hong Kong. This Symposium is the 13th on the series and is considered the principal showcase for tubular structures and the prime international forum for discussion of research, developments and applications in this field.



The welcoming speech of the Symposium was delivered by Professor Roland Chin, Deputy Vice-Chancellor and Provost

of The University of Hong Kong. The International Symposium was well attended by approximately 150 overseas and local academics, researchers and engineers. The participants were coming from 22 countries and 5 continents. Over 90 technical papers were presented at the Symposium. The papers were published by Taylor & Francis Group in the symposium proceedings together with a CD, edited by the symposium chairman, Professor B. Young.

Staff Activities

Dr. S.T. Smith has been promoted to "Associate Professor" on tenure terms effective from March 1, 2011. The promotion is a recognition of Dr. Smith's accomplishment and hard work over the years.

Dr. A.T. Yeung presented the keynote lecture "Field-scale evaluation of non-destructive underground void detection techniques" at the 2nd International Conference on Utility Management & Safety in Hong Kong on March 8, 2011. The project was supported by the Drainage Services Department of the Hong Kong SAR Government.

Staff Activities

Dr. A.T. Yeung chaired the 1st ASCE Region 10 Board of Governors meeting 2010-2011 on February 14, 2011 in Pattaya, Thailand in his capacity of ASCE Region 10 Director and Chair of the Region 10 Board of Governors.

Dr. A.T. Yeung officiated at the signing ceremony of the Agreement of Cooperation between ASCE and the Engineering Institute of Thailand under H.M the King's Patronage on February 18, 2011 in Bangkok, Thailand in his capacity of ASCE Region 10 Director.

Dr. A.T. Yeung was elected Senior Vice President of the Community & Construction Professionals Development Centre 2011-2013.

Professor S.C. Wong was appointed as a member of the

Logistics and Transportation Discipline Advisory Panel and Education and Examinations Committee of the Hong Kong Institution of Engineers for the term 2010-2011.

Professor S.C. Wong delivered a keynote speech on "A continuum model for housing allocation and transportation emission problem in a polycentric city" at the 2010 International Conference and Annual Meeting of Chinese Institute of Transportation, December 9-10, 2010, Taichung, Taiwan.

Dr. J. Yang was invited to sit on the Technical Committee on Seismic Resistance Design of Geotechnical Structures, Chinese Institute of Seismic Design and Disaster Prevention. He gave an invited presentation entitled "Site response to multi-directional earthquake loading" at the committee's inaugural meeting held in Chongqing, China on December 25, 2010.

New Staff

Dr. K.H. Law joined the Department of Civil Engineering as Teaching Consultant in March 2011. Dr. Law is also a Chartered Structural Engineer and her professional experience in the industry substantially enriched her

knowledge in structural engineering and equipped her with strong engineering basis, inter-personal and managerial skills for undertaking research and teaching in this profession.

News from Centre for Infrastructure and Construction Industry Development (CICID)

Inaugural issue of BEPAM - Complimentary online access

Complimentary online access until **June 17, 2011** to the forthcoming 1st issue of *Built Environment Project and Asset Management* (BEPAM), is specially offered to friends of HKU, since BEPAM is supported by our Dept. of Civil Engineering and the 'Centre for Infrastructure and Construction Industry Development' (CICID).

This new international Journal addresses interfaces between project management and asset management of building and civil engineering infrastructure. It focuses on cutting edge research and development in 'construction project management' and 'infrastructure asset management', e.g. arising from life-cycle and sustainability imperatives.

To access the inaugural issue: log on to www.emeraldinsight.com/2044-124X.htm with:

Username: BEPAM

Password: emerald

To be notified about future issues, please register for 'contents alerts' at www.emeraldinsight.com/2044-124X.htm.

Please feel free to forward above message to any of your colleagues, friends and any networks who may be interested in BEPAM.

