"This year programmes as usual had been designed to highlight the consulting engineering industry’s successes and achievements in helping society implement sustainable solutions to today’s urgent global challenges."
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“We like to thank all members who have come forward and help to contribute any ideas they may have in the issues facing the industry.”

Er. Koh Boon Liang
President

The tightening of Employment Pass and S-Pass has affected many of our fellow consultants and a few have called me to express their concerns regarding this matter. CJC, on behalf of the Built Environment has written to the Acting Minister for Manpower and copied to the Prime Minister and BCA on this matter. MOM has replied that it is currently studying into this matter. Concurrently, ACES has also highlighted this shortage during our various meetings with all the authorities. In conjunction, our Business and Professional Practice Committee, chaired by Er. Russell Cole has also formed a committee to discuss and review some of the issues facing our consultancy business.

We like to thank all members who have come forward and help to contribute any ideas they may have in the issues facing the industry.

FIDIC World Consulting Engineering Conference 9-12 September 2012
This year FIDIC 2012 Conference was held in Seoul, Korea from 9 – 12 September 2012. Vice-President, Er. Ling Shiang Yun and myself had attended the conference

This year programmes as usual had been designed to highlight the consulting engineering industry’s successes and achievements in helping society implement sustainable solutions to today’s urgent global challenges. As all of us know the advent of globalisation and the stresses accompanying resource bottlenecks, climate change and population growth were accommodated initially through the “greening” of society and by engineering, and later by introducing sustainability concepts.

PEB Day of Dedication 2012
23 October 2012
The yearly Professional Engineers Board (PEB) Day of Dedication was being celebrated on 23 October 2012. The objective was to celebrate the profession and reaffirm its commitment to advancement and development to maintain high standards and better serve the public and stakeholders.

This year ACES and its members had continued our support by taking part in having a Special Supplement to commemorate the Day of Dedication, which was published in The Straits Times on the same day, 23 October 2012.
ACES 42nd Anniversary Gala Dinner
27 March 2013
We are pleased to share the good news that Mr. Lee Yi Shyan, Senior Minister of State for Trade & Industry and National Development has accepted ACES’ invitation to be the Guest-of-Honour for ACES 42nd Anniversary Gala Dinner to be held at Grand Copthorne Waterfront Hotel, Grand Ballroom on 27 March 2013 (Wednesday).

Business and Professional Practice Committee
Er. Russell Cole has recently enrolled 9 ACES members with the aim to review key objectives of our business such as follows:
• To review Consulting Business and propose developments to improve professional practice
• To promote viable models/options to sustain and upgrade members profession/business.
• To promote Professional Standing and Professionalism of Engineer through public communications, awards, etc.

- To support members business practices in relation to commercial terms and agreements, and review other regulations and industry requirements that will impact members business.

The Business and Professional Practice Committee members are Er. Russell Cole (Chairman); Er. Koh Boon Liang; Dr. Lock Kai Sang; Er. Dicky Lee; Er. Leung Chiu Kin Keith; Er. Tony Tay; Er Yeang Hoong Goon; Er. Kok King Min; Er. Yap Mui Cheng Serena and Er. Han Kim Siew Vincent.

Christmas & New Year Greetings
In conjunction with the year-end December festive season, on behalf of all ACES Council, I take this opportunity to wish all our members, partners and stakeholders a Merry Christmas and Happy New Year 2013! ☺
The IES-ACES-BCA Dialogue Session was held on 4 October 2012. The following matters were discussed:

Guidelines on Submission of Amendment and Record Structural Plans

BCA has finalized the Guidelines on Submission of Amendment and Record of Structural Plans after several discussions and feedback from IES and ACES members. The Guidelines are more specific now on what constitute material and immaterial changes in the structural works. Material changes require submission of amendment plans before construction whereas immaterial changes can be incorporated in the Record Structural Plans or As-Built Plan Submission after completion of structural work at the site. BCA will soon publish the new guidelines in its website.

Submission of Soil Investigation (SI) Data in Standardized Electronic Format

SI Data will have to be submitted in Standard Electronic Format whenever structural submission involving foundation work is made. By this, BCA’s intention is to create a data base which will enable engineers in the future to tap the vast information of the soil data across the country and this will be useful for the engineers who perform the foundation design. BCA has already been in discussion with the Accredited Companies specialized in Soil Investigation, and had received positive response from them.

