



2016
Engineering Exposition -
Engineering Life Challenges

Saturday 30 April 2016 9:00 am - 2:00 pm

Chiang Chen Studio Theatre

G/F, Chung Sze Yuen Building

The Hong Kong Polytechnic University

Hunghom, Kowloon



Contents

Page No

Engineering Exposition 2016 Programme

| | |
|--|----|
| Chairman's Message – Veneree Club | 1 |
| HKIE Veneree Club Activities | 2 |
| EngExpo 2016 Organizing Committee Chairman's Message | 3 |
| Engineering Exposition 2016 Organizing Committee Members | 3 |
| Session 1 Speaker Information: Ir Prof Daniel LAI | 4 |
| Session 1 Speaker Information: Ir Edmund LEUNG | 7 |
| Session 1 Speaker Information: Ir Greg WONG | 10 |
| Session 2 Speaker Information: Ir HO Wing Ip | 12 |
| Session 2 Speaker Information: Ir YING Tsie Cheong | 15 |
| Session 2 Speaker Information: Ir YUEN Sui See | 17 |
| HKIE Engineering Exposition 2015 | 19 |
| Certificate of Attendance | 20 |
| Acknowledgements | |

Chairman's Message – Veneree Club

The HKIE Veneree Club “睿賢學社” was inaugurated on 18 Jan 2012. Since its establishment of Veneree Club, we aimed to enjoy the club activities in a retired & relaxed environment and at the same time, to contribute our experiences in serving the society. Each month, regular meetings were organized with interesting talks where retired engineers could expand their knowledge as well as meet both new and old friends. Some of these retired engineers also served as school engineers and school ambassadors, giving lectures in their own field. I am sure our Veneree Club organizes various meaningful activities for our retired members to enjoy and contribute.



With the remarkable successes in both 2013, 2014 and 2015 ‘Engineering Exposition’ events, the Engineering Exposition 2016 is hence a repeated continuation. In Engineering Exposition 2016, we have six distinguished speakers and with more time devoted for questions and answers to enable more elicitation from our speakers. In order to enhance knowledge gains for our young participants of the Engineering Exposition 2016, a lunch gathering after the speakers’ presentation and discussion is so arranged to enable young engineers to sit adjacent to experienced engineers for a deeper understanding and discussion with experienced engineers.

I would like to express our appreciation to our sponsors who provided the required financial support to enable this meaningful knowledge sharing be continued. I am most grateful to our 6 distinguished engineers for sharing their valuable career insights from motto, case experiences to engineering challenges. My thanks are also extended to our organising committee members for their hard work and contribution over the past few months of preparation. Finally, I would like to thank all our participants and wish them every success in their fulfilling career.

A handwritten signature in blue ink, appearing to be 'Ir SW Cheung'. The signature is stylized and somewhat abstract, with a large loop on the left and a long horizontal stroke extending to the right.

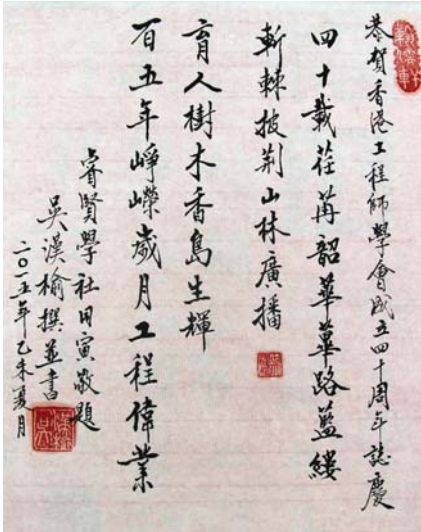
Ir SW Cheung
Chairman, Veneree Club
The Hong Kong Institution of Engineers
Session 2015/2016

HKIE Veneree Club Activities

The following is a list of activities that Veneree Club organised during May 2015 to Apr 2016. In the third Wednesday morning of each month, Tea Gathering with guest speakers giving interest talk is normally held.

Tea Gathering Talks

- 20 May 2015 How to Become a Green Building Assessor
- 17 Jun 2015 Change from aluminium alloy to carbon fibre in aviation development
- 15 Jul 2015 Mental and Psychological Problems for the Elderly
- 19 Aug 2015 Defence Mechanism: Technique and Application (心理防衛機制技巧和運用)
- 16 Sep 2015 Travel, Technology, Culture
- 14 Oct 2015 Vision for Hong Kong
- 18 Nov 2015 Wealth Management at the Private Banking Industry in Hong Kong
- 16 Dec 2015 Heart Disease
- 20 Jan 2016 Be smart in Retirement Insurance and Financial Planning
- 17 Feb 2016 Positive Communication
- 16 Mar 2016 The Story of F11 Photographic Museum



Engineering Exposition 2016 Organizing Chairman's Message

HKIE Veneree Club has the pleasure to continue to hold the Engineering Exposition for the fourth year. Trust that many young engineers benefitted from the talks and experience sharing by our speakers in the past Expositions.