Symposium on Construction Industry Development - Comparison and Acceleration organised by CICID

Organised by the Centre for Infrastructure and Construction Industry Development (CICID), this symposium was held in the Wang Gungwu Lecture Hall of The University of Hong Kong on January 18, 2011. It was attended by over 160 professionals, as well as by academics and researchers. At the morning conference session, four eminent speakers spoke on recent construction industry developments and the way forward in Hong Kong. These were juxtaposed against independent overviews of construction industry developments in Hong Kong, Singapore and UK, based on ongoing research by the respective team leaders. The afternoon Workshop involved

more intensive brainstorming within three focus groups, to help develop a framework and strategies for optimising and accelerating construction industry development.



Brainstorming Workshop with Delegation from Ministry of Public Works, Indonesia on Construction Industry Development on March 10, 2011

A brainstorming workshop with a delegation from Ministry of Public Works, Indonesia was arranged by CICID on March 10, 2011. Participants included Professor Dr. Ir Danang Parikesit, Special Adviser for the Minister of Public Works, Ir Dadan Krisnandar, Dr. Ir Akhmad Suraji and Ir Budi Setiawan from The Directorate General of Construction Development, Ministry of Public Works in Indonesia and Hong Kong industry and academia representatives.



Zhengdong Kindergarten in Construction

Prof. P.K.K. Lee, Dr. D.J. Guo and a group of seven students spent their holidays of last Christmas on the site of the project in Chongzhou, Sichuan. They were looking into a problem with the excavation for a foundation which was near the side walls of an old house. To protect the old house, local engineers proposed the footing



foundation to be replaced by a caisson foundation. Our students had a good chance to learn about this special type of foundation which has been banned in Hong Kong since 1995. The site visit was financially supported by the Lee Hysan Foundation.

The Center for Information Security and Cryptography (CISC) of the Department of Computer Science introduced its ITC projects Flexible Framework for GPGPU-based Video Decoding and Post-processing (ITS/139/09) and Object-oriented Motion Deblurring Technology for Forensic Video Enhancement (ITS/152/09) at InnoCarnival of InnoTech Month 2010 (ITM 2010), which was held at Hong Kong Science Park from November 6 to 14, 2010. InnoCarnival was one of the major events of ITM 2010 launched by Innovation and Technology Commission (ITC), which aims to present a variety of spectacular programmes on innovation and technology for public participation with free admission. Over 2,500 people visited the project booth of CISC during the nine days of the event.



Engineering Science Workshop

A half-day interactive workshop was organized to introduce engineering science principles that have broad applications in the real world to Primary 5 students. A total of 40 students living in Sha Tau Kok came to HKU on February 25, 2011 for this event. The workshop was intended to give an early inquiry-based exposure on engineering to primary-school students in Hong Kong and was delivered by members of the Biomedical Engineering Laboratory.



Engineering and Healthcare

To encourage secondary school students to develop interest in technological innovations, a two-day workshop entitled "Engineering and Healthcare: From High-Tech Metropolitans to the Developing World" was organized in December 2010. The workshop was held over two consecutive Saturdays at HKU, and over 25 gifted students registered to join this occasion. It served as a knowledge exchange platform between HKU and gifted students in Hong Kong.



Organized by the Hong Kong Academy for Gifted Education, the workshop was delivered by Dr. Alfred Yu and four research staff members from the Biomedical Engineering Laboratory (Simon Lai, Ivan Tsang, Billy Yiu, Donald Chan). It covered a broad range of topics with emphasis on introducing the role of biomedical engineering in today's world. Through this workshop, participants were able to find out more about how various real-world biomedical engineering technologies are making an impact in the global society.

Knowledge Exchange 2010

A group of 20 students from the University of Electronics Science and Technology of China visited HKU from December 20 to 23, 2010. A team of EEE students who went to Sichuan in May 2010 received the delegates. They interacted and exchanged knowledge together through a Student Knowledge Exchange Conference, visiting the Hong Kong Science and Technology, Hong Kong Stock Exchange, and HK Convention and Exhibition Centre, etc.