Recommendation for Wind Tunnel Tests for Design of Buildings

BCA will soon request for Wind Tunnel Test to be carried out for the buildings and structures when one or more of the following criteria apply:-

a. Buildings with unusual or irregular shape for which the Codes of Practice BS 6392 Part 2 and SS EN 1991-1-4:2009 do not cover the estimation of wind pressure. BCA has yet to decide on the minimum height of the building for which the requirement should be applied.

b. Height of buildings or structures exceeding 200m as per SS EN 1991-1-4:2009

c. Slender buildings susceptible to dynamic wind excitation. The criteria for defining such building are still under review by BCA.

ACES Members Feedback

ACES brought to BCA’s attention on member’s concern in the shortage of Engineers and Drafters. Although BCA recognized the problem, no concrete solution was emerged during the discussion.

National Annex For Eurocode EC8–1

PRING Singapore has produced a draft Singapore National Annex for Eurocode EC8-1 (namely, BS EN 1998-1). The National Annex was developed after reviewing BS EN 1998-1 (Design of Structures for Earthquake Resistance) and the UK National Annex for BS EN 1998-1. The use of EC8-1 will be mandatory together with the implementation of the Eurocode by BCA.

BCA also has developed Draft BC3 (2012) on Simplified Design Guide for buildings in Singapore to long Distance Tremor effects to SS EN 1998-1 and it will be used in conjunction with Singapore National Annex for EC8-1.

According to BC3, new buildings and existing buildings undergoing major additions and alterations work have to be checked for an enhanced robustness consideration to cater for impact of Tremor Actions due to distant earthquakes. This requirement is applicable to buildings above 20m height and the foundations of those buildings are on certain soil conditions. The draft code classifies the Ground types as A, B, C, D and E in which ordinary buildings found on D and E have to satisfy the EC8-1 requirements and special buildings such as hospitals and institutional buildings, civil defence installation found on C, D and E have to satisfy the EC8-1 requirements. The Ground Class type is determined using the representative soil parameter P in the upper 30m soil strata. The derivation of the soil parameter ‘P’ and the simplified static design approach to calculate lateral load due to tremor action are given in the BC3 code.

The design detailing for reinforced concrete structures will follow the requirements to SS EN 1992–2010 (Design of Concrete Structures) and for buildings of structural steel or composite construction, the design will follow SS EN 1993 (Design of Steel Structures) and SS EN 1994 (Design of Composite Structures).
The dialogue between ACES and ACEM has been in its 8th year running now. This year, it is hosted by ACEM, and they had chosen Kuching, Sarawak East Malaysia as the venue for the dialogue. There was a good turn-out of more than 30 members in total, majority of whom are ACEM members from West Malaysia, Sabah & Sarawak, including the delegation of 7 Council members from Singapore.

The day started off with a site visit to Bengoh Dam in the morning. The dam measured 267m length and is 63m high located across the Bengoh river, and is intended to serve the 127km² catchment of rain water for the drought season. The dam project started in April 2008, and is about 97% complete to date, but it cannot be put into service because the villagers living around the catchment are not keen to relocate.

The dialogue proper was held in the afternoon. ACES shared with Malaysian counterparts their experience in using the Eurocodes, which have superseded the British Standards that the consulting practice in Singapore had been using for many years. BIM (Building Information Modelling) roadmap in Singapore has been in top gear as mandatory submissions to the authorities is due in 2014. Though ACEM acknowledged the benefits of BIM and is keen to embark on BIM, the majority of their Malaysian practice had not been too keen to embark on BIM at this moment due to cost and skills set. ACES also shared the developments in the Green Mark Scheme, in particular the drive for GM in existing buildings, the incentives and criteria for existing buildings.

ACEM then shared that they had made in road progress to be represented in the Professional Engineers Board Malaysia, and now has 2 representatives in PEM. ACEM had proposed amendments to the Registration of their Engineers Act, which would be tabled in their Parliament sitting in Nov 2012. To qualify for Professional Engineer registration, they are introducing a 2 tier registration where the graduate engineer is required to pass the professional assessment exams (1st tier) and then pass the professional competency exams (2nd tier). This is very similar to the current practice in Singapore. There is a 6 months Malaysia residency requirement for PE application. Another amendment is the minimum requirement of 70% composition of PEs in a corporation offering professional practice.

