



International Symposium on Advances in Steel and Composite Structures 2016, Hong Kong SAR 2016.12.06

An International Symposium on "Advances in Steel and Composite Structures 2016" jointly organized by the Chinese National Engineering Research Centre for Steel Construction (Hong Kong Branch) (CNERC) of the Hong Kong Polytechnic University and the Hong Kong Constructional Metal Structures Association (HKCMSA), was successfully held on 6 December 2016 with a total of 146 registrants attended.



The International Symposium is also supported by the Works Branch of the Development Bureau of the Government of Hong Kong SAR, the Construction Industry Council, and Building Division, Materials Division and Structural Division of the Hong Kong Institution of Engineers.

Advances in Steel and Composite Structures are important to practicing engineers in Hong Kong due to huge demands on infrastructure construction in the Region, in particular China, in the coming decades. Steel and composite construction is very often adopted in super high-rise buildings, long span bridges and public structures due to their high structural efficiency with large strength-to-self-weight ratios as well as large flexural rigidities against instability and serviceability issues.

This International Symposium is organized as a technical platform for the following renowned researchers and engineers to disseminate their research findings on advanced construction technology of steel and composite structures with special emphases on practical applications:

Prof. X.H. Zhou Academician, China Academy of Engineering, and

President, Chongqing University

Prof. Reidar Bjorhovde The Bjorhovde Group, U.S.A.

Prof. Richard J. Y. Liew National University of Singapore, Singapore

Prof. Y.J. Shi Tsinghua University, China
Prof. G.Q. Li Tongji University, China

Prof. Leroy Gardner Imperial College London, U.K.
Prof. Brian Uy The University of Sydney, Australia

Prof. K.F. Chung The Hong Kong Polytechnic University, Hong Kong

The following distinguished guests and senior engineers also attended the Opening Ceremony:

Ir Y. K. Cheng Institution of Structural Engineers, U.K.

Ir K. T. Leung Joint Structural Division, The Hong Kong Institution of Engineers

and the Institution of Structural Engineers.

Ir Joseph W.J. Chi Materials Division, The Hong Kong Institution of Engineers.

Ir H.Y. Lee Hong Kong Constructional Metal Structures Association.

Mr. Y.C. Leong Macau Society Metal Structures.
Mr. K.C. Law Macau Society Metal Structures.

Ir Richard S.M. Lee Yau Lee Construction Co. Ltd.

Dr. Jackson Lau Vocational Training Council (Tsing Yi).

Mr. Y.K. Pang Hong Kong Constructional Metal Structures Association, and

Macau Society of Metal Structures.

Prof. J. Di Steel Construction Research Centre, Chongqing University.

Prof. Paul T.C. Pang Department of Civil and Environmental Engineering, The Hong

Kong Polytechnic University.

Ir Eric Chan Joint Structural Division, The Hong Kong Institution of Engineers

and the Institution of Structural Engineers.

Ir K.H. Mok Hip Hing Construction Co. Ltd..

Mr. Matthew Lai Wo Lee Steel Co. Ltd..

Dr. Andy Leung Department of Civil and Environmental Engineering, The Hong

Kong Polytechnic University.

Office-bearers of CNERC

Ir Prof. K.F. Chung Director

Ir Dr. Michael C.H. Yam Deputy Director and Secretary General

Ir Prof. Joseph Y.W. Mak Chief Engineer

Dr. T. M. ChanDeputy Secretary GeneralDr. H. C. HoDeputy Secretary General



Prof. K.F. Chung, Prof. X.H. Zhou, Ir C.K. Hon and Ir K.T. Leung.



About 146 delegates attended the event.

During the Opening Ceremony, Ir C.K. Hon, Permanent Secretary for Development (Works), Development Bureau, the Government of Hong Kong SAR gave an inspirational speech to all delegates of the Symposium as the Guest of Honour. This followed by a report presented by Prof. K.F. Chung, Director of CNERC, on research and development activities of the CNERC since its establishment in October 2015.



Ir C.K. Hon delivered his Opening Speech.



Prof. K.F. Chung reported on research and development activities of the CNERC.

After that, Prof. X.H. Zhou and Prof. K.F. Chung signed a collaboration agreement on constructional steel research, and witnessed by Dr. Michael C.H. Yam and Prof. J. Di.



Signing of a collaboration agreement on constructional steel research 1st row from left:

Dr. Michael Yam, Prof. K.F. Chung, Prof. X.H. Zhou, and Prof. J. Di.

2nd from left: Mr. Y.K. Pang; Ir K.T. Leung, Ir C.K. Hon, Ir Y.K. Cheng, and Ir Prof. Joseph Mak.



Dr. T.M. Chan, Dr. H.C. Ho, Dr. Paul Lam, Prof. Paul Pang, Prof. K.F. Chung, Prof. Reidar Bjorhovde, Prof. Richard Liew, Prof. Leroy Gardner, Prof. Brian Uy, Prof. G.Q. Li, Prof. Y.J. Shi, and Ir H.Y. Lee.

International Symposium on Advances in Steel and Composite Structures 2016

Date: Tuesday, 6 December 2016

Venue: Lecture Theatre TU107, The Hong Kong Polytechnic University, Hung Hom, Hong Kong SAR.

Time: 8:30 am (registration) for 9:00 am to 5:15 pm.

