

5th international conference on  
**PROTECTION OF STRUCTURES AGAINST HAZARDS**  
**15-16 November 2012**, Goodwood Park Hotel, Singapore

Secretariat:

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<b>Programme-Tentative</b>	
<b>14 November, 2012</b>	
0900-1730	One Day Course on "BLAST RESISTANT DESIGN Course leader: Mr Donald Dusenberry, USA Venue: (Arundel Room, Level 2, Goodwood Park Hotel)
1500-1730:	Early Registration for conference participants At Board Room, Lobby Floor, Goodwood Park Hotel, Scotts Road. Singapore
1730-1830:	Welcome Reception
<b>15 November, 2012 - Conference on "PROTECTION OF STRUCTURES AGAINST HAZARDS"</b>	
0900	Opening Session ( <i>Arundel Room Level 2, Goodwood Park Hotel</i> ) Welcome Address by Conference Chairman, A/Prof Tat Seng Lok, Nanyang Technological University, Singapore Address by Support Organisation: Centre for Hazard Research, National University of Singapore, Prof C G Koh
0915	Keynote Session 1
	Chairman: A/Prof T S Lok Speakers: (4x30min-120mins) <b>1. Prof Chan Ghee Koh</b> , National University of Singapore, Singapore, and C G Tay <i>"Disproportionate collapse of multi-storey building"</i> <b>2. A/Prof Nawawi Chouw</b> , The University of Auckland, New Zealand <i>"Observation and prevention of relative movement induced damage to bridges in strong earthquakes"</i> <b>3. Prof C Y Wang</b> , National Central University, Taiwan <i>"A 3-D fluid-structural interaction analysis code for the natural hazard"</i> <b>4. Prof Hong Hao</b> , The University of Western Australia, Australia <i>"Experimental and numerical study of dynamic material properties of fibre reinforced concrete"</i>
1115	Morning Refreshments
1130	<b>Special Session 1 on "Blast Resistant Design and Retrofit of Structures"</b>
	Chairman: Prof Murat Saatcioglu, University of Ottawa, Canada Speakers: (6x20m=120m+30QA=150mins) <b>1. Peter J Mendoza</b> , <i>"Numerical simulation and testing validation of prefabricated composite steel stud blast panels retrofitted with FRP"</i> <b>2. Ioan Nistor</b> <i>"Experimental and numerical modeling of dam breach and subsequent failure due to blast"</i> <b>3. Alan Lloyd</b> <i>"Blast retrofit of wood-framed buildings"</i>
1230-1400	Lunch

<b>15 November, 2012</b>	
1400	<b>Special Session 1 on "Blast Resistant Design and Retrofit of Structures"</b> continues
	<p><b>4.Chunlin Liu</b> <i>"Weapon based attacks: protection against the ballistic and blast components for architectural elements"</i></p> <p><b>5.Husham Almansour</b> <i>"Structural performance of reinforced concrete columns subjected to multiple versus single simulated blast shots"</i></p> <p><b>6. Saaed Ahmad</b> <i>"Comparison between factors affecting blast loading on reinforced concrete structural elements"</i></p> <p>-Discussion</p>
1530	Afternoon Refreshments
1545	<b>Special Session 2: "Structural Response to Extreme Loads"</b>
	<p>Chairman: -Prof Hong Hao, The University of Western Australia, Australia Speakers: (Lead30+5x20m=130min)</p> <p><b>1. John Crawford (Lead speaker)</b> <i>"Design and test of a portable anti-ram bollard system"</i></p> <p><b>2. Shengrui Lan</b> <i>"Blast Damage Mechanism Of RC Column"</i></p> <p><b>3.Chengqing Wu</b> <i>"Critical scaled distances of spherical vs cylindrical charge shape effects for external, fully vented confined and fully confined blasts"</i></p> <p><b>4. Jun Li</b> <i>"Influence of brittle shear damage on two-step method prediction of structural response to blast loads"</i></p> <p><b>5. Jingchun Liu</b> <i>"Dynamic responses analysis of steel-backed reinforced concrete structure subjected to blast loading"</i></p> <p><b>6.Yanchao Shi</b> <i>"Blast loads on slabs under close-in explosions"</i></p>
1800	Adjourn for the day
1900	Conference Dinner