ACEM also shared a case study on the collapse of the Trengganu Stadium. The consulting engineer lacked the experience and depended wholly on the Contractor’s engineer to provide the design. There were many signs of the structure failing leading to the eventual collapse, but no one took serious actions of the early warning signs. Fortunately there were no fatalities when the building collapse. This is a case of gross professional negligence on the part of the consulting engineer.

The day ended with a dinner hosted by ACEM. The hospitality of the host was overwhelming and ACES hoped that they can reciprocate the same when they host the next dialogue next year.
ASEAN Chartered Professional Engineer (ACPE) 3rd Roundtable Discussion

By Er. Ling Shiang Yun

The theme of the 3rd Roundtable Discussion is “Capability Building and Engineering Mobility Consolidation through Cooperation and Collaboration”. Specific topics were discussed over the roundtable by representatives from ASEAN Member States. Topics included: ACPE Engineering Mobility, ASEAN Infrastructure, Harmonising Engineering Standard, Professional Engineers Exchange Programme (PEEP), and ASEAN Sustainable City. After the roundtable discussion, all issues discussed were presented and tabled to ACPE Secretariat for further action. In summary, the issues discussed were:

1. ASEAN Mutual Arrangement on Engineering Services, how do we move forward effectively?
2. How do ensure that the objectives of the MRAs (Mutual Recognition Arrangement on Engineering Services) are achieved?
3. How do we facilitate the process of liberalization of our engineering services industry?
4. Can we collectively as ASEAN Professional advocate the consolidation of effort in capability building and engineering mobility through cooperation and collaboration?
5. How do we strategize our efforts to meet the challenges of the globalized world, where the issue is not only capability building but also professional competency, ethics, and integrity?
6. Should we establish a common ASEAN Codes similar to that of Euro Codes?

A fter the roundtable discussions, the participants were invited to technical visits to 2 interesting sites. The 1st site is at Prasarana office on the Kelana Jaya & Ampang Line Extension Projects, and the 2nd site visit is at SMART (Stormwater Management and Road Tunnel) MotorWay Control Center.

The site visits have provided the participants with an overview of the SMART and Kelana Jaya & Ampang Line Extensions and the various challenges faced by the project team were explained to the participants. The briefings are very informative as the presentations were filled with practical illustrations.

The QEC Talk and Networking Nite held on 2 November 2012 at IES auditorium attended by 150 participants. Er. Ken Jung presented his experiences on how an engineer should think out of the box and capitalizes on the benefits of the local regulations with that of financial engineering to lower operating cost for the electrical installations besides the typically practices of changing to energy-saving light sources or lowering the operating voltages of the electrical installations. He gave an insight on how buildings have benefited from on-line monitoring with case studies illustration on actual projects successfully implemented.

Mr. Joseph Ong from Fluke presented on their newly patented unified power algorithm for quantifying the energy wastage. This new measurement solution will provides correct energy and power quality parameters for engineering economic decisions, and determination of major distortion sources.
Er. Henry Lim and Er. Yeow Mei Leng attended 2 sessions of the performance based codes standing committee meeting on 12 Sep 2012 and 24 Sep 2012.

Using the performance criteria, the Acceptable Solutions on the requirements of staircases, headroom & ceiling heights, safety barriers and ventilation were reviewed, and below are a summary of the discussions:

Staircases
1. To enhance the safety requirement at the staircase, the exemption on clause E.3.8.1 was proposed to be removed.
2. To raise the minimum height of safety barrier from 900mm to 1000mm.
3. As there is no specific requirements for size of handrails in the acceptable solutions, the size of 35mm to 50mm diameter is proposed.
4. Handrail for flight of not more than 5 steps will be part of acceptable solution.
5. To specify gentler stairs for transport stations, interchanges and passenger terminal, hotel, hospitals, polyclinics, markets, food centres and other places of public resort, such that the riser tread $\leq 160$mm, and tread width $\geq 280$mm

Headroom and Ceiling Height
1. To remove utility room from exception in clause C.2.2.2
2. To allow for storeroom not exceeding 6 sq m in floor area
3. To comply with LTA’s requirement of headroom of every parking lot and driveway to be not less than 2.2m
4. To allow exemption for only houses built for their own use to have an attic of floor area not exceeding 10 sq m.
5. To allow exemption for toilets, bathrooms or lavatories for only houses built by owners for their own use.