This year, again we have invited six distinguished engineers from different disciplines to share their valuable experience with fellow engineers. Though coming from different fields, they all have a strong spirit to pursue excellence that has enabled them to achieve so much in their career and life.

Through the talks and dialogue with them over lunch, participants could broaden their mind and learn from more experienced members, which would benefit their future development.

The world keeps on changing. Engineers bear the mission to further improve our living environment. Every step in carrying out that mission, however small it appears at the time, is significant.

I would like to take this opportunity to express my heartfelt thanks to our sponsors, members of the Organizing Committee and those who have contributed to the success of Eng Expo 2016.

Ir Philip KWONG Sze Fai
Organizing Committee Chairman
Engineering Exposition 2016



Engineering Exposition 2016 Organizing Committee

Organizing Committee Chairman: Ir KWONG Sze Fai Philip

Members: Mr CHEUNG Sai Ping David

Ir CHEUNG Shu Wing

Ir CHUNG Fuk Wai Simon

Ir KWAN Lok Fong Anthony

Ir LEE Siu Ching Stephen

Ir LI Wai Lim William

Mr SIU Wai Kwong Martin

Ir SZE Tak Wei John

Ir TSANG Kang Ho Peter

Advisor: Ir Dr CHAN Fuk Cheung

Ir Prof Daniel LAI Sik Cheung

Master in Technology Management,
Diploma in Management Studies,
Fellow HKIE, Distinguished Fellow HKCS, Fellow HKIoD



Disciplines: Information Technolgyoy

Ir Lai started his long career in IT in 1966 as a trainee at NCR (HK) Ltd. He joined Computer Services Dept. of Hong Kong Electric Co. Ltd in 1968 and led the computer operations team. He served The Hong Kong Jockey Club from 1978 to 1999 and held many senior managerial positions in IT, including managing one of Asia's largest computer installation, managing the Club's Technology Research and Development Centre in Australia, and acting as Director of IT. He led and participated in many projects deploying advanced technology and developing innovative IT solutions. From 1999 to 2011, he was Head of IT of MTR Corporation, and led the very successful IT integration for the merger between MTR and KCR corporations.

Ir Lai was Government Chief Information Officer of HKSAR Government from 2012-2015, his responsibilities included developing appropriate E-Government programme; promoting IT in the community and the business sector; bridging digital divide; and to champion the adoption of new technologies and the development of innovative applications and services

As GCIO, he revised the Digital 21 Strategy (the blue print for Hong Kong's information technology developments), initiated many digital inclusion and industry facilitation measures and initiatives, enhanced IT infrastructure, developed and launched mobile Apps, and made public sector information available. He developed the Government cloud computing strategy and successfully introduced cloud platforms, strengthened information security and contributed to developing Hong Kong a Data Centre hub. He also developed Smart City plan and initiatives.

Ir Lai joined Hong Kong Polytechnic University in March 2015 and served as Interim Vice President (Administration) for 6 months before being appointed Professor of Practice (Computing).

Awards: Justice of Peace, Bronze Bauhinia Star.

Motto

Treat hard work as learning, and learning is a life-long experience.
To achieve perfection or full score, you have to double your effort.

Case 1

The “Y2K” was a global issue that had no precedent case with limited understanding of the complexity or extent of impacts, but the whole world was faced with the fear and concerns that it would affect many of the mission critical systems, infrastructure, and applications (especially embedded systems and applications using 2 digits to represent year)

Ir Lai was charged with the responsibility to lead Y2K rectification works for Hong Kong’s most important public transport organization that had deployed many computer systems and many would be affected by Y2K. He analyzed the risks and impacts, rectifications effort and costs, and developed appropriate plans and strategy to cope with the problem, and then built led a team to rectify the problems, overcoming many challenges. The deadline of Y2K could not be moved, and the team must find ways and best means to remove or mitigate the risks with limited resource and against a tight schedule, and ensure no disruption of service. On the night of 31 December 1999, MTR had no problem on the arrival of a new millennium.

Learning points: *irrespective of the dimension and type of the problem and its impacts, there are always ways to overcome the problem, planning ahead, thorough analysis and looking at more options could help you to find the most effective ways to tackle the problem.*

Case 2

In the Merger between MTR and KCR Corporations, the 2 relatively large organisations need to be merged into one, not only physically, but culturally, socially, organizationally, procedurally, etc. IT played a key role in being used as a tool to enable systems, processes, practices and procedures of the 2 organisations to be merged into a single entity, and enabling synergy to be delivered.