<b>16 November, 2012</b>	
<b>0830</b>	<b>Special Session 2 continues &amp; Technical Session 1</b>
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Special Session 2</p> <p>Chairman: Prof Hong Hao Speakers: (7x20=120m+10QA=150mins)</p> <p><b>7. Yongqiang Zhang</b> <i>"Numerical modelling of FRP-bonded steel tubes subject to transverse impact"</i></p> <p><b>8. Jun Li</b> <i>"Numerical simulation of blast induced structural response using static condensation method"</i></p> <p><b>9. Bing Du</b> <i>"Dynamic mechanical behavior of fiber reinforced concrete Under impact loading"</i></p> <p><b>10. Guowei Ma</b> <i>"Probabilistic gas explosion hazard assessment of fixed platform structures"</i></p> <p><b>11. Zheng Ruan</b> <i>"Numerical investigation into responses of rc columns subjected to fire and blast"</i></p> <p><b>12. Jonathon Dragos</b> <i>"Derivation of normalised pressure impulse curves for elastic members against confined blasts using a new approach"</i></p> <p><b>13. Teppei Kaneko</b> <i>"Experimental study on the impulsive fluid load of flow water"</i></p> <p>Discussion</p> </div> <div style="width: 45%;"> <p>Technical Session 1</p> <p>Chairman: Dr T S Lok Speakers (5x15m=75mins)</p> <p>1. Mahesh S. Shah 2. Alpa Sheth 3. Asskar J Choobbasti* 4. Tan LI 5. I A Rahman</p> </div> </div>
1100	Morning Refreshments
1120	Keynote Session 2- Tsunami
	<p>Chairman: Soon Hoe Chew Speakers: 3x30m=120mins)</p> <p><b>1. Prof Em N. Ishikawa</b>, National Defense Academy, Japan <i>"Protection of seawalls against tsunami"</i></p> <p><b>2. Dr. T. Arikawa</b>, Port and Airport Research Institute, Japan <i>"Structural failure by impulsive tsunami force"</i></p> <p><b>3. Dr Ioan Nistor</b>, The University of Ottawa, Canada <i>"Field survey of the tsunami impact and loading on structures engineering lessons of the 2011 Tohoku tsunami"</i></p>
1250	Lunch

<b>16 November, 2012 continues</b>					
1400	<b>Keynote Session 3</b>				
	Chairman: Prof ChanGhee Koh Speakers: (4x30m=90mins)  <b>1.ProfEm Shoji Ikeda</b> , National Yokohama University, Japan <i>"Proposal of stipulating the rule for prevention and mitigation of great disasters"</i> <b>2.Prof Murat Saatcioglu</b> , The University of Ottawa, Canada <i>"Seismic retrofit of structures"</i> <b>3.Prof Jan Holnicki-Szulc</b> , Institute of Technological Research, Poland <i>"Adaptive impact absorption - the concept, simulations and potential applications"</i> <b>4. Dr Mohammed M. Ettouney</b> , Weidlinger Associates, Inc., USA <i>"Theory of Multihazards for Civil Infrastructure"</i>				
1600	Afternoon Refreshments				
1615	<b>Technical Session 2 – Parallel Sessions</b>				
	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%; text-align:center;"><b>Technical Session 2A</b></th> <th style="width:50%; text-align:center;"><b>Technical Session 2B</b></th> </tr> </thead> <tbody> <tr> <td>           Chairman: Prof Shoji Ikeda            Speakers; (6x15m=90+15QA=105min)   <b>1.Tuswadi</b>  <b>2.Baris Trak</b>  <b>3.Paul Imbeau (Husham Almansour)</b>  <b>4.Mohamed Abdel Mooty</b>  <b>5.Yoshimi Sonoda..basic study</b>  <b>6.Hiroki Tamai*</b>  <b>7.Yonghui Wang</b> </td> <td>           Chairman: Mr Chirag Baxi            Speakers; (6x15m=90+15QA=105min)   <b>1.Chunlin Liu</b>  <b>2.Piyali Sengupta (reqd on15)</b>  <b>3.Gee-Cheol Kim</b>  <b>4. Feng LIN</b>  <b>5.Toshiyuki Horiguchi</b>  <b>6.M.M.Mirsaidov</b> </td> </tr> </tbody> </table>	<b>Technical Session 2A</b>	<b>Technical Session 2B</b>	Chairman: Prof Shoji Ikeda Speakers; (6x15m=90+15QA=105min)  <b>1.Tuswadi</b> <b>2.Baris Trak</b> <b>3.Paul Imbeau (Husham Almansour)</b> <b>4.Mohamed Abdel Mooty</b> <b>5.Yoshimi Sonoda..basic study</b> <b>6.Hiroki Tamai*</b> <b>7.Yonghui Wang</b>	Chairman: Mr Chirag Baxi Speakers; (6x15m=90+15QA=105min)  <b>1.Chunlin Liu</b> <b>2.Piyali Sengupta (reqd on15)</b> <b>3.Gee-Cheol Kim</b> <b>4. Feng LIN</b> <b>5.Toshiyuki Horiguchi</b> <b>6.M.M.Mirsaidov</b>
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1800	<b>Closing Session</b> Chairman: A/Prof Tat Seng Lok Panel Discussion Presentation of Paper Awards, if any Announcement and Vote of Thanks				
1830	<b>Adjournment of Conference</b>				

*N.B. The organisers reserve the right to amend or cancel the programme if deemed necessary. Should the event be cancelled, all fees would be refunded.*