Safety Barriers
1. To amend exemption and include roofs without permanent access
2. To standardize minimum safety barrier height requirement at atiors and ramps to 1.0m
3. Height of barrier measured from top of curb or step with dimensions more than 150mm by 150mm
4. Application of the lowest 75mm built with no gap requirement to all safety barriers
5. To allow up to 500mm opening sizes in barriers at areas for maintenance
6. Vehicle barriers are proposed and shall be
   a. Provided in front of a safety barrier (e.g. parapet wall) in carparks
   b. Provided where there is any waiting area or shop front located at an end/turn of driveways in carparks

Ventilation
1. To remove utility rooms and corridors or passageways not exceeding 13m length from exemption
2. To include private lift lobby area of not exceeding 6 sq m in exemption
3. To prescribe the effective area of different types if ventilation openings
4. As there was no requirements on location and distribution of natural ventilation openings in the Acceptable Solutions, resulting in extreme designs where openings are provided at two ends of a narrow corridor and inner space ventilates via outer space with opening. The proposal is to add the requirement of “No part of any room shall be more than 12m from any window/ opening ventilation the space” to circumvent such designs.
5. To amend current NV requirement for above ground carpark, to follow the requirements of SS 553
6. To provide clarity for acceptable sources for natural ventilation, such as airwells and recess voids.

The above is provided for advance information and may be amended after further reviews by BCA.

Clarification arising from FSSD Standing Committee Meeting

At the last FSSD Seminar held in Oct 2012, one of the SCDF speaker mentioned that emergency lighting is not necessary at the carpark ramp. FSSD had clarified that this will apply to the portion of ramp near external. However if it is an internal ramp, emergency lighting will still apply, including the requirements on travel distance, fire fighting facilities such as hosereel and fire extinguishers.

FSSD clarified that their circular on Clause 13.1.2 of SS 550:2009 dated 8 November 2012 on the requirement of heat detectors at lift lobbies will apply to building plans submitted after the circular date, and should not affect projects whose plans were submitted before that date.
The first Cementaid company was established in 1946, in Perth, Australia. Since 1958, the focus of the Cementaid group’s technology research and delivery has been the 11 causes of corrosion in reinforced structural concrete and the successful prevention of all of them. The earliest existing Cementaid-enhanced reinforced concrete structures, placed in 1962 in extremely aggressive exposure conditions, are still in-service today, free of corrosion and requiring no maintenance cycles – verifying the successful performance of Cementaid’s unique technology.

The Cementaid group has long-term experience, since 1958, in successfully installing more than two million cubic metres of very high performance, enhanced HPI® (Hydrophobic Poreblocking Ingredient) concrete in a wide variety of projects in the full range of exposure conditions, around the world. This unique concrete technology is in service now and delivering corrosion-proof, maintenance-free design life and green concept to many landscaping / eco-roofs, marine structures, deep basements, water retaining structures, bridges, jetties, MRT stations, diaphragm walls, skin wall locally as well as overseas.

Havind established the registry of RE and RTO by JAC for the last few years, JAC with the support of BCA have initiated the publishing of the two Guide books on Foundation and Steelwork which are specially tailored to assist the site supervision work by RE and RTO. The Guide books were launched in September 2012 and were distributed free to all registered RE and RTO. There are many detailed illustrations and photographs showing the sequence of construction and are very useful even to practicing site engineer. The guide books are also available to member firms at $20 per book.

**Guide for Qualified Site Supervisors – REs and RTOs Foundation Supervision Guide and Steelwork Supervision Guide**

By Er. Lim Hung Tjung, Henry

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What are the challenges or difficulties you face as a female engineer in male dominated engineering profession? Are there more perks or bane as a female engineer in the local industry as compared to your male counterparts?

I am very amused each time I am mistaken as the architect or interior designer, but never as the engineer at the first meeting. Society had stereotype engineering as a male dominated profession, but glad to note that it is a lesser degree nowadays than when I first started working.

Women are often perceived as being non-technical. I have encountered questions directed at my male colleagues, as they are deemed to be better technically, and this can hurt the self-esteem of some, luckily not me.

Women are often perceived as being weak, and get preferential treatment when it comes to physical or strenuous work, which I consider as perk. However, I believe a woman engineer would not expect any exceptions, as engineers have no gender.

Women are perceived as emotional and indecisive, so they are not leaders material. Women had to work harder than their male counterparts to gaining acceptance. Then, they became aggressive and domineering in the process, and this could lead to another stereotyping of a successful women engineers.