Careful planning, effective execution, and sound governance and programme/project management played a key role in this successful merger. The changeover was flawless, with no adverse impacts on operations and customers services.

Learning Point: *Detailed planning, practices, walk-throughs, clear instructions, and rehearsals pay off.*

Engineering Life Challenges

In this very competitive business world and under rapidly changing technology situation, in order for one to advance, one needs to invest significant time and effort to equip oneself with knowledge and experience in order to move ahead. One should always BE PREPARED.

In my career in the IT sector, there are new technology every day, and I have to constantly update myself and learn new knowledge and practice continuously.

Personal Philosophy

Be prepared, always anticipate

Work hard to achieve the best – do your best in every task

Time is the most precious thing, must make best use of time – never waste time,
it is non-recoverable

Learning is a life long practice and experience

Tolerate incompetence, but not dishonesty or lack of integrity

Ir Prof Daniel LAI Sik Cheung

Engineering Life Challenges

- To strive but not to yield
- Put organization's interest first, rather than self-interest
- Do not mind doing more or extra, treat additional work as gaining more experience and exposure
- Accept new ideas and changes with open mind
- Listen more and talk less
- Respect self and others
- Practice what you preach
- Set role model

Management Philosophy

- Spend time in planning, including contingency, then execute according to plan, systematically
- Managing is like playing jigsaw puzzle, we have to fit each piece into its appropriate place, we cannot fit square into round shape
- In managing your subordinates, must be fair and unbiased, respect individuals
- There are far too many things to do, must prioritize tasks according to urgency and importance
- Each individual has his/her own strength and weakness, focus on strength and avoid using one's weak areas
- Look for achievements and NOT faults

Core Values

- Excellence, Mutual Respect, Value Creation, Enterprising Spirit

Engineering Exposition 2015
Lunch Time Experience Sharing



Each table, there is one experienced engineer sharing experience with other 11 young eningeers

Ir Edmund LEUNG Kwong Ho

C Eng, R.P.E., FHKIE, FIMechE, FCIBSE, FIEAust, FHKEng.

**Disciplines: Mechanical, Building Services,
Aircraft, Energy.**



Professional engineer with broad-based experience covering power, manufacturing and construction industries, covering power utilities, manufacturing, contractor and consultant.

Chief Officer of Kowloon-Canton Railway Corporation

Previously, Managing Director of Hsin Chong Construction Group Limited,
Chairman of East Asia Region, Hyder Consulting Limited.

President of The Hong Kong Institution of Engineers (1995/1996),

Chairman of the Hong Kong Branch and Council Member of the Institution of Mechanical Engineers (1997-2000).

Deputy Chairman of The Hong Kong Institute of Directors.

Previously: Chairman of the Process Review Panel for the Financial Reporting Council, Chairman of the Energy Advisory Committee, Board Member of the Airport Authority Hong Kong, and Member of the Town Planning Board.

Awards: OBE, Justice of Peace, Silver Bauhinia Star.
Hall of Fame of HKIE.

Motto

People are born equally smart. Those who plan ahead, work hard and focus sharply will be more successful.

計劃，辛勤和專注是成功之道。

Case 1. Winning in a new field.

I worked as a mechanical engineer in a contracting firm doing building services and one day I was asked to help to stand in to pursue a lift contract, which I did not have experience. I put in a tender and was asked by my client to meet them to clarify the tender. It was before the days when Powerpoint presentation became fashionable, and presentations were by words in front of a group and answering questions, with no visual aid.

I had never had experience of this, and I felt the heavy responsibility to win the job. Worst still, I did not wish to see the job lost in my hands when I was only standing in for my colleagues.

Ir Edmund LEUNG Kwong Ho

I ask a friend of mine who was experienced in engineering sales. He taught me the basics: I must write down the winning points on one side of the paper and our weak points on the other side, and in doing so, I must be completely honest with myself and should not be too proud or too reserved. I spent a long night going through the tender, thinking hard on how our bid would compare with that of our competitors, in the eyes of the client. I was pleased to find that I have a far longer list of strong points than our weak points. Based on that, I was also able to rehearse my points before I attended the meeting. With good preparation, I gathered enough confidence to face my clients and their architects and their professional team, and eventually, we won the contract.

When I analysed my strategy afterwards, I realized that, to win a contract, firstly we have to have a good proposal. I must also understand how our bid compares with that of our competitors in the eyes of the client. Finally, I must feel confident when I face the client so that they feel comfortable to award the contract to us.

Case 2. Handling a tough client.

