

2-DAY INTERNATIONAL CONSTRUCTION CONFERENCE

CHALLENGES OF GLOBAL MEGA PROJECTS

5-6 June 2013 Sunway Putra Hotel,
Kuala Lumpur, Malaysia

Advancing Engineering & Technology for Project Excellence



CIDB Approved 20 CCD Points
BEM Approved 6 CPD Points
LAM Approved 3 CPD Points
BQSM CPD Applied,
Pending Approval

- Showcase an excellent effective & efficient concept & design development management of construction processes, construction engineering & application of green technology & methodology in sustainable mega projects for human habitat.
- To promote, impart and enhance knowledge & practices related to sustainability & green technology with the aim to improve efficiency, productivity & competitiveness.

In conjunction with the 2013 International Construction Conference, a Construction, Trade, Education, Training & Publication Exhibition will be organised during the conference.

Participants will be able to gather information on the prevailing construction related educational courses & construction continuing professional development training programmes by some local universities & colleges. Books & publications on construction will be on display & available for purchase at special rates to conference participants.

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Advancing Engineering & Technology for Project Excellence

1.0 Purposes and Objectives of the Conference

- To promote, impart and enhance knowledge and practices to improve efficiency, productivity and competitiveness;
- To showcase on excellent and sustainable project concept and design development; creative and innovative on engineering sciences, construction technology and methodology; efficient contract procurement and project delivery system; better refined and defined contract documentation to enhance understanding and communication within the entire project workflow and amongst the project team organisation structure; cost effective and time efficient supply and value chain management; as well as excellent construction and project management system.

2.0 Proposed Concept

ICC 2013 will consists of four(4) parts, namely:

- i. Conference Paper presentation by international as well as local speakers and industry practitioners
- ii. Technical Paper presentation by trade and building material as well as plant and machinery suppliers and manufacturers on the latest technology and construction methodology
- iii. Post-Conference Project Visit to project sites of interest to the conference participants
- iv. Mini Exhibition by Institutions of Higher Learning on construction courses and programmes, publishers on construction books and publications and information technology providers on their latest construction software/system for the industry

3.0 Conference Papers

- Focuses on project-based presentation by professionals, practitioners and researchers from each and every identified mega project with emphasis or specifically on the state of the art of advanced engineering and technology created or deployed such as the Building Information Modelling, Industrialised Building System, Web-based Construction Project Management, Contract Administration, Intra-net, Extra-net and the like, in achieving one or more of the following:
 - Innovative and Creative Project Concept and/Or Design;
 - Effective and Efficient Construction Methodology and Technique;
 - Excellent Environmental Sustainability and Green Technology;
 - Competitive Economic Sustainability;
 - Productive and Cost Efficient Project Buildability and Constructability;
 - Total Quality Management (TQM) in Construction Project Management;
 - Project Time and Program Management;
 - Project Risk Management, Contract Administration and Procurement Delivery System;
 - Innovative and Creative, Efficient and Effective Supply and Value Chain Management;
 - Practices on Lean Construction, Recycling of Construction Waste, Waste Management, Green Technology and Environmental Sustainability, Life Cycle Costing and Value Management, Modularisation and Standardisation of Building Components, Productive Performance and Strategy for Improvement and the like.

4.0 Technical Paper Presentation on Modern & Advance Technologies, Components, Products, Methodologies & Techniques

- Focuses on technical paper presentations by producers, manufacturers and corporations in new, modern or advance construction or engineering technologies, components, products, business process and information technology, methodologies and techniques.
- Target three (3) technical papers, 30 minutes each inclusive of Q & A

5.0 Post-Conference Project Visit

- Two project visits, one in the morning and one in the afternoon is targeted on the 3rd day.

6.0 Mini Exhibition

- In conjunction with the ICC 2013 Conference, the Construction Courses & Programmes, Publication Exhibition on the prevailing construction related educational courses and construction continuing professional development training programmes by local universities and colleges and books and publications on construction and construction related software such as the BIM and the like will be organised during the 2-day Conference.