I can speak only on being a C&S Consultant in the construction industry. In our job, the impact of the sexes is less apparent as most of my time as an engineer is spent on planning, design, coordination and contract administration. Most of this work is carried out in the office. However, “sun and helmet” work is essential for sharpening one’s ability to plan and design well to ensure it can be physically constructed on site. Being able to see what you had planned, designed and coordinated works physically, is really satisfying even though it commands hard work at times. It gives me a lot of job satisfaction which explains why besides me, there are a lot of other women engineers in this industry.

I’ve always felt that there are more perks as a female engineer. Our male counterparts are more patient, forgiving when dealing with the ladies. The age-old male chivalry is still very much alive.

Besides being an Engineer, women have roles of being a mother and wife in the family. How do you balance both roles; that of an engineer and of a mother/wife? Or please share with us how do you achieve a work life balance from your busy schedule?

I would say PRIORITY. The amount of time one wants to commit to their work and family is within one’s control. I salute women who can juggle work, children and husband all at one go.

Looking back, I had allowed my work to create stress, frustration and sleeplessness, but do not anymore. Not that I don’t take work seriously now, but I began to realize that there is something more to work, and there should be a balance. I now schedule...
my weekends for recharging my battery, by working out at the gym, play tennis or swim, meeting up friends, helping out at church, etc. all of which helps me relax and stay healthy.

I am fortunate to work for a company that encourage work life balance, allows me to do just that, and you don’t feel bad leaving on time.

[SY] Work and family depends very much on your own time management, company’s policy and government policy. This question should not be asked of women engineers alone as men and women now have equal responsibility to take care of children and family. This is an antiquated approach. We should demolish the old economical belief that men are born to be sole bread winners and women should stay home.

[AK] During a recent survey by Jobstreet.com on work-life balance in Singapore, it is found that nine out of ten workers surveyed worked beyond their official hours. I am sure I am not alone in this struggle for work-life balance especially with multiple roles to play i.e. Engineer, mother and wife! There is a saying that goes “To shrug off guilt of not being able to strike a work-life balance when compared to fighting age, is a lot harder for most of us working ladies”.

How do you think we can attract more female students to take up engineering and enter the engineering profession?

[YML] Working with ACES, women engineers can:

a. Educate and share their experiences with school aged girls to pursue studies leading to engineering careers.
b. Illustrate to them on how engineering can be rewarding careers
c. Remove the negative stereotype of engineering
d. Provide scholarship to an engineering degree program.
e. Provide vacation training / job immersion

[SY] There has been a decline in the number of young engineers both male and female willing to enter into the construction industry. This, I suspect, is due to incorrect impression that engineers are not so well paid and the job demands long working hours. Look at it this way, what other industry can you find that offers you the opportunity to leave a mark in the skyline of Singapore as evidence of your life’s achievement for future generations to see.

[AK]

• By our examples. If we do our work well, we will be noticed and looked upon as role models.
• Encourage more students to take up engineering as there appears to be a lack of interest in the field of engineering course offered by the Institution of higher learning.
• Professional groups like ACES could play a more active role to organise activities, technical seminars and workshops with particular emphasis for female engineers.

M&E RE and RTO Registry

ACES in a joint effort with IES, will be launching the registry of M&E RE and RTO in the next month or two.

This registry had been in the planning for the last two years and ACES is pleased to see that coming to fruition. This registry will be very similar to the C&S RE and RTO registry. Though M&E RE and RTOs are not regulated by BCA, ACES felt that the registry will help set and maintain the standards of the resident site staff, provide them with recognition and motivate the better ones.

ACES and IES will conduct classes as continuing education for them, and would request members to help out in this area. Criteria for registration will be e-blast to members in the next month or two, ACES would like members to encourage their REs and RTOs to register.
ACES - Fluke South East Asia Seminar: Predictive Maintenance Make Easy  19 September 2012

ACES had invited Fluke to conduct a Predictive Maintenance Make Easy Seminar with “Live” demo held at ACES’ premises on 19 September 2012. It was a very good knowledge sharing event and interactive session with Fluke technical team, sharing various real life Industrial applications with the participants.

Electricity has been around more than a century but the introduction and advancement of modern technology in today’s environment has also introduced new risks such as harmonics and unbalanced that will shorten the lifespan of our equipment. One of the key take-away in this seminar is about the how we can quantify energy wastage due to modern automation technologies. With these new risks, the existing power quality computation that we use is no longer comprehensive. In this seminar participants were presented with these unknown Power Quality Risks and were introduced to the newly developed Fluke 435II Power Quality and Energy Analyser that leverage on the newly patented Unified Power Algorithm that enable engineers and technicians to quantify these risks. This information would be useful especially to M&E engineers, facilities managers and technicians to help optimise M&E systems’ operational cost. Fluke product experts had also performed live demonstration to share with the participants the solutions and tools in achieving energy optimization.