Again, I was an engineering manager of a contractor, in an MTR construction contract in the 1970s. It was the era when expatriate clients were king and we are only mere mortals. I was attending a site meeting and was grilled for holding up the completion of a station because my sump pump installation (which was a minor piece of work, but unfortunately at the tail end of the construction activities, due to delays by others) was still a few days away from completion. My team was already working a 24 hour day, and causing significant overrun to my budget.

In the site meeting, where the Client, the Engineer and the Civil Contractors had already spent two hours debating progress delays, I was asked to commit to a programme which was only half the length of time of my sub-contract, and to improve on it so that the whole station programme will suffer less delay. I told them I need time to plan, but I was almost physically locked up in the room and was told that unless I can agree to their programme, I was not allowed to leave. I thought that was grossly unfair and unnecessary, so I ate the sandwiches they offered me, and sat there resting, not doing anything. The Client threatened to call my Managing Director. I told them that they would be welcome to do that but that would mean another three days of delay (it was before the days of mobile phones). I told them that if they do so, my MD will call me to his office the next day, I would have to spend a day writing a report to explain to him the problems, discuss about it, and I won't be able to come back with any answer within three days. However, I suggested to the Client that if they let me out of the room, I may be able to confirm the programme in a few hours, as I can go and discuss with my foreman immediately and plan a fast way to complete the job.

The Client had no choice but to concede, and within an hour, I went back to them to commit to a programme shorter than they have asked for.

Not only have I upheld my dignity, but I won a friend in my Client. Since then, he had respected me a lot more and I was able to accomplish more on that contract on other activities with his trust and my efforts.

Engineering Life Challenges

Work Hard.

Hard work and determination are the only key to success. I have never seen successful people who spend their life on leisure, and if they do, it will only be short-lived. In this super-competitive world, to get ahead you have to row very hard, all of the time. If you want success, you will have to sacrifice some leisure time.

Plan Ahead.

All good projects require careful planning. Good planning ensures minimum rework and frequent change in directions. Planning takes time, but with practice, planning can be done at time when you are not under time pressure, and will give you a lot more confidence in your execution.

Planning also allows opportunities to test different options and to optimize your approach. It should also prepare contingency plans in the event external circumstances forces a need for change.

Sharp Focus and Determination.

Having completed your plan, you should focus sharply to your goal and proceed with full determination.

You will encounter difficulties. They are there to pose challenges but it should not deter you from your progress. Have confidence in yourself and your plans and circumvent these hurdles.

Sort out your Priorities.

When you are busy, you often have more than one task to manage.

Sorting out priorities is a key requirement for success. With some experience, you should be able to decide what to do first. Some tasks can conveniently be left aside undone without detrimental effects.

Find Enjoyment at Work.

If you can find enjoyment in work, you will be able to work harder without feeling the pains. Be positive, wear your best humour and look at the brighter side of things. Please remember that certain tasks need to be done anyway.

Rise up early in the morning, and try to go home on time or not too late. If you sort out your priorities, there is no reason to stay late continuously. With practice, you will enjoy getting up in the morning and going to work.

Ir Dr. Greg Wong Chak Yan

B.Sc (Eng) (Hons), M.Sc (Eng), Ph. D.
F.HKIE, M.I.C.E, F.IStructE



**Disciplines: Civil, Structural, Geotechnical,
Fire, Environmental**

Ph.D in soil mechanics from McGill University, Canada.

Engineering consulting services in Canada, United States, Brazil, Korea and then in Hong Kong and China.

Worked in MTRC on Kwun Tong, Tsuen Wan and Island Line.

Established own consulting engineering firm in 1982. The firm designed and supervised buildings, civil engineering structures in Hong Kong, China, Vietnam and Macau.

In past 15 years serve the community as President of HKIE, Vice Chairman of Town Planning Board, Chairman of Kowloon City Urban Renewal Forum, Board member of Ocean Park, member of Central Policy Unit, member of Antiquities Advisory Board, Provincial People's Political Consultative Committee Member,

Awards: Bronze Bauhinia Star awarded, Justice of Peace.

Motto

Contribute one's best effort and try to do a perfect job every time.
Be innovative to stay competitive. Be honest, honourable, generous, fair
and considerate.

Case 1

I established an engineering consulting company in 1982 with 2 graduates and myself. At its peak there were 120 qualified and graduate engineers in the firm. It was my dream to have my own consulting company when I was young and working for an international consulting firm in Canada.

A young person should have a dream of what he wants to be. He needs to keep at it. There will be up and down times. If he really wants to fulfill his dream, there is no substitute to long period of persistent hardwork. One more important element is competitive edge. An engineer must innovate and must not give run of the mill solutions all the time if he is to remain competitive.