Seminar by Legislative Councilor Mrs. Regina Ip



Legislative Councilor Mrs. Regina Ip, presented a seminar titled "Making IT work in Hong Kong" to around 150 students studying Information Engineering, Electronic and Communications Engineering, Computer Engineering, Electrical Engineering, and Medical Engineering. On Feb 1, 2011, Mrs. Ip addressed the importance of high-tech industry to the economic development in many well-developed cities. She shared her views on the success factors for the development of high tech cluster in Shanghai, Beijing, Singapore, India, and the Silicon Valley.

Staff News

Prof. K. W. Chow helped to organize two special public seminars, 'The Japan Earthquake' at HKU on March 19 and 21, 2011. He also conducted an invited talk on 'The Origin and Dynamics of Tsunamis' at the Hong Kong Science Museum on April 2, 2011.

Dr. Sam C. M. Hui was invited to make a presentation at the Hainan China World Green Roof Conference in Hainan, China from March 18 to 21, 2011.

Dr. Sam C. M. Hui was invited to make a presentation at the CIBSE Hong Kong Branch Annual General Meeting held in Hong Kong on March 8, 2011.

Dr. Chun-Ho Liu gave an invited talk on "High-Performance Computing and Air Turbulence/Pollution Studies" in the PRAGMA 20th Workshop cum HKU Centennial IT Conference (March 2-4, 2011). He is also a member of the International Program Committees & the Local Organizing Committees.

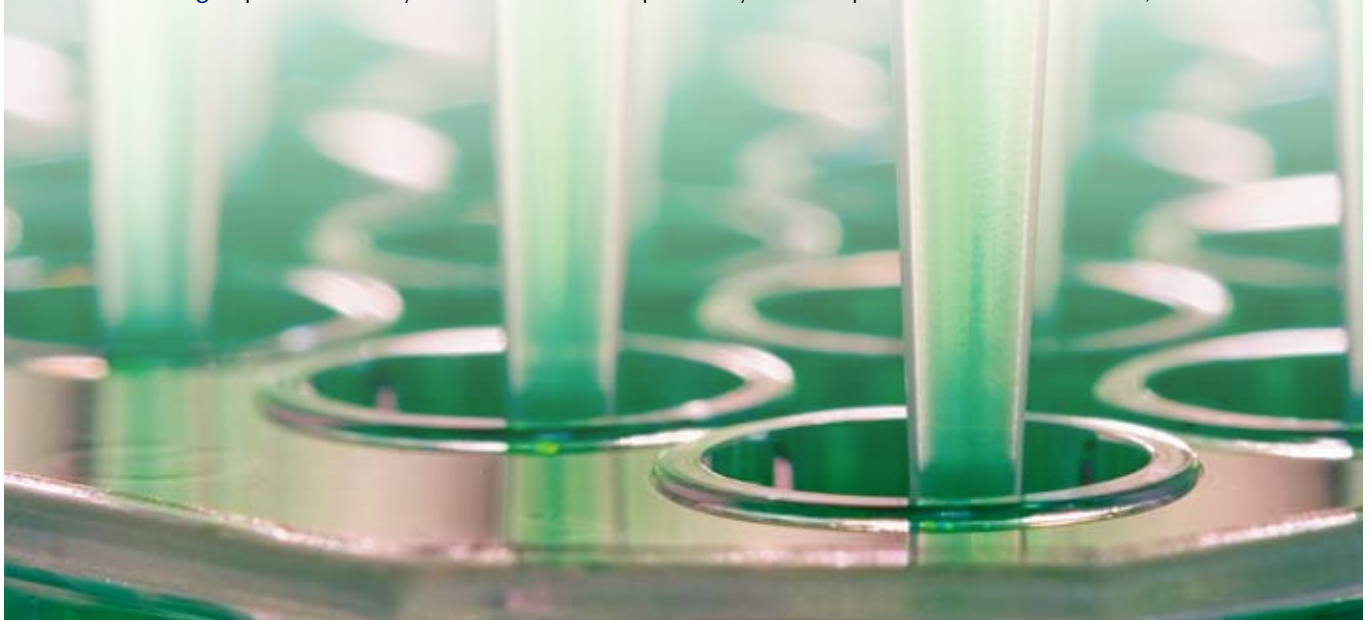
Prof. A. H. W. Ngan presented a keynote lecture on "Creep

deformation of micron to submicron material volumes", at Plasticity 2011 (January 3-8, 2011) at Puerto-Vallarta, Mexico.

