

# 7th Asia Pacific Young Researchers and Graduates Symposium

## University of Malaya, MALAYSIA, 20-21 August 2015

### PROGRAM OVERVIEW

#### 19<sup>th</sup> August 2015, Wednesday

03:00 pm – 05:00 pm	Pre-registration
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#### 20<sup>th</sup> August 2015, Thursday

08:15 am – 09:00 am	Registration
09:00 am – 09:15 am	Opening Ceremony
09:15 am – 10:15 am	Keynote Presentation 1
10:30 am – 10:40 am	Tea Break
10:40 am – 12:10 pm	Parallel 1A, 1B & 1C
12:10 pm – 12:20 pm	Break
12:20 pm – 01:20 pm	Parallel 2A, 2B & 2C
01:20 pm – 02:15 pm	Lunch
02:15 pm – 05:00 pm	Excursion
06:00 pm – 09:00 pm	Banquet Dinner

#### 21<sup>st</sup> August 2015, Friday

08:30 am – 09:30 am	Keynote Presentation 2
09:30 am – 10:50 am	ACF Special Session
10:50 am – 11:00 am	Tea Break
11:00 am – 12:45 pm	Parallel 3A, 3B & 3C
12:45 pm – 02:45 pm	Lunch and Laboratory Visit
02:45 pm – 03:45 pm	Parallel 4A, 4B & 4C
03:45 pm – 04:00 pm	Tea Break
04:00 pm – 05:15 pm	Parallel 5A, 5B & 5C
05:15 pm – 05:30 pm	Award Presentation and Closing Ceremony

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## University of Malaya, MALAYSIA, 20-21 August 2015

### PROGRAM IN DETAIL

(Block Y, Faculty of Engineering)

19th August 2015, Wednesday			
03:00pm – 05:00pm	Pre-registration (The Cube)		
20th August 2015, Thursday			
08:15am – 09:00am	Registration (Foyer)		
09:00am – 09:15am	Opening Ceremony (DK8)		
09:15am – 10:15am	<b>Keynote Presentation 1 (Chair: Prof. P. Mohamed) (DK8)</b> <b>ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) BRIDGES</b> Adjunct Prof. Dr. Lei Yen VOO		
10:30am – 10:40am	Tea Break		
	<b>Parallel 1A (DK7)</b> <b>Chair: Prof. R. Sahamitmongkul</b>	<b>Parallel 1B (DK8)</b> <b>Chair: Prof. S.Chaudhary</b>	<b>Parallel 1C (DK9)</b> <b>Chair: Prof. D. Kim</b>
	<b>Concrete Materials I</b>	<b>Structural Design and Analysis I</b>	<b>Steel Composites</b>
10:40am – 10:55am	Contributory Factors Related to Permanent Deformation of Asphalt Concrete Mixtures A.H.K. Albayati, H.M. Al-Mosawe	Optimum Flexural Reinforcement in Design of RC Beams - A review H.E. Nagesh, G. Appa Rao	Seat Angle Parameter Effect on Bolted Top-Seat Angle Moment-Rotation Behavior S.H. Leong, N.H. Ramli Sulong
10:55am – 11:10am	Cement Based Hydrophobic Paste for The Repair of Cracked Concrete Y. Tong, G. Mwamba, L. Ye	Ductility Analysis of PSC Members with High Strength Strands H. Park, J-H. Lee, J-Y. Cho	Effect of column thickness on the strength and stiffness of steel pallet rack connections S.N.R Shah, N.H. Ramli Sulong, M.Z. Jumaat