7.0 Target Participants

- Developers, Owners or Government Officials
- Bankers, Financial Institutions or Government Agencies
- Directors, Chief Executives, Chief Operating Officers, Senior Managers or Managers
- Superintending/Maintenance Officers
- Town Planners, Architects, Engineers or Quantity Surveyors
- Project/Building/Construction Management Professionals or Cost/Claims Consultants
- Project Managers, Commercial/Contracts Managers, Site Managers or Building Managers
- Main Contractors/Sub-Contractors/Suppliers
- Construction Lawyers/Practitioners/Academia
- Students

8.0 Language & Medium of Presentation

- English

CHALLENGES OF GLOBAL MEGA PROJECTS

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Day 1 Wednesday, 5 June 2013

8.30 am Registration & Exhibition

9.00 am Welcome Address by CIOB Malaysia President

9.05 am **Keynote Address and Official Opening by Guest of Honour**

9.15 am Tea Break & Refreshment

9.30 am **Paper 1: BUILDING CONSTRUCTION WITH REUSED MATERIALS AND COMPONENTS - EXPERIMENTAL CONSTRUCTIONS OF THE INTERIOR FINISHING WORK IN A MULTIPLE-DWELLING COMPLEX - by Prof. Dr. Naoto Mine**, SHL Professor, Department of Construction Management, Faculty of Engineering and Green Technology, UTAR

The demolition process creates a substantial volume of waste that cannot be readily reprocessed. Building materials and components can be recycled and reused to mitigate this problem; however a recycling system has not yet been established. The purpose of this study was to establish a reuse system for building construction. To achieve the purpose we performed experimental constructions with used materials and building components which are used for interior finishing works in a house. In this paper the building components and materials are bath, kitchen, and gypsum board. The paper addresses preparation of used materials and components, and then describes results of an experimental construction with the used materials.

10.30 am Q & A

11.00 am **Paper 2: SUSTAINABLE RECLAMATION IN HONG KONG – by Dr. K K YIN**, Director, Ove Arup & Partners Hong Kong Ltd, Hong Kong

The Hong Kong Zhuhai Macao Bridge (HZMB), being one of ten major infrastructure project announced by the Chief Executive's Policy Address, is poised to embrace the principle of sustainability for its reclamation.

The HZMB Hong Kong Boundary Crossing Facility (HKBCF) will be located on an artificial island of approximately 150 hectares to be reclaimed in a sustainable manner. The methodology for both the construction of the seawall and the main reclamation area will ensure that the marine soft compressible material remains intact during the process of land formation; i.e. a fully non-dredge reclamation - the first ever method adopted in Hong Kong.

Over 60% of the main reclamation shall be filled with public fill material from various sources in Hong Kong. The rationale for this approach is to mitigate potential saturation of existing fill banks as well as re-exportation of public fill to the neighbouring Mainland areas.

This paper reflects the team's effort in introducing the methodology, driving the approach, solving the major constraints, and arriving unanimous consensus among the various government agencies to procure a fully sustainable reclamation for Hong Kong

12.00 pm Q & A

12.30 pm TECHNICAL PAPER PRESENTATION & Q & A SESSION BY SPONSOR

1.00 pm Lunch Break

2.00 pm **Paper 3: A BETTER TOMORROW: THE FUTURE OF CITIES – by Ar Dr. Tan Loke Mun**, Director, ArchiCentre Sdn Bhd. Adjunct Professor of Architecture, University Putra Malaysia

This paper presents some ideas for a better tomorrow. It looks at some small beginnings in the Asian context; the development of Malaysia's GBI and the No. 19 a green urban rehabilitation exercise undertaken to help transform old building fabric into new and more sustainable uses. Green Offices, Malls, Convention Centres and also the cities for the future.