Prof. A. H. W. Ngan gave an invited talk on "Transition from Deterministic to Stochastic Deformation", at symposium "Advances in Mechanics of One-Dimensional Micro/Nano Materials", 140th TMS Annual Meeting (February 27-March 3, 2011) San Diego, CA, USA.

Prof. A. H. W. Ngan gave an invited talk on "Achieving Ultra-high Strength and Strain-hardening Rate by Trapping Dislocations in Small Material Volumes" at the symposium "Size Effects in Mechanical Behavior", 140th TMS Annual Meeting (February 27-March 3, 2011) San Diego, CA, USA.

Dr. A. Shum presented papers in Advances in Microfluidics and Nanofluidics / Asian-Pacific International Symposium on Lab on Chip (AMN-APLOC 2011) in Singapore in January 5-7, 2011. These works are reported in 'News & Views' of 'Nature', and 'Material Views'. He also gave an invited talk in the Physics Colloquium of HKUST on March 4, 2011.



Staff Awards



Professor Y.K. Cheung (pictured, right) was awarded the Hall of Fame 2010 by The Hong Kong Institute of Engineers. The award is dedicated to honour outstanding members who have made exemplary contributions and outstanding achievements to the Institution, the engineering profession and the community as a whole.

The research project “Buoyant jets in complex environments – theory, innovative technology and application” led by **Professor J.H.W. Lee** has won a SSTPA Second-Class Award (State Scientific and Technological Progress Award). Other core team members are **Professor W.P. Wang** of Department of Computer Science, **Professor Y.G. Li** of Department of Mechanical Engineering, **Dr. V. Cheung** of the Department of Civil Engineering, The University of Hong Kong; and **Professor Hongwu Tang** of Hohai University, Nanjing. The SSTPA is conferred on scientific workers in the fields of science and technology who have made outstanding contributions. More than 680 nominated entries competed for SSTPA in 2010 and this is one of very few successful SSTPA award from Hong Kong.

Dr. N.N. Sze and **Professor S.C. Wong** and (with **O.F. Wong, K.L. Tsui, Tommy S.K. Lam, F.L. Lau and S.H. Liu**) was awarded the Best Original Paper Award 2010 for their paper entitled “Prevalence of drugged drivers among non-fatal driver casualties presenting to a trauma centre in Hong Kong” published in the Hong Kong Medical Journal.

At the Award Presentation Ceremony for Excellence in Teaching and Research 2010 held on February 17, 2011 in the Rayson Huang Theatre:

- **Prof. P.K.K. Lee** (Leader), Professors **L.G. Tham, A.K.H. Kwan, Drs. K.L. Su, D.J. Guo** and **Y.P. Huang** received the Outstanding Teaching Award (Team Award) for the Mingde Projects.



Team members sharing the honor at the Award Presentation Ceremony

- **Professor M.M. Kumaraswamy** received the Outstanding Research Student Supervisor Award.
- **Dr. J. Yang** received the Research Output Prize (Faculty of Engineering) for his paper “Site Response to Multi-directional Earthquake Loading: A Practical Procedure”, co-authored with **Ms. Yan Xiaorong**, published in *Soil Dynamics and Earthquake Engineering*, 29 (2009), 710-721.

