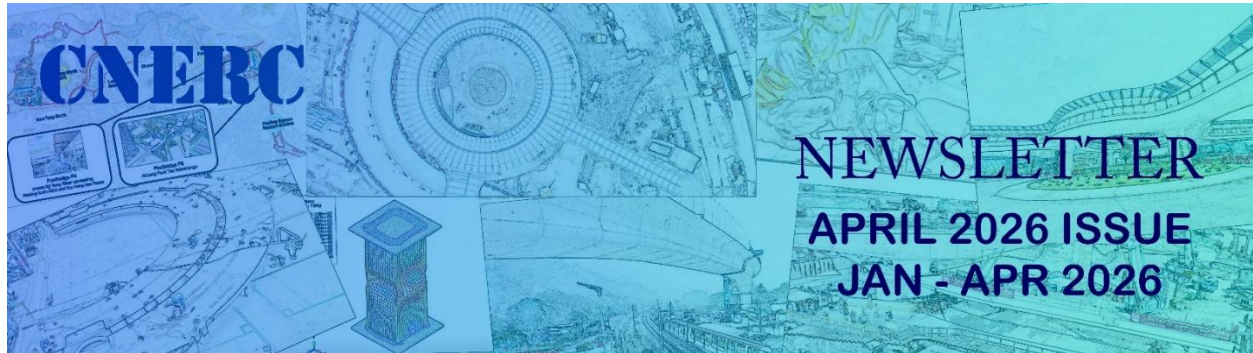


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## Approval on the Group Industrial Standard “Design Standard for 690 to 960 MPa High Strength Steel Structures”, China Steel Construction Society

The Review Meeting for approving the “*Design Standard for 690 to 960 MPa High Strength Steel Structures*” was successfully convened on 26 February 2026 through a hybrid mode. The meeting was chaired by Mr. Qingwei Li, Secretary General of CSCS, while Professor Xuhong Zhou, Member of the Chinese Academy of Engineering and Professor at Chongqing University, served as Group Leader of the Expert Review Group.



Attendees included members of the Standard Drafting Committee — Prof. Kwok-Fai Chung, Dr. Yifei Hu and Dr. Ho-Cheung Ho of The Hong Kong Polytechnic University, Prof. Yongjiu Shi and Prof. Huiyong Ban of Tsinghua University together with key representatives of the Standard Drafting Committee.

During the meeting, Prof. Chung and Dr. Hu presented a comprehensive report to the Review Expert Committee, detailing the background, development process, key technical contents, and industry feedback received throughout the Standard's formulation.



The Review Expert Group conducted a thorough examination of the Draft Standard — evaluating it *chapter by chapter* and *clause by clause* — and formulated detailed review opinions through in-depth discussion with the Standard Drafting Committee. The Review Expert Group commended the Standard Drafting Committee for conducting extensive investigations, theoretical analyses, experimental studies, and engineering validations during the development process. Drawing relevant insights from international standards in Europe and the United States, the new Standard offers significant technical guidance for the design, fabrication, and application of high-strength steel structures.

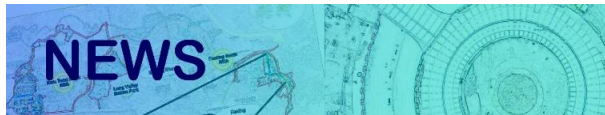
The Review Committee highly praised the Draft Standard, particularly its innovative approaches and important contributions to advancing high strength steel construction technology. It expressed strong support for the Standard's forthcoming publication and implementation, recognizing it as a major milestone in promoting the use of 690 to 960 MPa high strength steel in construction in China. Furthermore, the Standard is expected to accelerate the internationalization of Chinese structural design standards, enhance international collaboration between China and other countries in modern steel construction, and play a leading role in supporting the “*Going Global*” strategy for high quality Chinese steel products and technologies. This achievement also contributes considerably to advancing infrastructure development under the “**Belt and Road**” initiative.

Following an in-depth review and unanimous endorsement, the Review Committee officially approved the Standard with a final confirmation by the China Steel Construction Society.

It should be noted that owing to the successful and innovative applications of S690 to S960 high strength steel in a number of construction projects in Hong Kong, CNERC was invited by the China Steel Construction Society (CSCS) in September 2023 to compile a new design standard for high strength steel structures in order to promote their use in China. Drafting of the Standard was officially approved by CSCS in December 2023, and the Standard Drafting Committee was jointly led by Prof. Kwok-fai Chung of The Hong Kong Polytechnic University and Prof. Yongjiu Shi of Tsinghua University. The Standard was titled “*Design Standard for 690 to 960 MPa High Strength Steel Structures.*” A panel comprising 32 experts from Hong Kong and China, including leading

academics, and senior representatives from major design institutes and steelwork fabrication companies, was established to undertake the drafting task.

The first Expert Committee Meeting for the Draft Standard was held in Hong Kong on 16 May 2024, followed by the second meeting in Beijing on 21 to 22 May 2025. Subsequently, the Draft Standard was submitted to CSCS for industry-wide consultation in September 2025, during which 124 comments from 41 steel experts were received. After comprehensive discussions among members of the Standard Drafting Committee, the Draft Standard was revised in a comprehensive manner. The finalized version of the Draft Standard was then submitted to CSCS in October 2025, and later forwarded to the Review Committee in January 2026.



