

Technical Seminar on the Effective use of High Strength S690 Steel in Construction and Recent Applications

(Organized by Building Division)

Date: 4 November 2024 (Monday)

Time: 06:30pm to 08:00 pm

Mode: Hybrid Mode (60 participants for Physical Participation and 500 participants for Online Participation via Zoom)

Venue: Chan Yat Mei Sophie Room, 9/F, HKIE Headquarters / Online Zoom

Enrollment Deadline: 25 October, 2024

Speaker:

Prof. K. F. Chung is an internationally renowned academic, researcher and structural engineer with established expertise in steel construction. Currently, Prof. Chung is a Professor at the Department of Civil and Environmental Engineering, and Founding Director of **Chinese National Engineering Research Centre for Steel Construction (Hong Kong Branch)** 國家鋼結構工程技術研究中心香港分中心主任 of The Hong Kong Polytechnic University. Prof. Chung works on a wide range of inter-disciplinary engineering investigations, analyses and simulations, especially on modern steel and steel-concrete composite structures. His research interests include materials and mechanical properties of high strength steel, structural behaviour, limit state analyses and performance-based design of high performance structural systems, structural fire engineering and fire protection in buildings and tunnels, and design codification. In the recent years, with strong supports from the construction industry and various government departments and agents, Prof. Chung has extended his applied research interests into effective use of high performance materials, sustainable infrastructure development, corrosion protection of structural steelwork.

Programme Highlights:

This presentation reports various research and development activities in promoting effective use of high strength S690 steel in construction carried out at The Hong Kong Polytechnic University in the recent years:

- a) an innovative construction technology using high strength S690 steel with proven structural adequacy and improved structural economy for construction;
- b) development of an effective welding technology on high strength S690 steel which ensures little or virtually no reduction in mechanical properties of 10 to 70 mm thick steel plates after welding;
- c) rationalized methods for structural design of welded sections, connections and joints of high strength S690 steel which are in line with current engineering practice in Hong Kong; and
- d) innovative applications of the high strength S690 steel in building and civil engineering projects.

The innovation enables a modern construction technology using the high strength S690 steel to achieve significant savings in construction materials and time, manpower demand, and carbon footprints. Typical applications include long span foot bridges and roof structures, highways noise closure, steel piles supporting heavily loaded structures, and supporting members in road bridges.

Registration details:

- The seminar is free of charge.
- Limited to 60 participants for Physical Participation and 500 participants for Online Participation (via Zoom)
- Prior registration is required. It will be allocated on a first-come-first-served basis with priority given to Members of HKIE Building Division. For registration, please apply online at: <https://forms.gle/vSkgKRgdLxyLgrMV9>
- Confirmation notice and Zoom link will be shared with successful registrants at least 7 days before the date of the event.
- An electronic CPD certificate will be issued to the attendees who joined the physical session or online with over 80% attendance one month after the seminar or webinar.

Enquiry details:

For enquiries, please contact Ir Jenny MAK via email hkie.bud@gmail.com