The 5th ACES Networking Night held on 5 October 2012 at “The Cellar & Humidor” @ Raffles Town Club saw a large turnout of about 50 ACES participants. It was an enjoyable evening with participants catching up with old friends and making new friends over a sumptuous buffet dinner with great French wine. ACES is most grateful to Cementaid’s generous sponsor to this well received event and sharing their expertise and key products, Hydrophobic Poreblocking Ingredients (HPI) for structural concrete to eliminate traditional waterproofing system and enhancing concrete durability.
Dry-Mix Mortar Technology
In Modern Architecture
And Engineering Practices –
Sustainable Building Technology –
The Hidden World Unveiled
25 October 2012

The Dry-Mix Mortar Technology In Modern Architecture And Engineering Practices Seminar jointly organized by SIA and ACES and was held on 25 October 2012 at the Furama Hotel Ballroom was attended by 200 participants. This seminar was sponsored by LCS Optiroc and AkzoNobel. This seminar presented the hidden world of dry mortar as it has been the most widely used construction materials but it is also one of the least explored. The vast application of dry mortar includes plaster, skim coat, tile adhesives, waterproofed screed, colour tiles grouts, non-shrink grouts, high strength grouts, etc. Today, the applications of dry mortar are getting increasingly varied and exciting due to the need to adapt to innovative and advancement in building technologies, the Green initiatives and of course the pursuit towards better productivity. The seminar also serves as a platform to share global trends with fellow practitioners in the industry.

Design for Safety Coordinator
(DfSC) Course
30 & 31 October 2012

ACES’ DfSC Course, supported by MOM-WSHC and granted with WDA funding was held on 30 & 31 October 2012. The Trainer, Er. Goh Poh Kee is a Professional Civil & Structural Engineer with over 37 years of experience in Civil and Structural Engineering such as Bridge; Airport; Facilities Management; Schools and Institutional Buildings; and Project Management, etc.

There were a total of 7 participants, which comprised of 3 PEs and 4 BOAs with more than 10 years experiences in both design and construction with the relevant construction related qualifications accepted by recognised construction-related institutions. Participants of this course had gain the knowledge and skills for fulfilling the role of the Construction Project Safety & Health Coordinator in accordance with the Guidelines on Design for Safety in Buildings and Structure.

Competent candidates who have passed both their Assessment I (MCQ) and Assessment II (project report) will be issued with a Certificate of Competency. These competent candidates will then be certified as DfS Coordinators by WSHC. The on-line listing of certified DfS Coordinators can be download at WSHC website https://www.wshc.sg/wps/themes/html/upload/cms/file/2012%20Articles/Certified%20DfS%20Coordinators%20-%2020120511.pdf
ACES Seminar on Fundamentals of SS EN 1990 (aka Eurocode 0)
5 November 2012

This Eurocode C&S Seminar organised by ACES was held at SPRING Singapore Auditorium on 5 November 2012 with 129 participants. The speaker, Er. Dr. Tan Teng Hooi is a Chartered Engineer and Professional Engineer. He is currently a member of SPRING, Singapore’s Technical Committee on Building Structure and Sub-structure where he also serves as a Convenor, on the adoption of Eurocode 0 and Eurocode 1 in Singapore and member of the workgroup for Eurocode 2.

The industry already know that Singapore’s structural design standard will be migrating from traditional British Standards to the Eurocodes. This seminar prepared engineers in adopting the new codes and provided an overview of the Eurocodes. Fundamentals of the Head code SS EN 1990 (aka Eurocode 0): Basis of Design with significant adjustments and/or difference between the two codes highlighted to assist practicing engineers in understanding the adapting to the new code were covered.

ACES-Autodesk Seminar on “Get Ready for Mandatory BCA BIM E-Submission” 1st run on 28 August 2012 & 2nd run on 22 November 2012

With the support from BCA and Autodesk ACES had already organised two runs of this BIM Seminar – 1st run on 28 August 2012 and 2nd run on 22 November 2012, both attended by more than 40 participants.