Student Awards

The following BEng students were awarded the HKU Foundation Scholarships for Outstanding Students 2010-11:

- Mr. Chan Cheuk Hei Jervons** (Year 1)
- Mr. Chung Chi Hang** (Year 3)
- Mr. Shui Chin Sum** (Year 2)
- Mr. Wong Wai Keung** (Year 1)

Mr. Chiu Yik Kan (2010 graduate), selected by the HKIE Geotechnical

Division, won the 1st Runner-up of the AECOM Prize for the Best Final Year Geotechnical Project 2010-2011. Mr. Chiu's project was supervised by **Dr. R.W.M. Yan**.

Dr. Jacky K.H. Chung, who earned his PhD under the supervision of **Professor M.M. Kumaraswamy** in 2010, received the Tony Toy Memorial Award for his outstanding dissertation titled “Development of a Collaborative Briefing Approach for Infrastructure Projects in Hong Kong”. This award acknowledges the high quality research output by research students in the domain of Value Management.

Mr. Guan Jingwei (2010 graduate), selected by the HKIE Geotechnical Division, won the AECOM Prize for the Best Student of the Year 2010-2011.

Mr. Law Tsz Ting (Year 3 BEng student) was awarded the CMA and Donors Scholarships 2010-11 by The Chinese Manufacturers' Association of Hong Kong.

Mr. Ling Shao Keat (Year 1 BEng student) was awarded the HKSAR Government Scholarship Fund 2010-11 and HKU Foundation Scholarships for Outstanding International Students 2010-11.

Mr. Peng Jun, PhD student supervised by **Dr. J.C.M. Ho**, was awarded the HKIE Outstanding Paper Award for Young Engineers/Researchers 2010 by The Hong Kong Institution of Engineers (HKIE) for the paper entitled “An experimental study on strain gradient effect of equivalent rectangular stress block of normal-strength concrete”. The prize presentation was held at the HKIE presidential address dinner on September 14, 2010.

Staff Awards

Dr Lucas Hui, Director of the Center for Information Security and Cryptography in the Department of Computer Science, has been appointed by the Government Chief Information Officer (the GCIO) as a member of the Advisory Committee on Code of Practice for Recognized Certification Authorities for a period of two years from February 1, 2011 to January 31, 2013.

Dr Kevin Pun, an expert on IT law in the Department of Computer Science and co-director of the Law and Technology Centre jointly established by the Department of Computer Science and the Faculty of Law, has recently been re-appointed by the Chief Executive

of the Hong Kong SAR as a member of the Unsolicited Electronic Messages (Enforcement Notices) Appeal Board for another three years effective December 22, 2010. The re-appointment was gazetted on December 17, 2010.

Student Awards

Mr. Dongxiao Yu, a PhD student, was awarded the Microsoft Research Asia Fellowship 2010. The Microsoft Research Asia Fellowship Program aims to recognize outstanding junior PhD students in the Asia-Pacific region, as well as facilitate and empower the future growth of junior PhD students majoring in Computer Science,

Electronic Engineering, Information Science, or Applied Mathematics, who have the potential to become future research leaders. This year, 95 PhD students were nominated for the fellowships and 28 of them were selected. Mr. Yu is currently working on his PhD thesis in Computer Network under the supervision of **Professor Francis Lau**.

Mr. Li Hao, a final year BEng(CompSc) student, received the HKMA Information Technology Management Club Scholarship 2010-11. Established by the Hong Kong Management Association, this scholarship is awarded on the basis of academic merit, leadership and participation in extra-curricular activities.

Staff Awards

Dr Kenneth Wong, the chairman of Hong Kong Chapter of IEEE Photonics Society, led it to win the IEEE Photonics Society 2010 Chapter of the Year Award. Dr. Wong received the Award at the Awards Banquet of the Photonics Society Annual 2010 Meeting in Colorado, USA in November 2010.

Prof. Ed. X. Wu received the Outstanding Researcher Award 2009-2010 in recognition of his research accomplishments, the quality and quantity of his research publications, the ability to attract research grants and his involvement in high-impact applied research work. The Outstanding Researcher Award is an annual award that honours HKU's outstanding researchers for their outstanding research at the University of Hong Kong.