Time	Program	
9:00 am	Opening Ceremony Master of C	Ceremony: Dr. T.M. Char
	Guest of Honour Ir C.K. Hon Permanent Secretary for Development (Works), Development Bureau, the Government of Hong Kong SAR. Report on the work of CNERC	
	Signing of Collaboration Agreements	
9:30 am Presentation 1	《國際鋼結構工程技術研討會》大會主題報告 —	Ir Y.K. Cheng Past President
	報告主題: 鋼管約束混凝土結構的研究應用及發展 報告 人: 周緒紅院士 重慶大學校長	IStructE
10:15 am	Refreshments	
10:45 am Presentation 2	Recent developments for constructional steel Professor Reidar Bjorhovde The Bjorhovde Group, U.S.A.	Ir Dr. Paul H.F. Lam Chairman
11:30 am Presentation 3	High strength steel and concrete for composite construction Professor Richard J.Y. Liew National University of Singapore, Singapore	Education & Training Committee HKCMSA
12:15 pm	Lunch Break	
2:00 pm Presentation 4	Recent progress on developing a specification for high strength steel structures Professor Y.J. Shi Tsinghua University, Beijing, China	Ir Dr. Michael C.H. Yam Deputy Director & General Secretary CNERC
2:35 pm Presentation 5	The strength of connections with welds or high-strength bolts for high strength structural steel Professor G.Q. Li Tongji University, Shanghai, China	
3:10 pm	Refreshments	
3:25 pm Presentation 6	Design of steel beam-column under combined compression and bending Professor Leroy Gardner Imperial College London, U.K.	Ir Prof. Joseph Y.W. Mak Chief Engineer CNERC
4:00 pm Presentation 7	Advances in steel and composite structures in Australia Professor Brian Uy The University of New South Wales, Australia	
4:35 pm Presentation 8	Effective use of high strength structural steel in building construction Ir Professor K.F. Chung The Hong Kong Polytechnic University, Hong Kong SAR, China	
5:10 pm	Closing Remarks Dr. T.M. Chan The Hong Kong Polytechnic University, Hong Kong SAR, China	
5:15 pm	End of Day	

Prof. X.H. Zhou, Academician, China Academy of Engineering, and President, Chongqing University gave a presentation titled "Research and prospect of steel tubed concrete structures".



Prof. X.H. Zhou, President of the Chongqing University.

Prof. Reidar Bjorhovde, The Bjorhovde Group, gave a presentation on "Recent developments for constructional steel".



Prof. Reidar Bjorhovde, The Bjorhovde Group, U.S.A..

Prof. Richard J.Y. Liew, National University of Singapore, gave a presentation on "High strength steel and concrete for composite construction".



Prof. Richard Liew, National University of Singapore.

Prof. Y.J. Shi, Tsinghua University, gave a presentation on "Recent progress on developing a specification for high strength steel structures".



Prof. Y.J. Shi, Tsinghua University, China.

Prof. G.Q. Li, Tongji University, gave a presentation on "The strength of connections with welds or highstrength bolts for high strength structural steel".



Prof. G.Q. Li, Tongji University, China.

Prof. Leroy Gardner, Imperial College London, gave a presentation on "Design of steel beam-column under combined compression and bending".



Prof. Leroy Gardner, Imperial College London, U.K.

Prof. Brian Uy, The University of Sydney, gave a presentation on "Advances in steel and composite structures in Australia".



Prof. Brian Uy, The University of Sydney, Australia.

Prof. K.F. Chung, The Hong Kong Polytechnic University, gave a presentation on "Effective use of high strength structural steel in building construction".



Prof. K.F. Chung, The Hong Kong Polytechnic University, Hong Kong SAR.



A general view on the delegates.



Mr. Y.K. Pang, Mr. Y.C. Leong,
Dr. Michael Yam, Prof. G.Q. Li., Ir C.K. Hon, Ir Prof. Joseph Mak, and Dr. H.C. Ho.



Dr. Michael Yam, Prof. K.F. Chung, Prof. X.H. Zhou, Ir Prof. Joseph Mak, Prof. J. Di and Dr. T.M. Chan.



Prof. J. Di, Prof. G.Q. Li, Prof. Y.J. Shi, Prof. Richard Liew, Prof. Leroy Gardner, Prof. Brian Uy Ir Prof. Joseph Mak, Ir K.T. Leung,

Ir Y.K. Cheng, Prof. X.H. Zhou, Ir C.K. Hon, Prof. K.F. Chung, Dr. Michael Yam.



Prof. Brian Uy, Prof. K.F. Chung, Ir T.K. Leung, Prof. Leroy Gardner, Prof. X.H. Zhou, Prof. Richard Liew, and Prof. Y.J. Shi



Mr. Y.K. Pang, Mr. Y.C. Leong, Prof. X.H. Zhou, Mr. K.C. Lo and Dr. T.M. Chan.



Prof. Richard Liew, Prof. X.H. Zhou, and Prof. G.Q. Li together with research personnel of the CNERC.



Dr. T.M. Chan, Dr. Michael Yam, Prof. Brian Uy, Prof. Sebastião Andrade, Prof. André Tenchini, Prof. Luis Costa Neves, Prof. Pedro Vellasco, Prof. Luciano Lima, Prof. Leroy Gardner, Prof. Reidar Bjorhovde, Prof. Richard Liew, Prof. K.F. Chung.



Dr. Ray Su, Prof. X.H. Zhou and Prof. K.F. Chung



Dr. Paul Lam and Dr. T.M. Chan



Dr. Michael Yam and Dr. Jackson Lau



Prof. Reidar Bjorhovde and Prof. X.H. Zhou



Dinner among friends!