Case 2

Failure Case

A set back is not a failure if one keeps composure and sustain himself and company to sail through the storm and come out to see better times. One only fails if he gives up. A real failure is when the bad situation is so serious that no matter how hard and how long one tries the situation is still a total loss. But even after a failure, one can still stand up again to start all over again.

In most cases where the set back is temporary, put together a mitigation plan, carry it out and survive through the bad times.

Must avoid a catastrophic and unexpected failure that one cannot survive through. Be cautious when taking a big step forward, try not stretch ones capacity to the limit, take risk but always analyze thoroughly before taking the risk, and have provision to survive worst case scenario.

Engineering Life Challenges

“Life challenges help you discover who you are and how far you can go.”

After I got my Ph.D, I worked in a 1,000 staff consulting firm. During hard times, a few colleagues got lay off every fortnight. It really impressed me in a negative way. I thought we (employees) were helpless and I decided to work hard to become the action part not the passive part of an employment. But when I have my own company, I have to face other challenges. I have to control the quality of output, create the brand, create competitive edge, market the services, manage human resources. In each of these aspects I have to learn from mistakes, improve and then discover how far I can go. “Challenges are what makes life interesting; overcoming them is what makes life meaningful.”

How young engineers can prepare for successful future

I think an engineer who wish to be successful as an engineer should be first technically outstanding. Those who want to stay in the technical field should work for a Ph.D when young, follow by joining the best firm to apprentice practical engineering. Learn to be an effective problem solver. Engineers should have a broad view also, be well verse in ecology, culture, politics, develop interpersonal skills and communication skills etc. He should develop a positive attitude and an amiable personality. His practice should abide by engineers ethics all the time. Most of all he should work hard, gives his best and be happy and make others happy at the same time.

Ir HO Wing Ip

MSc (HKU)
FHKIE, CEng, MIEE



Discipline: Electrical, Building Services, IT

Ir Ho was a Government Directorate Officer working in the Housing Department, he is renowned for his expertise in energy management, which is often his speech topic in various symposiums.

During his civil service tenure he has a lot of achievement, just name some:

- a) Development of “2-Level Lighting System”
- b) Development of “Carbon Emission Estimation”
- c) Development of “Environmental Protection Window”
- d) Reduction of Energy Consumption by BS Installations in Public Housing in HK

As many of us know that Ir Ho has written a renowned book on his adventure to the Himalaya in 2003 organized by HKU, and he continued his admirable authoring work by publishing a book containing some touching letters to his beloved daughter; due to the popularity of his publications he has always been invited by university and colleges to deliver speeches and has become a famous and welcomed literature writer and speaker in the education sector.

With a view to serve the community by authoring and speaking on positive values such as integrity and perseverance, on top of his engineering excellence, Ir Ho has just retired to get more time under his own disposal. He is now a “Writer-Speaker-Engineer”. He is seen an exceptionally successful example of how an engineer can contribute to build a better world, in terms of both physical and moral.

Motto

Challenges make life difficult, but meaningful!

Case 1 Development of 2-Level Lighting System

With the adoption of Compact Florescent Tube and localized on off control, the energy consumption by general lighting system in the communal areas of high rise domestic buildings has reached the “theoretical” minimum, so do the other BS Installations such as lift system and water pumping system after years of development. I can however see a further opportunity to compress the energy consumption by lighting system by employing the “lighting-on-demand” principle.

It is noticed that the Barrier Free Design Manual do mandate the minimum lighting level at 85 lux, it does not explicitly require the maintenance of such a high lux level when there is no people. The general lighting system is thus redesigned with a “basic” lighting system giving out 30 lux supplemented with a “standby” lighting system giving out 55 lux, with the former always on around the clock and the later only on when a button is pressed by people. The concept is simple yet easily achievable, and the lighting energy can be greatly saved. With the endorsement of relevant authorities the “2-level Lighting System” is now widely adopted in newly designed buildings, and has been successfully demonstrated to Chairman HU Jintao during his visit to a Public Housing Estate.

Case 2 Development of “Carbon Emission Estimation”

People are aware that a building during its construction period and operational life will consume electrical power and as a result carbon dioxide is emitted during power generation. Construction professionals and environmentalists have been very keen to cut the carbon, but sadly there did not exist a methodology, both locally and globally, to tell “exactly” how much carbon will be generated due to the creation and existence of a particular building, and with which design can be changed to reduce carbon.

I worked from first principle to build a model to estimate the carbon emission by looking closely into the different stages of a building from “cradle to grave”, including the 3-year construction stage, 100-year usage stage and 1-year demolition stage. The materials used and carbon emission are carefully quantified, the energy consumption by different BS Installations is calculated with assumption of probable usage patterns, and every “thinkable” factors are analyzed and taken into account.