Conference 2011(WWDC2011) Student Scholarship. Each of them is awarded a free ticket to attend the WWDC 2011 conference in San Francisco this June 6-10, 2011. The WWDC is the premier technical event for developers and IT professionals innovating with Apple platforms. The project supervisor of Miss Lau is **Dr. Vincent Tam**.

EEE students and graduates **Au Yeung Hoi Hang Eric** (EComE graduate 2010), **Law Kam Yuen Ken** (EComE graduate 2010) and **Wong Wai Ming** (CE3) won a Certificate of Merit in the Hong Kong ICT Awards 2011: Best Ubiquitous Networking Award for their project Interactive Class System (iClass) won in the category of

Mobile learning and Publishing. The project iClass system was developed from a Final Year Project and the system is now being trial in some courses across a few faculties.

Mr Xu Jin, a PhD candidate, has been awarded a Certificate of Merit in the HKIE Innovation Awards for Young Members 2011 (Category I). The HKIE Innovation Awards for Young Members 2011 aims to encourage young HKIE members to develop their creativity through innovative application of engineering knowledge.

EEE Students **Au Yeung Hoi Hang Eric** (EComE4), **Cheng Tsz Kwai Cindy** (EE3), **Liu Guannan Gavin** (EComE3), **Li Jia Wen Angela** (EcomE2) and **Huang Chao** (EcomE3) won the Bronze Award in the 7th National Challenge Cup organized by Jilin University from September 23 to 26, 2010. The 7th Challenge Cup is a national competition organized by Central Committee of the China Communist Youth League, China Association of Sciences, Ministry of Education and National Academic Association, and co-organised by Jilin University.

Student Awards

Three EEE students, **Mr. CHAN Alexander Ho-young** (InfoE-1), **Miss LAU Hayley Man Hay** (CE-1) and **Mr. TAKWI W. Desmond** (EComE-2) were awarded the Apple Worldwide Developers



Staff Awards

Dr B.P. Chan, Associate Professor, has received the Outstanding Young Researcher Award 2011.

Dr L.X. Huang, Associate Professor, has received the Faculty Best Teacher Award 2011.

Dr Boris H.W. Tong, Postdoctoral Fellow, was the winner of Young Persons' Lecture Competition (HK Heat), Institute of Materials, Minerals and Mining (Hong Kong Branch), in July 2010. He was also a winner of the Best Young Engineers Papers Award at the Biomedical Engineering International Conference 2010.

Student Awards

Boeing – Cathay Pacific Engineering Internship Award 2011

Orbananos Lai Aina (ME Year 2)

Wu Cheuk Yin Ernest (ME Year 2)

Wong Tin Po Neil (ME Year 2)



Boeing-Cathay Pacific Engineering Internship Programme 2011 Selection Interview Group Photo – (front row from left to right) – Dr. L.X. Huang (HKU), Dr Eric Wong (HKPolyU), Prof S.T. Tan (HKU), Mr. Chris Morgan (Boeing), Mr. Darryl Chan (Cathay), Mr S.S. Lam (HASEL), Prof. K. Tang (HKUST)

Speak Out for Engineers (SOFE) competition

Mohamed Shibly Kaamil Ur Rahman (ME Year 2)

Design for Elderly competition
Hung Tsz On Harris (ME Year 3)

Zhang Zeyi (ME Year 1)

Kenneth Yung Hon Yi (ME graduate in 2010)

British Council FameLab HK 2010 competition

Mohamed Shibly Kaamil Ur Rahman (Grand Prize and Audience Choice Award)

Ahmed Saleem Grewal (ME Year 2) (Second Runner-up Online Video Selection Award)

Analogue Engineering Group Scholarship in Mechanical Engineering 2009-2010

Cheng Yuen Ching (ME Year 4)

Hong Kong Government Industry Department Prize in CAD/CAM Technology 2009 – 2010

Chau Chi Wai (ME Graduate)