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11:10am – 11:25am	Innovative Use of Incinerated Solid Waste from Educational Environment in Concrete A.U. Abubakar, E.W. Gadzama	Failure Modes of RC Deep Beam Panels J. Leon Raj, G. Appa Rao	Finite Element Analysis of Extended Hollo Bolt (EHB) for Open Beam to Concrete-Filled Column Bolt Connections M. Z. Jeddi, N. H. Ramli Sulong, M. Ansari
11:25am – 11:40am	Characterization of rubberized self-compacting ferrocement multi-layer composite slabs by means of acoustic emission A. Behnia, H.K. Chai, M. Bagherifaez, H. Abdul Razak, M.Z. Jumaat, A. Ibrahim	RC/PSC Slab Behavior Subjected to Impact Load Y.J. Yu, J-Y. Cho, S. Lee	The Negative Influences of Profiled Steel Sheet in Steel-Concrete Composite Beam Subjected to Combined Negative Bending and Axial Compression M. Bavan, S.B. Baharom, S.A. Osman
11:40am – 11:55am	An Experimental Study on Compressive Strength Behaviour of Concrete by Replacing Natural Aggregates with Use of Blast Furnace Slag S. Meerwal, V.P Singh, R. Chauhan, R. Sharma	P. Mohammed (TBC)	Experimental Verification of Different Types of Shear Connectors on Composite Slab B. Ashvini, A. Siva, R. Senthil
11:55am – 12:10pm	Q&A	Q&A	Q&A
12:10pm – 12:20pm	Break		
	<b>Parallel 2A (DK7)</b> <b>Chair: Prof. M. Suhatriil</b>	<b>Parallel 2B (DK8)</b> <b>Chair: H. Onishi</b>	<b>Parallel 2C (DK9)</b> <b>Chair: Prof. A.A. Allawi</b>
	<b>Seismic Engineering I</b>	<b>Fibre Reinforcement I</b>	<b>Structural Assessment I</b>
12:20pm – 12:35pm	Generation of Ground Motions Compatible with Design Response Spectrum in Time Domain D. Kim, S.H. Lee, K. Ahmed	Pullout Mechanisms of Different Hooked Steel Fiber Embedded in Cement Matrix K. Luecha, C. Sujivorakul	Concrete Crack Characterization By Mutli-Channel Surface Rayleigh Wave Measurement F.W. Lee, H.K. Chai, K.S. Lim
12:35pm – 12:50pm	Seismic Analysis of Tall Structures B. Sashikanth, S.T.G. Raghukanth, G. Maheshreddy	A Static Flexural Loading Test of AFRP-RC Beams. H. Onishi, Y. Watabe	Assessment of Corrosion Damage using Acoustic Emission Technique under Load Testing A. Zaki, J.Y. Tan, H.K. Chai, D.G. Aggelis
12:50pm – 01:05pm	Seismic Analysis of Scaled Model Test for RC Column Considering Strain Distortion J. Park, J-Y. Cho	Investigate Punching Shear Behavior of Ultra High Performance Steel Fiber Reinforced Concrete Slabs T.N. Thanh, T.N. Nhu, W. Pansuk	Verification of Composite AE-Tomography on Varying Anisotropy of Elastic Wave Velocity Y. Kobayashi, T. Shiotani

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01:05pm – 01:20pm	Q&A	Q&A	Q&A
01:20pm – 02:15pm	Lunch		
02:15pm – 05:00pm	Excursion		
06:00pm – 09:00pm	Banquet Dinner		
<b>21st August 2015, Friday</b>			
08:30am – 09:30am	<p><b>Keynote Presentation 2 (Chair: Prof. N. H. Ramli Sulong)</b>  <b>Towards the Use of High Strength Steel for Construction Productivity</b>  <b>Prof. Sin Ping CHIEW, Nanyang Technological University</b></p>		
	<p><b>ACF (Asia Concrete Federation) Special Session</b>  <b>Chair: Prof. Y. Kobayashi &amp; Prof. U.J. Alengaram</b></p>		
09:30am – 09:35am	Introduction of ACF		
09:35am – 09:50am	<p>Self-Healing Ability of Mortar with Different Additives and Different Degrees of Damage  D. Jaroenratanapirom, P. Markpiban, R. Sahamitmongkol</p>		
09:50am – 10:05am	<p>Influence of Waste Rubber Tyre Particles in Concrete Pavement  T. Gupta, S. Chaudhary, R.K. Sharma</p>		
10:05am – 10:20am	<p>Improvements in Recycled Aggregate Concrete  H. Zhang, Y. Zhao, T. Meng, S.P Shah</p>		
10:20am – 10:35am	<p>Chloride Ion Penetration Simulation in Cracked Concrete Based on Truss Network and RBSM  P. Jiradilok, K. Nagai</p>		
10:35am – 10:50am	<p>Probabilistic Model for Service Life Prediction of Water Repellent RC Structures in Marine Environments  J-G. Dai, T. Wang</p>		
10:50am – 11:00am	Tea Break		