The main objectives of these seminars were to get ACES members ready for Mandatory BCA BIM E-Submission. As part of BCA’s Construction Productivity Roadmap, there is an imposing progressive regulatory mandate to drive widespread Building Information Modelling (BIM) adoption since 2010. A Steering Committee to oversee the adoption of BIM was also formed. The Regulatory approval of MEP and Structural plans using BIM will begin in 2014 for all new building projects with GFA above 20,000m2. The public sector will also take the lead by specifying BIM requirement in new building projects.

Ms. Angela Chan and Mr. Chidambaram from BCA took the opportunity to explain in details how BIM funding help firms to defray part of the cost incurred in training, consultancy, software or hardware purchases. Speakers from Autodesk, Chow-Jin Ho from shared his insights on “What is BIM, the benefits of BIM with respect to Singapore while two other speakers – Mr. Noah Arles and Mr. Vijay Raina gave demo presentation on Workflow for Structural and Workflow for MEP, respectively.
Upcoming Events

9 Jan 2013, 6.30 pm
EOG M
Level 5, Mercury Room I & II, Furama Riverfront Hotel,
405 Havelock Road, Singapore 169633

Feb 2013 (Date to be confirmed)
PPP ROUNDTABLE DISCUSSION
Details to be provided nearer to the date

22 Feb 2013
RE & RTO NETWORKING AWARDS NIGHT
Details to be provided nearer to the date

27 Mar 2013, 6.30 pm to 11.30 pm
ACES 42ND ANNIVERSARY GALA DINNER
Grand Copthorne Waterfront Hotel, Grand Ballroom, Level 4
392 Havelock Road, Singapore 169663
Programme Highlights: ACES Design Excellence Awards 2013
Lifetime Achievement Young Consulting Engineers of the Year

Jan 2013 & Apr 2013 (Date to be confirmed)
AUTODESK BIM WORKSHOP (1ST) & (2ND)

21 May 2013
APPRECIATION DINNER

(ToDate to be confirmed)
C & S SEMINAR ON EUROCODE 7 – GEOTECHNICAL
18 Sin Ming Lane, #06-01 Midview City, Singapore 573960

(ToDate to be confirmed)
PUB: SHARING OF LATEST COP ON SURFACE WATER DRAINAGE WITH PROFESSIONALS
18 Sin Ming Lane, #06-01 Midview City, Singapore 573960

(ToDate to be confirmed)
LTA ACADEMY–ACES JOINT SEMINAR
Block 5, LTA Auditorium, No. 1 Hampshire Road,
Singapore 219428

(ToDate to be confirmed)
SCHNEIDER-ELECTRIC LOW VOLTAGE PROTECTION
18 Sin Ming Lane, #06-01 Midview City, Singapore 573960

ACES-YPC
Factory Visit to Kong Hwee Ironworks and Super Galvanising

BY ER. YOW CHEONG HOE, ACES-YPC VICE-CHAIRMAN, EVENT ORGANIZER

ACES Young Professionals Connection organized a visit to two factories on 3 November 2012 as part of the education and exposure program for Young Professionals. We are most thankful to Kong Hwee Iron Works & Construction Pte. Ltd. (KHI) and Super Galvanising Pte. Ltd. (SG) for hosting us at their respective factories.

A total of 20 members of YPC and ACES participated in this visit and benefitted from the very informative tours arranged by KHI and SG. The visit started promptly at 9:15am at KHI where General Manager Mr. Tee gave a brief on the steel fabrication process from raw steel sections to pre-fabricated structures ready for delivery to site for erection. After the briefing, we were treated to a guided tour of the factory, where we witnessed steel fitting-out, cutting, grinding, welding, drilling and testing of welded joints. After the tour, Mr. Tee responded to queries from the participants while we enjoyed a buffet spread kindly sponsored by KHI.

After a drive over to SG, we were received at 12:00pm by Managing Director Mr. Quah, and he gave an insightful presentation of the process and benefits of galvanizing steel. He then personally conducted a tour of the factory, explaining each step of the galvanizing process from steel surface preparations and hot-dip-galvanizing. At the end of the tour, Mr. Quah addressed further questions from the participants and we dismissed at 1:00pm.

The participants expressed that these factory visits were informative in giving a first-hand experience of steel fabrication and galvanizing, and visits such as these will be beneficial to young engineers. With these positive feedbacks, ACES-YPC will continue to organize more activities of similar nature for YPC and ACES members.
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