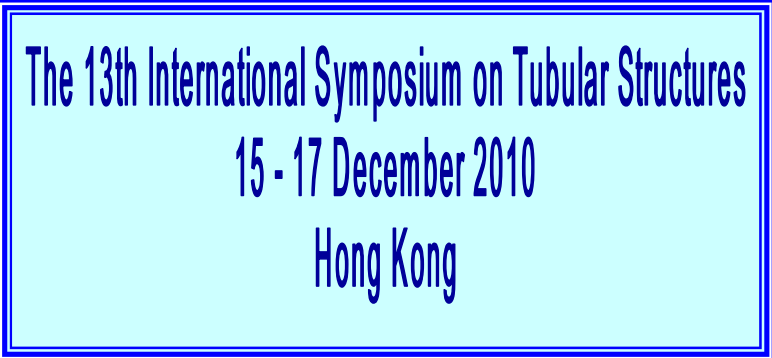


Conference Program

Last Updated: 22 Nov 2010

The 13th International Symposium on Tubular Structures

InterContinental Grand Stanford Hotel, 70 Mody Road, Tsimshatsui, Hong Kong

15 December 2010 (Wednesday)		15 December 2010 (Wednesday)	
	(Picasso Room)		
8:30 – 9:00	Registration & Coffee Break		
9:00 – 10:30	<p>Opening Ceremony</p> <p>Welcoming Speech <i>Professor Roland T. Chin</i> <i>Deputy Vice-Chancellor and Provost, The University of Hong Kong</i></p> <p>Co-Chair: J.A. Packer Co-Chair: J. Wardenier</p> <p>CIDECT President Report <i>Mr. P. Ritakallio</i> <i>President, CIDECT</i></p> <p>IIW XV-E Report <i>Professor X.L. Zhao</i> <i>Chairman, IIW Subcommission XV-E on Tubular Structures</i></p> <p>ISTS Kurobane Lecture Life extension of fixed platforms <i>N. Zettlemoyer</i></p> <p>Group Photo</p>		
10:30 – 11:00	Coffee Break	10:30 – 11:00	Coffee Break
	(Picasso Room)		(Monet Room)
11:00 – 12:45	<p>Parallel Session 1A: Static strength of joints Co-Chair: R. Puthli Co-Chair: D. Camotim</p> <p>Improving the ductility of welded connections in rectangular hollow sections <i>L.H. Teh* & G.J. Hancock</i></p> <p>Evaluation of numerical investigations on static behaviour of slender RHS K-gap joints <i>O. Fleischer*, R. Puthli & J. Wardenier</i></p> <p>Elastic axial rigidity formula for multi-planar CHS X-joints and its effect on the behavior of single layer ribbed domes <i>L.J. Jia & Y.Y. Chen*</i></p> <p>Strength of RHS K-joints in brace members with holes required for truss hot-dip galvanizing <i>C. López-Colina*, M.A. Serrano-López, J.J. Del Coz-Díaz, G. Iglesias-Toquero & J. González-Martínez</i></p> <p>Static behaviour of complicated multi-planar tubular joints – A case study in Guangdong Science Center <i>Y.B. Shao*, Y.F. Jin, J.C. Zhang, Z.H. Qiu, S.P. Chiew & S.T. Lie</i></p> <p>Strengthening T-joints in thin-walled tubular structures <i>A. Shaat*, J. Aguilera & A. Fam</i></p>	11:00 – 12:45	<p>Parallel Session 1B: Oval hollow sections Co-Chair: L. W. Tong Co-Chair: L. Gardner</p> <p>Numerical study on the ultimate strength of elliptical stub columns <i>N. Silvestre* & L. Gardner</i></p> <p>Slenderness limits for EHS and OHS subject to bending using the RHS approach <i>X.L. Zhao*, A. Kernot, J.A. Packer & T. Haque</i></p> <p>Biaxial bending and compression of elliptical hollow sections <i>T.M. Chan*, J.M. Abela & L. Gardner</i></p> <p>Instabilities in elliptical hollow section members <i>K.H. Law* & L. Gardner</i></p> <p>Numerical modelling of concrete-filled stainless steel elliptical hollow sections <i>D. Lam* & X. Dai</i></p> <p>Experimental studies of elliptical concrete-filled tube columns <i>N. Jamaluddin*, D. Lam & J. Ye</i></p>
12:45 – 13:50	Lunch (Academy Room, 1 st Floor): Short lunch talk by Tata Steel International	12:45 – 13:50	Lunch (Academy Room, 1 st Floor): Short lunch talk by Tata Steel International