3.00 pm Q & A

3.30 pm TECHNICAL PAPER PRESENTATION & Q & A SESSION BY SPONSOR

4.00 pm Tea Break

4.20 pm **Paper 4: MODIFYING THE EARNED VALUE CONCEPT IN ORDER TO MANAGE AND CONTROL MEGA PROJECTS : A CLIENT PERSPECTIVE – by Dr. Tahir Hanif**, PhD MSc MCIQB FAPM FACostE MIC CMC FRICS

Earned Value was developed by the US government in 1967. It was originally called CSCS (Cost and Schedule Controls System) and allowed the integration of cost and time to control and manage projects. This paper will introduce a modified concept termed 'Imperium', which is based on the EV concept but has slightly modified formulae. This approach focuses on budget expenditure without having the need for accurate actual cost information. 'Imperium' helps clients to manage, control and understand project performance without having to resort to elaborate data systems or rely on information supplied by organisations involved in project delivery.

5.20 pm Q & A

5.50 pm END

Day 2 Thursday, 6 June 2013

8.30 am Registration & Exhibition

9.00 am **Paper 5: PROJECT EXCELLENCE THROUGH VIRTUAL DESIGN AND CONSTRUCTION (VDC) - THE SUNWAY EXPERIENCE by Dato' Ir Tan Kia Loke**, BSc (Hons) Civil Engineering, P.E., F.I.E.M., M.C.I.H.T., BSc (Hon) Degree in Civil Engineering; Senior Managing Director, Sunway Construction Sdn Bhd

Virtual Design and Construction (VDC), utilising Building Information Modeling (BIM), is one of the most promising developments that brings fundamental transformation to the Architectural, Engineering and Construction (AEC) industries. The data rich environment of BIM technology enables virtual design, visualization, analysis, fabrication and collaboration to achieve higher productivity, accuracy and product quality. This paper will showcase Sunway's experience in implementing this advanced engineering technology for project excellence.

10.00 am Q & A

10.30 am Tea Break

11.00 am	<p>Paper 6: LONDON 2012 OLYMPICS – CREATING SUSTAINABLE LEGACY FOR FUTURE – by Dr. Bill Huang, Director, Atkins, PhD, CEng (Chartered Engineer) and MCIQB (Chartered Member of CIOB)</p> <p>As the official engineering design services provider for the London 2012 Olympic and Paralympic Games, Atkins has been there on every step of the journey to the London 2012 Games, from transforming a derelict site into a beautiful park, to transforming iconic landmarks such as Greenwich Park, home of the Greenwich Meridian Line, into spectacular Olympic venues.</p> <p>Bill's presentation will focus on:</p> <ol style="list-style-type: none"> 1) How Atkins and ODA delivered a mega project like the Olympics Games 2) Addressing sustainability issues in order to create a sustainable legacy for future
12.00 pm	Q & A
12.30 pm	TECHNICAL PAPER PRESENTATION & Q & A SESSION BY SPONSOR
1.00 pm	Lunch Break
2.00 pm	<p>Paper 7: CHALLENGES FOR SUSTAINABLE - WASTEWATER MANAGEMENT IN MALAYSIA - By Sr Jailani Jasmani MISM, ICECA, Director, JUB Central Sdn Bhd</p> <p>Rapid development in urban areas has increased the importance of sustainable wastewater management. Challenges in the field of wastewater management include addressing issues in wastewater collection infrastructure, wastewater treatment, biosolids reuse and disposal, effluent reuse, and effluent dispersal. The Malaysian Government has taken several initiatives to address these issues by implementing sustainable measures in the planning, design, implementation and operation and maintenance of its wastewater management projects. The Jelutong Sewage Treatment Plant (JSTP) in Penang completed in 2008(capacity of 1.2million population equivalent (PE)) and the Pantai 2 Sewage Treatment Plant (P2STP) in the southern suburb of Kuala Lumpur currently under construction designed to treat up to 1.4million PE of wastewater are part of the Malaysian Government initiatives towards a sustainable wastewater management.</p>
3.00 pm	Q & A
3.30 pm	Tea Break
3.50 pm	<p>Paper 8: CREATING A COMFORTABLE ECO DISTRICT – by Mr Russell Cole, Arup Singapore</p> <p>The South Beach development aims to create an Eco-district in the centre of Singapore. The old army land site includes some fine conservation buildings and is well connected to the adjoining MRT system, but to unlock the potential of the site the mixed development also includes two large towers and a series of podium blocks. However to pull the district into a whole the site features a canopy sweeping over the site improving comfort t for the public moving between buildings. This canopy then turns up the face of the towers and become a high performance building envelope. The design of the canopy and facades need to respond a large number of environmental factors that have driven their form. Another major design driver is the architecture goals of the buildings, and of course the budget.</p> <p>In this presentation Russell Cole of Arup will describe how the form of the canopy and facade has been derived and highlight how different techniques and tools have been used to finalise the design.</p>
4.50 pm	Q & A
5.20 pm	END