The Chartered Institution of Building Services Engineer Book Prize 2009 – 2010

Chan So Chun (ME-BSE Year 3)

The Chartered Institution of Building Services Engineers Prize 2009 - 2010

Wong Chi Chung (ME-BSE Year 3)

Ho Fook Prize in Engineering 2009 – 2010
Ahmed Saleem Grewal (ME Year 2)

Fong's Project Prize in Mechanical Engineering 2009 – 2010

Ho Sin Wai, Chung Hin Yeung, Kwok Wai Lun, Choi Hin Fai Raymond (ME Graduates in 2010) (Design Project)

Tang Kit Wai, Chu Chi Wah Henry (ME Graduates in 2010) (Final Year Project)

Walter Brown Memorial Prizes in Mathematics 2009 – 2010

Fang Tianshi (ME Year 2)

Hong Kong Joint Branch of the Royal Institute of Naval Architects and the Institute of Marine Engineer Prize 2009 – 2010

Leung So Sum (ME Year 3)

Ma Tse Sau Prize in Mechanical Engineering 2009 – 2010

Kwok Wai Lun (ME Graduate in 2010)

The Hong Kong Electric Co. Ltd. Energy Systems Prizes 2009 – 2010

Choi Chi Fai (ME Year 2)

Wong Man Long (ME Year 3)

Lao Seak Hong (ME Graduate in 2010)

Chiap Hua Cheng's Foundation Scholarships 2009-2010

Law Kwok Fai (ME Year 2)

Chung Wai Choi (ME Year 3)

Tang Kit Wai (ME Graduate in 2010)

CO2nnsulting Initiative for Education and Research in Climate Change

Leung So Sum (ME Year 3)

Daikin Scholarship 2009 - 2010

Kwok Yu Ho (ME-BSE Year 2) (Level 1 award)

Wong Chi Chung (ME-BSE Year 3) (Level 2 award)

Lai Yuen Yee (ME-BSE Graduate in 2010) (Level 3 award)

Shum Wai Ling (ME-BSE Graduate in 2010) (Design award)

Lam Yan Ting Edith, Yuen Chun Yin Anthony (ME-BSE Graduates in 2010) (Design and Research Award)

Wong Ki Fung Mike (ME-BSE Graduate in 2010) (Research Awards)

Simatelex Charitable Foundation Scholarship 2009-2010

Ahmad Saleem Grewal (ME Year 2)

Chau Chi Wai (ME Graduate in 2010)

ASHRAE Hong Kong Chapter Scholarship 2009-2010

Chan So Chun (ME-BSE Year 3) (Diamond Award, Bachelor degree category)

Best Final Year Energy Project Competition 2010 by Energy Institute Hong Kong (Branch)

Wong Ki Fung Mike (ME-BSE Graduate in 2010) (1st Runner-Up, individual project category)

Best Student Paper Award at the Second International Symposium on Surface and Interface of Biomaterials

Tao Sun (PhD student)

Young Investigator Award at the 2010 International Symposium of Materials for Regenerative Medicine

Siyue Li, (PhD student)

37th Annual General Meeting of H.K.U. Engineering Alumni Association

With the continuous support from all the members in the year of 2010-2011, our activities were held successfully and fruitfully since the inauguration of the cabinet. Time flies, through this year, we have pursued our aim of promoting friendship amongst HKU Engineering graduates and to organize recreational, social and cultural activities. In order to show our sincere thanks to our supportive members and to share our effort and joyful results with all of you, we cordially invite you to join the 37th annual general meeting of the HKU Engineering Alumni Association.

Date : 15th July 2011 (Friday)

Time : 7:00 pm

Venue : The Chinese Club (華商會所)
8/F., The Chinese Club Building, 21-22 Connaught Road Central, Hong Kong (中環干諾道中21-22號華商會所大廈8樓)



This is an important event of our Association as well as a valuable occasion for members to meet one another. We look forward to seeing all of you in the annual general meeting. With your support, the Association will be able to continue pursuing our objectives.