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	<b>Parallel 3A (DK7) Chair: Prof. Y. Tong</b>	<b>Parallel 3B (DK8) Chair: Prof. Z. Ibrahim</b>	<b>Parallel 3C (DK9) Chair: Prof. J-G. Dai</b>
	<b>Concrete Materials II</b>	<b>Structural Design and Analysis II</b>	<b>Structural Strengthening I</b>
11:00am – 11:15am	Non-uniform Distribution of A Corrosion Layer at A Steel/Concrete Interface X. Zhang, J. Dong, Y. Zhao	Long-term Deflection Prediction of Flat Plate Slabs under Construction H-J. Hwang, H-G. Park	Performance Evaluation of RC Beams Strengthened with Different FRP K.V. Naveen Kumar, R.S. Chidambaram, P. Agarwal
11:15am – 11:30am	D-Optimal Experimental Design of High Strength Self Compacting Concrete to Enhance Experimental Efficiency A. Khan, J. Do, D. Kim	Revisiting ACI 318-11 Shear Provisions for Prestressed Concrete Beams M.S. Lee, T. Kang, K-J Shin	Evaluation of Deflection in High Strength Concrete (HSC)I-beam Reinforced with Carbon Fiber Reinforced Polymer (CFRP) Bars A.M.I. Said, O.M. Abbas
11:30am – 11:45am	Effect of Iron Based Waste Materials on the Strength Properties of Mortar R. Sharma, I.P Singh, R. Verma, S. Singh	Sandwich 3D Panel System: Construction Practices and Experimental Investigations P.Poluraju, G. Apparao	Innovative Application of Rebar Couplers in RC Structural Members under Static loading R.S. Chidambaram, P. Agarwal
11:45am – 12:00pm	Self Compacting Concrete using PPC and SNF R. Nayaka, P.M. Anil Kumar	Biotensegrity Model Inspired by Backbone O.C. Lian, K.K. Choong, T. Nishimura	Behavior of Strengthened RC Short Columns with CFRP under Eccentric Load A.A. Allawi, K.F. Sarsam, R.F. Hassan
12:00pm – 12:15pm	Tire Chips-sand Composites: A Noble Technique S.K. Tiwari, J.S. Yadav	Pile Static Design Methods: A Review V. Ghiasi, S. Kazemian, A. Honarjoo, P. Rasouli	Behavior of CFRP Strengthened Reinforced Concrete Multi-cell Box Girders under Torsion A.A. Majeed, A.A. Allawi, H.K. Chai, W.H. Wan Badaruzzaman
12:15pm – 12:30pm	Z. Ahmad (TBC)		Tensile Behaviour of Polyurethane under Varying Strain Rates H.M.C.C. Somarathna, S.N. Raman, K.H. Badri, A.A. Mutalib
12:30pm – 12:45pm	<b>Q&amp;A</b>	<b>Q&amp;A</b>	<b>Q&amp;A</b>
12:45pm – 02:45pm	<b>Lunch and Laboratory Visit</b>		