Day 3 Friday, 7 June 2013 : Post-Conference Project Site Visit

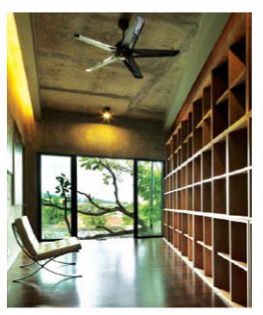
Visit to KKR 2 : Kompleks Kerja Raya 2(KKR 2) is a 6-block office complex masterplan on an existing 1 million sq ft site, strategically located at Jalan Sultan Salahuddin, Kuala Lumpur. KKR Tower is targeted as Malaysia's first Green Building Index (GBI) Platinum high-rise office building.

8.30 am	Registration
9.00 am	Depart Sunway Putra Hotel
9.30 am	Arrive at KKR2, Jalan Sultan Salahuddin, Kuala Lumpur
10.00 am	Tour/Presentation of KKR 2
11.00 am	Q & A
11.30 am	End



Visit to S11 : The S11 House has been built around the existing trees on the site to provide natural shelter for the living spaces. Environmental considerations have been integrated into the scheme, including rainwater harvesting. The S11 House was designed to achieve the highest level Platinum rating of Malaysia's Green Building Index (GBI).

2.00 pm	Registration
2.30 pm	Depart Sunway Putra Hotel
2.45 pm	Arrive at S11 House
2.50 pm	Tour/Presentation of S11 House as 1st GBI rated for residences
4.00 pm	Q & A
4.30 pm	End





Prof. Dr. Naoto Mine

Prof. Dr. Naoto Mine is currently the SHL Professor at the Department of Construction Management, Faculty of Engineering and Green Technology, University of Tunku Abdul Rahman.

From 2001 to 2012 he was a professor at Department of Architecture, Faculty of Environmental Engineering, The University of Kilakyushu. He was a Senior Researcher at the Institute of Technology Shimizul Corporation from 1971 to 2001.



Dr. K K Yin

Dr. Yin is a Director of Ove Arup & Partners Hong Kong and a geotechnical engineer by profession. He has participated in many mega projects, including the Hong Kong Zhuhai Macau Bridge – HK Boundary Control Facilities Reclamation, the International Commerce Centre, Airport Core Projects, and MTRCL etc.

Dr. Yin academic background spans from University of Strathclyde in Glasgow, Doctorate from University of Aston and a Master degree from Cambridge. His professional qualifications include FHKIE, MICE and MStructE. He is currently acting as Reviewer for Corporate Membership for both ICE and HKIE.



Ar. Dr. Tan Loke Mun

Ar. Dr. Tan Loke Mun, is principal of Ar. Dr. Tan L M Architect and Director of ArchiCentre Sdn. Bhd. The architectural design studio operates out of Kuala Lumpur, Malaysia where they are involved in a large variety of high profile work. Ar. Dr. Tan studied at Taylor's College, Kuala Lumpur and obtained his architectural training from Deakin University and later his doctorate from Melbourne University, Australia. In Malaysia, Ar. Dr. Tan's architecture embraces and interprets regionalism in a modern social context. In a rapidly changing world landscape, he believes that well designed buildings and spaces actually create value for all its users. Often working from the basis of typologies, he has managed to interpret and translate simple regional metaphors into his increasingly green architecture.