Now every new building to be constructed by the Housing Department is gauged against the “Carbon Emission Estimation” methodology and their design adjusted to minimize carbon.

Engineering Life Challenges

My career has been tightly related to energy, not only with its generation, transmission and distribution, but also utilization and more importantly reduction, the later is always the difficult part.

Reduction is difficult because energy cost is low in Hong Kong, and people are not aware of their energy performance as compared with others, leading to lack of motive.

I, together with my colleagues, have been successful in greatly reducing energy consumption by BS Installations in Public Housing. The success is quantifiable. In year 2000, the average annual energy consumption by lighting, lift and pump per household was around 877kWhr. With our continuous effort both technically and managerially, the figure has been reduced to around 678kWhr in 2015, or 22% shrinkage, equivalent to a tariff saving of around \$140M for 700,000 household.

Ir HO Wing Ip

Engineering Life Challenges

The achievement is not only related to money, but also to energy and carbon emission which is the cause of global warming, so compliments have been flooding from different sectors, but I have not been excited as people think I should be, it's because the total energy consumption by high rise domestic buildings, which include the landlord portion and household portion, has actually increased instead of decreased.

In an in-depth study, I found that the energy consumed by households, which is solely controlled by the residents, is around six times the energy consumed by communal BS Installations. Though we have successfully suppressed the later part in the last 15 years, the household consumption has drastically increased in the same period, probably synchronized with the economy growth of Hong Kong, and overwhelmed the overall effect.

The challenge to me was how I can contribute to cut down the energy consumption by households.

I realized that most people are not aware of their energy performance as compared with others, so I have developed an "Environmental Protection Window".

It's an electronic display panel installed at the lift lobby of domestic building. Both absolute and comparative figures of energy consumption by landlord BS Installations and households in aggregate, are compared with blocks in the same estate and in the Territory, so that people living in a particular building will know how good, or bad, they are doing, and adjust their energy using behavior, leading to energy saving.

In a trial project, the "Environmental Protection Window" has proved to be an effective tool in educating people of how and why energy should be saved, and figures tell that less energy has been consumed.

Upon my promotion to a Government Directorate Officer, my scope of work has expanded to include many duties beyond that of an engineer, which include high level policy formulation, administration and management of senior professionals of different disciplines, all these have enriched the colour of my career life and made me realize that besides energy and engineering, there are many aspects that necessitate our input of time and effort, so I decided to spend more time and effort to writing and speaking, and quit my bread earning job in the Government.

Challenges make life difficult, but meaningful!

Ir YING Tsie Cheong

BSc(Eng.), MBA
FHKIE, FICE, FIStructE, MIHT, RPE, CEng

Disciplines: Civil, Structural



More than 40 years of experience in the construction industry in different roles and capacity (consultant, government, contracting and self-employed). Major projects involved/completed – Tuen Mun Road Phase One Contracts, the HK Academy for Performing Arts, Pacific Place Phase One, Oil Depot Installation in Tsing Yi, Infrastructure Works Contracts in Pak Shek Kok, Tsuen Wan West Station and Casino Hotel Developments in Macau.

Motto

Adversities in Life can be overcome; Work responsibly to minimize regrets

Case 1

Taking up the assignment of Project Manager for the construction of the Academy for Performing Arts had a profound impact on my career.

The Academy was a complex project consisting of theatres, studios as well as practice rooms for teaching. With less than one year of contracting experience, a project of such magnitude and high acoustic requirements was very challenging. All co-ordination works on site were my responsibility and fulfilling the task required not only engineering knowledge but the ability to manage various parties including specialists (local and overseas) involved in theatrical installations. Effective communication with counterparts of different nationalities and appreciation of cultural differences were called for to ensure the smooth execution of construction. I had to learn fast to overcome technical problems as well as to lead people to achieve a common goal.

There were handsome rewards. The project enjoyed an early completion by combining a two phase handover into one and made a good profit. Two awards were received, including the best site management award from IFAWPCA and the merit award from HKIA.

Although the project assignment appeared to be daunting at the beginning, successful completion was a great booster to my confidence as a young engineer.

Ir YING Tsie Cheong

Case 2

I was once the Project Director of a project in the New Territories which involved the construction of some 4,000 flats within 26 months. The year of completion coincided with the District Board election.

Although the political environment was not the same as today, it was still the budding years when political parties made use of public items to raise their profiles. Candidates of political parties took turn in visiting the site to show their care in ensuring the construction was of good standard. The project was therefore under media attention.