*Presenting Author (12 min presentation + 5 min Q&A)

*Presenting Author (12 min presentation + 5 min Q&A)

15 December 2010 (Wednesday)		15 December 2010 (Wednesday)	
	(Picasso Room)		(Monet Room)
13:50 – 15:15	<p>Parallel Session 2A: Applications & case studies Co-Chair: M. Lefranc Co-Chair: T.M. Chan</p> <p>PREON - The flexible standard in hall construction <i>O. Josat*</i></p> <p>Glazed atrium roof shopping centre Cotroceni Park, Bucharest <i>M. Eekhout*, N. Eekhout, L. Weber & M. Venhuizen</i></p> <p>Structural design of the Spanish Pavilion for the Expo 2010 in Shanghai <i>J. Martínez Calzón*, C. Castañón Jiménez, J.M. Ding, X. Zhao & H.H. Sun</i></p> <p>Manufacture and construction of the Spanish Pavilion for the Expo 2010 in Shanghai <i>M.Y. Fang, J. Martínez Calzón & C. Castañón Jiménez*</i></p> <p>The architecture of tubular footbridges <i>L.J. Sanz Balduz*, J.L. Abadía, J.R. León, M. Bolea, J. Arruga & M. Rivera</i></p>	13:50 – 15:15	<p>Parallel Session 2B: Oval hollow sections + Fire Co-Chair: P. Schaumann Co-Chair: B. Wong</p> <p>Compression members of cold-formed steel oval hollow sections <i>J.H. Zhu* & B. Young</i></p> <p>Experimental evaluation of steel dual tube column system for fire protection <i>M.B. Wong* & J.D. Wang</i></p> <p>FE analysis of self-consolidating concrete filled double skin tubular columns subjected to fires <i>H. Lu*, X.L. Zhao & L.H. Han</i></p> <p>Fire resistance design of concrete-filled double skin tubular (CFDST) columns <i>H. Lu*, X.L. Zhao & L.H. Han</i></p> <p>A numerical study of the fire behaviour of high strength concrete filled tubular columns <i>A. Espinos*, M.L. Romero, A. Hospitaler & C. Ibañez</i></p>
15:15 – 15:45	Coffee Break	15:15 – 15:45	Coffee Break
	(Picasso Room)		(Monet Room)
15:45 – 17:10	<p>Parallel Session 3A: Applications & case studies + Seismic Co-Chair: Y.Y. Chen Co-Chair: K. Goto</p> <p>Diversity of design for welded joints of hollow profiles in shell structures <i>J. Müglitz* & C. Seidel</i></p> <p>Cyclic test and analysis on CHS stiffened connections to box section girders with different details <i>W. Wang*, Y.Y. Chen & B.D. Zhao</i></p> <p>Experimental study on overlapped CHS K-joints under cyclic loading <i>X.Z. Zhao*, X.B. Xu & Y.Y. Chen</i></p> <p>Seismic performance evaluation of steel tubular columns under cyclic bidirectional loading <i>I.H.P. Mamaghani*</i></p> <p>Numerical and experimental plastic collapse loads and CTODs of a cracked square hollow section (SHS) K-joint <i>S.T. Lie, B.F. Zhang, T. Li* & Z.M. Yang</i></p>	15:45 – 17:10	<p>Parallel Session 3B: Bolted joints Co-Chair: J.A. Packer Co-Chair: T. Wilkinson</p> <p>Behaviour of I beam – SHS column steel joints with hollow-bolts: An experimental study <i>A.C.B. Mesquita, L.A.P. Simões da Silva & S. Jordão*</i></p> <p>Static resistance of bolted circular flange joints under tensile force <i>M. Couchaux*, M. Hjjaj & I. Ryan</i></p> <p>Joint rotation behaviour of bolted endplate connections to flowdrilled RHS columns <i>A.Y. Park* & Y.C. Wang</i></p> <p>Validation of an FE model for an experimental blind-bolted moment-resisting connection to concrete filled hollow section <i>A. Al-Mughairi*, W. Tizani & J.S. Owen</i></p> <p>Study on the initial stiffness of blind bolted T-stub connections <i>Z.Y. Wang*, W. Tizani, & Q.Y. Wang</i></p>