Sustainable Development (SD) project 2011 - Eco-city, a way-out to a sustainable tomorrow 環保之城，邁向可持續明天的出路

We aimed to explore how sustainable development concepts could be implemented in real life to help solve the challenges we are facing nowadays.

In recent years, waste treatment and urban renewal have become hot topics in Hong Kong. The Policy Framework of the government's strategy on these two social issues sets out a comprehensive policy to support the recycling industry that places emphasis on waste reduction and recovery, as well as urban redevelopment. The HKUEAA would like to arouse interest of engineering students and alumni on these two topics in this year's SD Project.

The SD Project 2011 comprised two local visits and a 4-day study tour to South Korea. We were delighted that Ove Arup & Partners HK Ltd and Dr. Eric Tang generously sponsored the project for this year.

Local visit to EcoPark

The EcoPark in Tuen Mun is a key element of the government's Policy Framework that aims to provide long term land for the environmental and recycling industry. A visit to the Eco-Park was held on March 5, 2011. A total of 12 students, 2 alumni and the SD subcommittee joined the visit. During the visit, students and alumni were shown various environmentally-friendly concepts (e.g. solid waste classification, solar photovoltaic system, 3R) in the Visitor Centre and the plastic recycling in operation in Yan Oi Tong EcoPark Plastic Resources Recycling Centre. They were also introduced to the process of retreating rancid oils into usable biodiesel with economic value in Champway Technology Ltd.

We would like to thank the EcoPark for arranging such an educational afternoon for our students and alumni.

Kai Tak Nullah

Kai Tak Nullah is one of the major flood relief drainage channels in East Kowloon area. The government is now carrying out the design of the Kai Tak Nullah improvement. The Kai Tak River project includes increasing drainage capacity, landscaping, increasing public space for leisure, improving adjacent townscape, etc., with the aim to revitalize the nullah into a special green river and townscape feature. The first stage of public consultation was held in December 2010 and the second stage will be launched later in 2011.

A visit to the Kai Tak Nullah was organized on April 9, 2011. The participants included 16 students, 7 alumni, and the SD subcommittee. The engineers from the Drainage Services Department (DSD) gave a presentation on the Kai Tak River Project followed by a tour to the downstream of the river in the Kai Tak Development Area at Kowloon Bay



to see the ongoing construction work. The group also visited the midstream from Tai Shing Street footbridge to Lok Sin Road footpath near Tung Kwong Road to see the current landscape and the planned improvement works to enhance the drainage capacity and improve the adjacent townscape through greening.

We would like to thank the Kai Tak Office, DSD and the Civil Engineering and Development Department (CEDD) for arranging such an informative afternoon for our students and alumni.



Inauguration Ceremony

The new cabinet of Engineering Society, HKUSU session 2011-2012 - Nexus - has been successfully elected in January 2011 and the inauguration ceremony was held on February 18, 2011 in Rayson Huang Theatre, HKU. Nexus, representing connection, consists of 12 passionate executive committee members who are willing to devote themselves in serving the members in the coming session. Over 150 guests from the engineering field in Hong Kong and various student organizations from different tertiary institutions attended the ceremony to congratulate and wish the new cabinet every success in the future.

Chartership: Paving your way for Success

“Chartership: Paving your way for Success” is a career talk aiming to give members the opportunity to have a better understanding about the path in becoming a chartered engineer. The talk was held on April 11, 2011 with more than 50 students, including undergraduates and postgraduates, attending the talk. Ir Ho Chi Shing, Chief Building Services Engineer of the Housing Department and

interviewer of the HKIE, was invited as the speaker. Ir Ho is experienced in integrating engineering knowledge with other disciplines such as law and management. During the talk, Ir. Ho has shared with the audience his experience in choosing the right career path and provided tips for them to prepare for the HKIE interview. The participants were very enthusiastic and presented some inspiring questions to the speaker.



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