The challenges included the handling of political groups and various stakeholders cautiously and to manage defects rectification requested by flat owners efficiently. The need to be proactive and responsive was critical.

The handover was completed satisfactorily with nonetheless several cases resulted in disputes afterwards. The importance of the project to me was the awakening of the arrival of a new political era, with an appreciation that embracing changes and progressing with time were equally important as accumulating professional knowledge and experience.

Engineering Life Challenges

Life may not be a bed of roses for some people. I was required to deal with some challenging situations at an early stage of my life.

I lost my father two years after graduation which was not an easy period to overcome. I did not escape responsibility and accepted the role as the head of a sizable family at a young age. The difficulties overcome had helped me mature, strengthened my ability to tackle adversities and gained confidence earlier than others of my age.

At work, I have been fortunate to have had assumed responsible positions and conducted projects of immense contract sums. As in life, the challenges connected with work have to be overcome with perseverance and a sense of responsibility. Maturity in people management and a belief in one's ability are also indispensable factors to achieve success.

In face of the changing world and a much more advanced and vocal society in Hong Kong as compared to the past, we engineers have to be prepared to respond to changes. Keeping oneself abreast with professional knowledge and acquiring relevant experience are mandatory, appreciating the demands for open consultation and public accountability in a modern society is also indispensable. For the future development and good of Hong Kong, we have to continue to invest in infrastructure projects, though they are mega in size, complicated and difficult to build. To execute these projects, one has to take into account, at an early stage and in parallel, the impact on affected parties and balance the views and interest of different groups. Hong Kong has entered a new political era and the resultant impact on the engineering and construction industry has to be handled with care and wisdom.

Ir YUEN Sui See

B.Sc. (Eng) Hon., M.Sc (Eng)
FHKIE, RPE, C.Eng.

Disciplines: Electrical



Ir Yuen is the Director of Operations of The Hongkong Electric Co., Ltd. Ir Yuen has over 40 years experience in Hong Kong and overseas in the electricity industry covering design, projects, assets management and customer services etc. His past services to the profession includes:

Chairman, Electrical Division, HKIE

Chairman, Electrical Discipline Advisory Committee, HKIE

Council Member (Division), HKIE

Departmental Advisory Committee Member of Hong Kong PolyU and

Appeal Board Panel (Electricity) of HKSAR Government

He now serves on the Departmental Advisory Committee of HKU.

Motto

勤有功 Labor Omnia Vincit

非以役人 乃役於人 To Serve But Not To be Served

居安思危 Be Prepared

Case 1. Launching A New Wave of Customer Services

Utility companies in the 70s were fairly bureaucratic and not transparent in their services. In the 80s and 90s citizens in developed countries gradually became more aware of their rights and this had led to the establishment of codes and practices in enhancing the rights of citizens such as the Citizen Charter in UK. This move had tremendous impact on the services of utilities. In response to this new trend and to lead in this new service direction HK Electric launched a new wave of customer services. It was fortunate for me to have the opportunity to play a key role in launching a series of proactive customer oriented initiatives which included changing the culture of our customer services through education and title change of personnel, service pledges to the public and introducing high quality and convenient services. While many of these measures have subsequently become the norm for customer services today, but during that period they were considered as ground breaking and a major paradigm shift in the service culture. Among these the more prominent ones are as follows:

- The publication of "Installation Guide Book (now renamed to Guide to Connection of Supply)" – now used widely by the industry
- The publication of Performance Pledges, amongst the first in Hong Kong
- The phone application initiative-Connect first and Pay later, amongst the first in Hong Kong.

Ir YUEN Sui See

Lesson to learn: *It is important to gauge the pulses of the community and be proactive to respond to the needs of the community rather than waiting for the community or the Government to force you to do it.*

Case 2. Care for the Minority

Nowadays we talk about Corporate Social Responsibilities and how we can help to build up social capital. In the 70s and 80s this was not very common. But as Hong Kong become more and more developed, Corporations have to think how they could contribute more to the society in their respective areas of expertise and services. For Hongkong Electric, we launched the Braille Bills for the visually impaired and also partnered with the HK Council of Social Services to introduce the concessionary tariffs for the elderly under the Comprehensive Social Security Assistance scheme. It was also fortunate that I could play a leading role in these meaningful projects. Both of these projects were the first in Hong Kong.