*Presenting Author (12 min presentation + 5 min Q&A)

*Presenting Author (12 min presentation + 5 min Q&A)

Conference Program
The 13th International Symposium on Tubular Structures
InterContinental Grand Stanford Hotel, 70 Mody Road, Tsimshatsui, Hong Kong

16 December 2010 (Thursday)		16 December 2010 (Thursday)	
	<i>(Picasso Room)</i>		<i>(Monet Room)</i>
8:30 – 9:00	Registration & Coffee Break	8:30 – 9:00	Registration & Coffee Break
9:00 – 10:30	<p>Parallel Session 4A: Specification & code development Co-Chair: J. Wardenier Co-Chair: S.P. Chiew</p> <p>Enhanced proof strength after cold process of fabrication of non-linear metallic profiles – Comparison of two predictive models for hollow sections <i>B. Rossi* & J.P. Jaspart</i></p> <p>Background of the new RHS joint strength equations in the IIW (2009) recommendations <i>J. Wardenier*, G.J. van der Vegte, J.A. Packer & X.L. Zhao</i></p> <p>Production standards for cold-formed hollow structural sections <i>J.A. Packer* & S.P. Chiew</i></p> <p>Design tools for hollow section joints <i>K. Weynand*, J. Kuck, R. Oerder, S. Herion, O. Fleischer, O. Josat & M. Schneider</i></p> <p>Material properties of cold formed tubular sections with high yield strength steels <i>K. Ochi*</i></p>	9:00 – 10:30	<p>Parallel Session 4B: Stainless steel & aluminium Co-Chair: D. Lam Co-Chair: W.M. Quach</p> <p>Column tests of concrete-filled aluminum tubular sections <i>F. Zhou* & B. Young</i></p> <p>Analytical solution for residual stresses in cold-formed stainless steel circular hollow sections due to cold bending <i>W.M. Quach* & C. Cai</i></p> <p>Recent research on stainless steel tubular structures <i>L. Gardner*</i></p> <p>Residual stress pattern of stainless steel SHS <i>M. Jandera* & J. Machacek</i></p> <p>Effects of different adhesive and FRP on strengthening of stainless steel tubular structural members <i>S.M.Z. Islam* & B. Young</i></p> <p>Compression resistance of aluminium stub columns using Continuous Strength Method <i>M. Ashraf & B. Young*</i></p>
10:30 – 11:00	Coffee Break	10:30 – 11:00	Coffee Break
	<i>(Picasso Room)</i>		<i>(Monet Room)</i>
11:00 – 12:45	<p>Parallel Session 5A: Composite construction Co-Chair: L.H. Han Co-Chair: S.T. Smith</p> <p>Moment capacity of concrete filled double skin tubes <i>X.L. Zhao & A. Choi*</i></p> <p>Parametric studies of behaviour of composite beam-column end plate connections subjected to low-probability, high-consequence loading <i>O. Mirza & B. Uy*</i></p> <p>FE analysis of composite tubular K-joints subjected to static loading <i>Q.Y. Song*, L.H. Han & X.L. Zhao</i></p> <p>In-plane creep behaviour of concrete-filled steel tubular arches <i>Y.L. Pi*, M.A. Bradford & W.L. Qu</i></p> <p>Strength design against in-plane failure of concrete-filled steel tubular arches <i>Y.L. Pi*, M.A. Bradford, C.Y. Liu & Y.Y. Wang</i></p> <p>Inclined, tapered and STS concrete-filled steel tubular (CFST) stub columns under axial compression <i>L.H. Han, Q.X. Ren & W. Li*</i></p>	11:00 – 12:45	<p>Parallel Session 5B: Fatigue & fracture Co-Chair: P. Marshall Co-Chair: F. Mashiri</p> <p>Fatigue performance of enhanced partial joint penetration welds for tubular joints <i>P. Marshall*, X. Qian & Y. Petchdemanengam</i></p> <p>New S-N curves for details in bridges with steel truss tubular superstructure <i>A. Nussbaumer, S. Herion, M. Veselcic* & R. Dietrich</i></p> <p>Comparison of approaches for fatigue design of different tubular joint types <i>F.R. Mashiri*, X.L. Zhao, Z. Xiao, P. Dong & L.W. Tong</i></p> <p>Fatigue strength of truss girders made of Very High Strength Steel <i>R.J.M. Pijpers* & M.H. Kolstein</i></p> <p>Failure assessment of a cracked circular hollow section T-joint including the effect of crack-front constraints <i>X. Qian*, Z. Ou & S. Swaddiwudhipong</i></p> <p>Experimental investigation on stress concentration factors for diamond bird beak T-joints <i>L.W. Tong*, D.Q. Yan, Y.Q. Liu & X.L. Zhao</i></p>
12:45 – 13:50	Lunch (<i>Academy Room, 1st Floor</i>): Short lunch talk by Nippon Steel Group	12:45 – 13:50	Lunch (<i>Academy Room, 1st Floor</i>): Short lunch talk by Nippon Steel Group