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	<b>Parallel 4A (DK7)</b> <b>Chair: Prof. D. Kim</b>	<b>Parallel 4B (DK8)</b> <b>Chair: Prof. A.A. Majeed</b>	<b>Parallel 4C (DK9)</b> <b>Chair: Prof. S.N. Raman</b>
	<b>Seismic Engineering II</b>	<b>Structural Assessment II</b>	<b>Structural Strengthening II</b>
02:45pm – 03:00pm	Behavior of Beam-Column Knee Joints with Headed Bars Subjected to Earthquake Loads B.U. Kwon, S. Kim, T-S. Oh, T. Kang	Feasibility of Elastic Wave Parameters for Tomographic Assessment of PC Tendon Duct Filling K.F. Liu, Y. Kobayashi, H.K. Chai, T. Shiotani, C.W. Yuen	Behavior of Reinforced Concrete Beams Strengthened by CFRP and Wire Rope A.I. Abdulla , M.I. Ali, A.S. Khazaal, M. Bagherifaez, A. Behnia
03:00pm – 03:15pm	Performance of Reinforced Concrete Structures with Tuned Mass Damper V. Kumar, B.K. Sahu	Optical Fiber Sensors for Reinforcement Corrosion Monitoring in Marine Concrete Structure M.R. Islam, M. Bagherifaez, M.M. Ali, H.K. Chai, K.S. Lim, H. Ahmad	Numerical Modelling of FRP reinforced in-plane restrained slabs G. Tharmarajah, S. Taylor, D. Robinson, D.J. Cleland
03:15pm – 03:30pm	Seismic Microzonation Maps for Kuala Lumpur, Penang, Melaka and Johor Bahru N.S. Aghdam, M. Suhatriil, R. Hashim	Modal Testing of A Road Bridge: A Case Study in Kuala Lumpur N. Mat Khair, H. Hashim, Z. Ibrahim, H. Abdul Razak, Z. Ismail	Strengthening Heat-Damaged Reinforced Concrete Circular Columns by confinement with GFRP A.B. Danie Roy, U.K. Sharma, P. Bhargava
03:30pm – 03:45pm	<b>Q&amp;A</b>	<b>Q&amp;A</b>	<b>Q&amp;A</b>
03:45pm – 04:00pm	<b>Tea Break</b>		
	<b>Parallel 5A (DK7)</b> <b>Chair: Prof. M. Suhatriil</b>	<b>Parallel 5B (DK8)</b> <b>Chair: Prof. Y. Zhao</b>	<b>Parallel 5C (DK9)</b> <b>Chair: Prof. M. Jameel</b>
	<b>Seismic Engineering III</b>	<b>Structural Design and Analysis III</b>	<b>Fibre Reinforcement II &amp; Reliability Analysis</b>
04:00pm – 04:15pm	Seismic Response Control of Multi Storey Structure using Distributed Multiple Tuned Mass Dampers M.S. Rahman, M.K. Hassan, S. Chang, D. Kim	A Proposal of an Approximate Equation for PS Strand Stress in PSC Member with High-Strength PS Strands J-H. Park, J-Y. Cho	Flexural Strengthening of Reinforced Concrete Slabs Using Hooked Steel Fiber Reinforced Concrete S. Viriyajaroenwong, C. Sujivoraku, T. Muhummud

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04:15pm – 04:30pm	Effect of Incident Angles on Seismic response of Asymmetric Base-Isolated Multistory Structure M.K. Hassan, D. Kim	Performance Verification Test for Spiral Anchorage Zone Reinforcement for Multiple PT Tendons A.S. Cho, T. Kang	Flexural Behavior of RC Beams Strengthened by Section Enlargement using Steel Fiber Reinforced Concrete W. Wonggran, T. Muhumud, C. Sujivorakul
04:30pm – 04:45pm	Vibration Control of Building Using Stockbridge Damper under Earthquake Loading S. Chang, D. Kim, S. Kuk, M.S. Rahman	Determination of Gas Explosive Blast Loads and Blast-Resistant Design of Concrete Panel Connection S. Ree, T. Kang	Risk Based Inspection and Proactive Maintenance for Civil & Structural Assets in Oil & Gas Plants. M.N. Mustafa, S.N. Sy Salim, P.H. Abdullah
04:45pm – 05:00pm	Q&A	Numerical Analysis of the Behaviour of Reinforced Concrete Columns subjected to Blast Loading M. Abedini, S.N. Raman, A.A. Mutalib	Reliability Analysis of Base-Isolated Nuclear Power Plant Using Response Surface Method based on BBD H. Cho, J. Do, D. Kim, S. Chang
05:00pm – 05:15pm		Q&A	Q&A
05:15pm – 05:30pm	<b>Award Presentation and Closing Ceremony</b>		