Lesson to learn: *As a responsible citizen, you always have to care about those less fortunate ones and use your position and talents to help whenever and wherever you can. In many cases this would not only help the needy but also your organization and the community. In fact this would bring happiness and sense of fulfilment to you as well!*

Engineering Life Challenges

Engineering is no exception to other professions in that you would not be able to grasp all disciplines of work and knowledges in your life time. So what you have to do is to master the basic principles and learn how to apply them. Apart from working hard by yourself, you also have to work closely with others as a team and learn how to be a good team player. As a young engineer, you need to seek advice from the more mature colleagues. You have to have confidence in yourself but at the same time learn to be humble. You will make mistakes, but you have to learn from your mistakes, or even better learn from the mistakes of others. As you grow older you should become more knowledgeable but at the same time you should become more clever because you know there are many more things you don't know and you begin to appreciate that you come a long way here because you were given opportunities and advice by those who cared about you. Hence you will learn to be more humble and be grateful to those who have helped to mould you. In return you should use your talents and knowledge to serve the community and your neighbor. You never know what will come in next second but you have to work hard and be prepared with an aim to serve people through your profession and to be able to respond to contingencies in life. You will then live up to the life challenges and have a life worthliving.

HKIE Engineering Exposition 2015

The 'Engineering Exposition – Engineering Life Challenges', held on 30 May 2015 at the Chiang Chen Studio Theatre, The Hong Kong Polytechnic University, was organized by HKIE Venere Club. There were 6 distinguished speakers to share their experiences gained, lessons learned and challenges encountered during their engineering careers. These 6 speakers were Ir Dr John LUK, Ir Victor NG, Ir Louis SZETO, Ir CHOW Tang Fai, Ir HO Chi Sing and Ir MA Lee Tak. There were some 200 participants, mostly young engineers, sharing of their valuable experiences.



Motto

「為學當如金字塔，要能廣大要能高」胡適。
Be versatile as Leonardo de Vinci and exquisite as Michaelangelo.



Motto

Where there is a problem, there exists a solution.
有問題就有答案



Motto

Enjoy your work every day.
Learning is Fun! Be innovative.
Never give up!
Professional integrity is of highest importance!



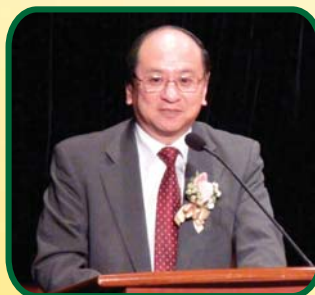
Motto

Be at ease in all encounters, give of yourself, as conditions permit.
隨遇而安，隨緣奉獻。



Motto

Miracle of Engineering help to build the infrastructure of the Society;
Manageable of New Technology to ascertain Safety, Environment Green & Energy Saving;
Navigator of Innovative and Creative Design in Engineering for the Public;
Control of ALL Projects on time and within budgets.



Motto

Solid knowledge, good dedication and passion, and flourishing imagination help one claiming new heights and exploring new work frontiers for building sustainable systems and projects for the benefits of mankind.
Case

Those are the "Thousand Miles" Journey of MMNC for the Professionals in the Society.
機械、輪機、造船及化工工程學是社會百樂的“千里馬”

This is to certify that

attended the
Engineering Exposition 2016

on

30 April 2016

from 09:00 – 14:00

at

**Chiang Chen Studio Theatre,
The Hong Kong Polytechnic University,
Hung Hom, Kowloon**

- * 1. Name of participant to be written by the attendee.
- 2. Attendee should seek certification of his/her attendance by having the stamp of the organizer immediately after the event.
- 3. This certificate serves the purpose to record participation of an attendee only. The duration of the activity indicated above does not automatically grant the equivalent CPD days, but is entirely up to the discretion of the 'Engineering Supervisor' for pre-Corporate Membership.
- 4. Please contact your 'Engineering Supervisor' for further advice for recognition of CPD activities.



Acknowledgements

The HKIE **Veneree Club** would like to express their gratitude to the following companies for their sponsorship to the Engineering Exposition.

Atkins

CLP Power Hong Kong Limited

Hong Kong Science and Technology Parks Corporation

Hsin Chong Construction Company Limited

REC Engineering Company Limited

Tsuen Lee Metal & Plastic Toys Company Limited

(listed in alphabetic order)



Engineering Exposition 2016 Programme

- 09:05 – 09:15** **Opening:** HKIE President: Ir CHAN Chi Chiu
- 09:15 – 10:40** **First Session** (Speaker presentation and Panel Discussion)
- 10:40 – 10:55** **Coffee Break**
- 10:55 – 12:20** **Second Session** (Speaker presentation and Panel Discussion)
- 12:20 – 12:30** **Closing:** Venerue Club Chairman: Ir CHEUNG Shu Wing
- 12:30 – 14:00** **Lunch**

First Session

Speakers:

Ir Prof Daniel LAI
Ir Edmund LEUNG
Ir Greg WONG

Second Session

Speakers:

Ir HO Wing Ip
Ir YING Tsie Cheong
Ir YUEN Sui See