*Presenting Author (12 min presentation + 5 min Q&A)

*Presenting Author (12 min presentation + 5 min Q&A)

16 December 2010 (Thursday)		16 December 2010 (Thursday)	
13:50 – 15:15	<p>(Picasso Room)</p> <p>Parallel Session 6A: Seismic Co-Chair: Y.S. Choo Co-Chair: K. Ochi</p> <p>Cyclic elastoplastic analysis of steel tubular braces <i>I.H.P. Mamaghani*</i></p> <p>Crack damage of multi-story CFT frame under strong ground motion <i>K. Goto* & M. Saisho</i></p> <p>Numerical study on displacement response of electric truss-columns under earthquake loads <i>L. Wang, J.H. Zhu, A.Z. Zhu* & H.P. Zhu</i></p> <p>Behavior of external diaphragm connection of CHS column with H-shaped beams <i>W.N. Sui* & Y.Y. Chen</i></p> <p>Cyclic testing of hollow structural sections for seismic applications in low to mid-rise moment frames <i>J. McCormick*, M. Fadden & J. Buisson</i></p>	13:50 – 15:15	<p>(Monet Room)</p> <p>Parallel Session 6B: Fire Co-Chair: N. Zettlemoyer Co-Chair: R. Feng</p> <p>Structural performance of extended end-plate connections between tubular steel members in fire <i>O. Salem*, G. Hadjisophocleous & E. Zalok</i></p> <p>Fire design of external semi-rigid composite joints <i>P. Schaumann* & O. Bahr</i></p> <p>An experimental study of structural behaviours of CHS T-joints subjected to brace axial compression in fire condition <i>M.P. Nguyen*, T.C. Fung & K.H. Tan</i></p> <p>Numerical models and parametric study on ultimate strength of CHS T-joints subjected to brace axial compression under fire condition <i>M.P. Nguyen*, K.H. Tan & T.C. Fung</i></p>
15:15 – 15:45	Coffee Break	15:15 – 15:45	Coffee Break
15:45 – 17:10	<p>(Picasso Room)</p> <p>Parallel Session 7: CIDECT President's Student Awards Co-Chair: J. Krampen Co-Chair: G. Iglesias</p> <p>Cherry Blossom Palace <i>X. Aguiló i Aran*</i></p> <p>Design and development of a New Terminal Building at the airport of Leon, Spain <i>F.Y. Baroudi Giovio*</i></p> <p>Experimental behaviour of elliptical hollow section welded X- and T- joints <i>T. Haque*</i></p> <p>Connection classification system for single layer reticulated domes <i>L.J. Jia*</i></p> <p>Extension of the fatigue life of welded X-joints made of circular hollow sections <i>P. Weidner*</i></p>	<p>Conference Banquet Location Map</p> <p>Regal Kowloon InterContinental Grand Stanford HK</p> <p>Conference Hotel</p> <p>3 minutes Walking distance from Conference Hotel to Regal Court</p>	
19:00 – 22:00	<p>Conference Banquet (Regal Court, 2nd Floor, Regal Kowloon Hotel, 71 Mody Road, Tsimshatsui)</p>	<p>Conference Banquet Regal Court, 2nd Floor, Regal Kowloon Hotel</p>	
<p><i>P.S. All events will be held at InterContinental Grand Stanford Hotel, except Conference Banquet will be held at Regal Kowloon Hotel.</i></p>			

*Presenting Author (12 min presentation + 5 min Q&A)

*Presenting Author (12 min presentation + 5 min Q&A)

Conference Program
The 13th International Symposium on Tubular Structures
InterContinental Grand Stanford Hotel, 70 Mody Road, Tsimshatsui, Hong Kong