Ar. Dr. Tan's works are widely published and he has received numerous Architectural Awards for his works. He is also adjunct Professor of Architecture at University Putra Malaysia.



Dr. Tahir Hanif

Dr. Tahir Hanif is a construction professional working in the Middle East where he is providing strategic project management advice on government infrastructure programmes with a value in excess of £40 Billion.

Dr. Tahir is a Chartered Builder, Professional Project Manager, Cost Engineer, Certified Management Consultant and Chartered Surveyor by profession. Over the last 25 years, he has worked on some of the most demanding and high profile projects both in the UK and the Middle East.

He is a frequent international speaker and has presented papers at major conferences in Serbia, Turkey, Qatar, Malaysia and Australia. In addition to this he is a visiting lecturer at Kingston University London, University of Reading and Oxford Brookes University.

His area of expertise is project management and in particular project control through the use of adaptable processes in dynamic and uncertain environments.



Dato' Ir. Tan Kia Loke

Dato' Tan is a registered professional civil engineer with the Board of Engineers, Malaysia, a Fellow of Institute of Engineers, Malaysia, a member of the Chartered Institution of Highway & Transportation, United Kingdom and Honorary Advisor of Master Builders Association of Malaysia. He was awarded Chief Executive Officer of the Year 2006 by Malaysian Construction Industry Excellence Awards. He has more than 32 years' experience in the Property and Construction industry and he joined Sunway Group in 1981.

Dato' Tan is currently a Board Member of The Malaysian Property Incorporated, a government company incorporated to promote Malaysian properties overseas.



Sr Jailani Jasmani

Sr Jailani Jasmani graduated from the Western Australian Institute of Technology (WAIT), Perth with a Bachelor of Applied Science in Quantity Surveying. He has more than 25 years of experience in the construction industry mainly with quantity surveying practice and project management consultancy. He is currently a Director of JUB Central Sdn Bhd, a quantity surveying consultancy firm based in Kuala Lumpur. He has been appointed as a Board Member of the Board of Quantity Surveyors Malaysia (BQSM), the Deputy Chairman of the Quantity Surveying Division, the Royal Institution of Surveyors Malaysia (RISM) and the Chairman of Research Technical Committee of the QS Division RISM. He is also an external examiner for quantity surveying courses at the Infrastructure University Kuala Lumpur (IUUKL). He was a member of CIDB Technical Working Group 2 which has recently published the Malaysian Standard Method of Measurement for Civil Engineering Works (MYCESMM).



Dr. Bill Huang

Dr Bill Huang is a Director of Atkins, the largest UK Engineering and Design Consultancy. Bill is a Chartered Builder (MCIOB) and Chartered Engineer (CEng) and holds a PhD degree in Construction Management from the University of Reading, UK. Bill has worked with design firms, construction contractors, real estate developers, management consultancies, and research institutions to build up his diverse and comprehensive knowledge around engineering consultancy. Over 15 years, Bill has hand-on knowledge and experience in mega projects. He has got involved in 17bn pounds London Underground upgrade project, Heathrow Terminal 5 project, and London 2012 Olympics project etc. Bill is now heading up Atkins Western China business. Bill is a solution provider with strong analytic skills. He combines technical leadership and project management skills with his holistic and pragmatic approach, which enables him to deliver highly value-added intellectual services to his clients. He is a council member of CIOB China West and is chairing the Sustainable Chongqing Working Group.



Mr. Russell Cole

Russell has a background in façade and structural engineering and specialises in the design, assessment and construction of all types of façade systems for a broad range of buildings.

He also has a strong interest in Building Physics and its application in hot climates. The projects he has undertaken cover a wide range and scope, from conceptual design and building physics studies, to providing sub-contractor's details. The areas of investigations and resolution of failing facades also form a large part of his work.

Russell founded the facade team in Singapore and ran it for many years before moving into the leadership of the Building group, and currently taking charge of the Singapore office. His projects are located in Singapore, Southeast Asia, India and the Middle East, and past assignments in other markets where he had previously worked, have given him the breadth and depth of experience in building engineering throughout various markets.

