

## Technical Seminar on Effective Use of High Strength Steel S690 in Construction 2024.05.17

The Chinese National Engineering Research Centre for Steel Construction (Hong Kong Branch) and Hong Kong Constructional Metal Structures Association jointly organized a Technical Seminar entitled “*Effective Use of High Strength Steel S690 in Construction*” on 17 May 2024 in a hotel in the TST East area. Moreover, the event was supported by Development Bureau of the Government of Hong Kong SAR, and the Construction Industry Council.

The Technical Seminar was organized as a platform for to disseminate research findings and experiences on advanced construction technology of high strength S690 steel with special emphases on practical applications. It also served as a focal point for renowned engineers to share experiences in adopting high strength S690 steel in their construction projects. It was attended by about 250 engineers, 16 Experts from the Mainland China, 8 Experts from Hong Kong, and another 6 representatives from steel fabricators.

Ir Ricky C. K. Lau, Permanent Secretary for Development (Works) of the Government of Hong Kong SAR was invited as Guest of Honour to give an Opening Speech, and Prof. Christopher Chao, Vice President (Research & Innovation) of The Hong Kong Polytechnic University was invited to give a Welcoming Speech.



A photo of honorable guests: Hon. Andrew S. L. Lam, Hon. Duncan Chiu, Hon. Dr. W. K. Lo, Prof. K.F. Chung, Ir Ricky Lau, Prof. Chris Chao, Mr. C. S. Wai, and Ms. Clarice Yu





Ir Ricky C. K. Lau



Prof. Christopher Chao



Honorable Guests and Invited Speakers of the Technical Seminar

The Opening Ceremony of the Technical Seminar was attended by a number of honorable guests including:

- Ir. Ricky C. K. Lau, Permanent Secretary for Development (Works)
- Dr. Hon W. K. Lo, Member of Legislative Council
- Hon Duncan Chiu, Member of Legislative Council
- Hon Andrew S. L. Lam, Member of Legislative Council
- Mr. C. S. Wai, Executive Director of Urban Renewal Authority
- Ms. Clarice Yu, Director of Buildings Department
- Mr. Harry Ma, Deputy Director of Civil Engineering and Development Department
- Mr. Andy C. C. Lok, Assistant Director, Water Supplies Department
- Mr. Joseph Chung, Deputy Project Manager, Highways Department
- Mr. Dennis Wan, Government Engineer/Railway Development, Highways Department
- Dr. Rocky Cheng, CEO of Hong Kong Cyberport



The event was attended by about 300 engineers and experts

## Programme

9:00 am	<b>Opening Ceremony</b> <i>Welcoming Speech</i> <i>by Prof. Christopher Chao, Vice President (Research &amp; Innovation)</i> <b>Opening Speech</b> <i>by Ir Ricky C. K. Lau, Permanent Secretary for Development (Works)</i>
9:40 am Presentation 1	<b>High strength S690 steel and their benefits in construction</b> <i>by K. F. Chung, H. C. Ho and Y. F. Hu</i>
10:10 am Presentation 2	<b>An inspiring Hong Kong landmark - Two iconic new arch bridges in Tseung Kwan O - Cross Bay Bridge and Promenade Southern Bridge - Pioneering with Grade S690QL high strength structural steel</b> <i>by Michael C. L. Leung and Robin S. H. Sham</i>
10:40 am	<i>Coffee Break</i>
11:10 am Presentation 3	<b>Circularity in construction - Recommendations for implementing a circular economy in construction: Direct reuse approach of steel structures</b> <i>by T. M. Chan</i>
11:40 am Presentation 4	<b>Effects of fabrication to structural behaviour of high strength S690 steel members, connections and joints</b> <i>by Y. F. Hu and K. F. Chung</i>
12:10 pm	<b>Lunch</b>
2:00 pm Presentation 5	<b>Pilot Use of High Strength S690 Steel in Redevelopment of Kowloon Tsai Swimming Pool Complex</b> <i>by Ken Y.C. Ho</i>
2:30 pm Presentation 6	<b>Design and construction of high strength S690 steel members and connections</b> <i>by H. C. Ho and K. F. Chung</i>
3:00 pm Presentation 7	<b>Design of high strength S690 steel piles in building structures</b> <i>by K. L. Wong and Rosaline B. K. Lau</i>
3:30 pm	<i>Coffee Break</i>
4:00 pm Presentation 8	<b>Innovative SMA-based connections for seismic resilience</b> <i>by Michael C. H. Yam</i>
4:30 pm Presentation 9	<b>Innovations in pile instrumentation technologies and investigation on pile-ground interaction effects</b> <i>by Andy Y. F. Leung</i>
5:00 pm	<b>End</b>



It should be noted that the Expert Committee of Technical Group Standard entitled “Design standard for structures using high-strength 690 to 960 MPa steel” of China Steel Construction Society was officially established at The Hong Kong Polytechnic University on 16 May 2024. All the Mainland China and the local experts and representatives of steel fabricators were invited to the Technical Seminar.



Honorable Guests and Mainland Experts



Honorable Guests and Local Experts





Honorable Guests and Representatives of Steel Fabricators

To kick off the Technical Seminar, Prof. K. F. Chung gave a presentation on “High strength S690 steel and their benefits in construction”.

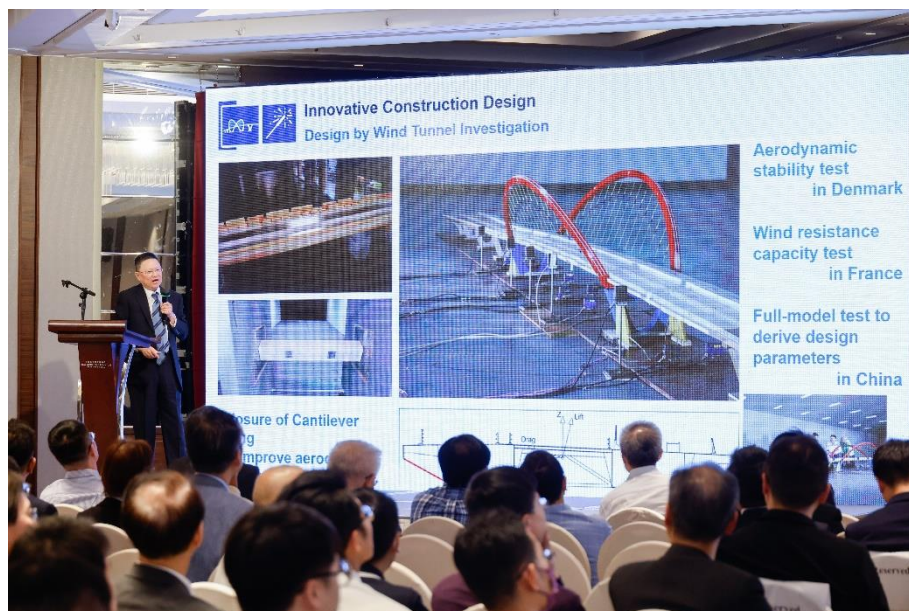


Prof. K. F. Chung, Direct of CNERC

After that, Ir Michael C. L. Leung of CEDD and Dr. Robin Sham of AECOM gave a presentation entitled “An inspiring Hong Kong landmark - Two iconic new arch bridges in Tseung Kwan O - Cross Bay Bridge and Promenade Southern Bridge - Pioneering with Grade S690QL high strength structural steel”.



Ir Michael C. L. Leung, CEDD



Dr. Robin Sham, AECOM





Honorable Guests and CNERC Office Bearers and Research Team