17 December 2010 (Friday)		17 December 2010 (Friday)	
	<i>(Picasso Room)</i>		<i>(Monet Room)</i>
8:30 – 9:00	Registration & Coffee Break	8:30 – 9:00	Registration & Coffee Break
9:00 – 10:30	<p>Parallel Session 8A: Structural integrity Co-Chair: X.L. Zhao Co-Chair: Y.L. Pi</p> <p>Study of the damage on tubular steel structure after 30 years in service <i>Å. Petersen, P. Decosemaeker & M. Lefranc*</i></p> <p>Modern design method using NIDA for scaffolding systems <i>Y.P. Liu & S.L. Chan*</i></p> <p>Structural integrity assessment of tubular structures containing weld defects <i>S. Cicero*, R. Lacalle & R. Cicero</i></p> <p>Fitness for service assessment of tubular structures using the FITNET FFS Procedure <i>S. Cicero*, F. Gutiérrez-Solana & R. Cicero</i></p> <p>Application of small punch test for the characterization of welded joints of tubular structures <i>R. Lacalle*, S. Cicero, J.A. Álvarez, B. Arroyo & F. Gutiérrez-Solana</i></p>	9:00 – 10:30	<p>Parallel Session 8B: Stability Co-Chair: K. Weynand Co-Chair: N. Silvestre</p> <p>Buckling analysis of cold-formed RHS frames using Generalised Beam Theory <i>C. Basaglia & D. Camotim*</i></p> <p>Eccentric cleat plate connections in hollow section members in compression <i>T. Wilkinson*, D. Stock & A. Hastie</i></p> <p>Bearing capacity of hollow flange beams with web penetrations <i>T. Wilkinson*, M. Judd, M. Popplewell & J. Salhini</i></p> <p>Local buckling limits of tubular sections in bending and compression <i>A.M. Gresnigt*, C.A. Willemse & S.A. Karamanos</i></p> <p>Buckling response of submarine pipelines under combined tension and bending <i>S.F. Gong*, H. Deng, L. Yuan & W.L. Jin</i></p>
10:30 – 11:00	Coffee Break	10:30 – 11:00	Coffee Break
	<i>(Picasso Room)</i>		<i>(Monet Room)</i>
11:00 – 12:45	<p>Parallel Session 9A: Composite construction Co-Chair: J.Y.R. Liew Co-Chair: B. Uy</p> <p>Hybrid FRP-concrete-steel double-skin tubular columns with a square outer tube and a circular inner tube: Stub column tests <i>T. Yu* & J.G. Teng</i></p> <p>Experimental investigation on tubular columns infilled with ultra-high strength concrete <i>J.Y.R. Liew* & D.X. Xiong</i></p> <p>Recent developments on design of composite columns in Hong Kong <i>K.F. Chung* & C.K. Chan</i></p> <p>Experiment investigations of stress concentration factor of concrete-filled tubular T joints <i>J. Chen*, J. Chen & W.L. Jin</i></p> <p>An experimental study of rectangular concrete filled tubular (CFT) columns with high strength concrete <i>D. Hernández-Figueirido, J.M. Portoles, M.L. Romero* & J.L. Bonet</i></p>	11:00 – 12:45	<p>Parallel Session 9B: Fatigue & fracture Co-Chair: A. Nussbaumer Co-Chair: S. Herion</p> <p>Assessment of brittle fracture from defects using toughness scaling model <i>T. Iwashita* & K. Azuma</i></p> <p>Fatigue resistant truss connections with thick walled chords <i>I. Mangerig, R. Wagner* & N. Romen</i></p> <p>Fatigue behavior of welded CHS joints of large dimensions <i>I. Mangerig*, N. Romen & R. Wagner</i></p> <p>Design and fatigue assessment of a stinger <i>N. Ermolaeva, Y. Yu* & L. Zhao</i></p> <p>Influence of welding residual stresses on stable crack growth in tubular K-joints under compressive fatigue loadings <i>C. Acevedo & A. Nussbaumer*</i></p> <p>Crane runways made of hot-rolled mannesmann steel hollow (MSH) sections <i>S. Herion*, O. Josat, C. Dittmann, P. Sunder, O. Fleischer & J. Dechent</i></p>

*Presenting Author (12 min presentation + 5 min Q&A)

*Presenting Author (12 min presentation + 5 min Q&A)