## **Adoption of high-strength steel in construction projects in Hong Kong**



Prof. K. F. Chung, Dr. H. C. Ho, and Dr. Y. F. Hu of CNERC had a fruitful meeting with Ir Ricky C. K. Lau, Permanent Secretary for Development (Works), and his team at the Hong Kong SAR Government Headquarters to discuss about adoption of high-strength steel in the upcoming construction projects in Hong Kong on 15 January 2026. It should be noted that the government has showed great support to the adoption of high-strength steel in construction.

The Development Bureau team included:

- Ir Ricky Lau, JP, Permanent Secretary for Development (Works)
- Ir Joseph Lo, Principal Assistant Secretary (Project Capability and Strategy)
- Ir Felix Poon, Chief Assistant Secretary (Works), PSGO Programme Management Section
- Ir Elton Tang, Assistant Secretary, PSGO Programme Management Section
- Ir Andy Chan, Assistant Secretary, PSGO Project Capability and Strategy Section



## CIC's InnoAward 2025 Presentation Ceremony



Prof. K. F. Chung attended CIC's InnoAward 2025 Presentation Ceremony for his research collaboration with Civil Engineering and Development Department, AECOM Asia Company Limited, DCK JV (Joint Venture of Daewoo E&C, Chun Wo C&E, Kwan Lee Holding), received the "Local Grand Prize" on the project, "Groundbreaking Application of Ultra-high Strength S960 Steel in Civil Infrastructure: Paving the Way for Hong Kong's Green Construction" being the world's first application of S960 steel to two pedestrian bridges in the northern metropolitan area to reduce the number of piles and the amount of prestressed concrete required, thereby reducing carbon emissions on 21 January 2026.

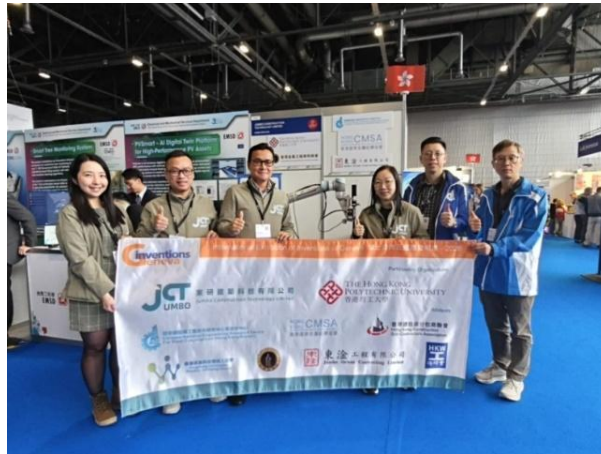
## Outstanding NEC Team Performance Award 2025 Presentation Ceremony



Prof. K. F. Chung attended the Outstanding NEC Team Performance Award 2025 Presentation Ceremony, and received the Winner Award in Excellence in Innovation and Technology Adoption together with Ir Michael H.S. Fong, Director of Civil Engineering and Development, Ir Joyce Y.Y.

Lau, Project Manager of North Development Office, and senior engineers owing to the success of a CEDD construction project using ultra-high strength S960 steel on 30 January 2026. The Award was presented by Ir Ricky C.K. Lau, Permanent Secretary (Works), Development Bureau.

## 51<sup>st</sup> International Exhibition of Inventions Geneva

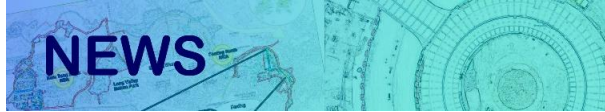


A research team led by Dr. H. C. Ho, Deputy Executive Secretary of CNERC in collaboration with Jumbo Construction Technology Limited attended the 51<sup>st</sup> International Exhibition of Inventions Geneva during 11 – 15 March 2026, and received a Silver Medal. The team presented an innovative “Automatic Robotic Welding System”, a cutting-edge solution that integrates advanced computer vision and laser scanning technologies.

## The Sixth International Civil Engineering and Architecture Conference - “Best Student Paper Award”



Mr. Eric K.F. Yuen, PhD student of CNERC received the “Best Student Paper Award” at the Sixth International Civil Engineering and Architecture Conference in Hong Kong, China, with his research work titled “Deep Learning-Based Corrosion Severity Classification of Steel Wire Ring Nets in Flexible Rockfall Barriers” on 20 March 2026.



## **HKIE Seminar on “Effective use of S690 to S960 high strength steel in construction - research, development and codification”**



Prof. K.F. Chung, Founding Director of CNERC was invited by The Hong Kong Institution of Engineers (HKIE) Structural Division to give a presentation at the HKIE Headquarters on “Effective use of S690 to S960 high strength steel in construction - research, development and codification” on 26 March 2026.



## **Opening Ceremony of the S960 Pedestrian Overpass at Lung Yeuk Tau Interchange in the Northern Metropolitan Area**

On April 18, 2026, Prof. K. F. Chung, Founding Director of CNERC, Dr. H. C. Ho, Deputy Executive Secretary, Dr. B. Li and Dr. M. F. Zhu, Postdoctoral Fellows, were invited by the Hong Kong Civil Engineering and Development Department of the HKSAR to attend the opening ceremony of the S960 pedestrian bridge at the Lung Yiu Tau Interchange in the Northern Metropolitan Area on 18 April 2026, with more than 100 people attended the event.



Prof. Chung, Ir Michael H. S. Fong, Director of Civil Engineering and Development Department, and Ir Y. Y. Joyce Lau, Director of the North Development Office posed for a group photo with representatives from the design and construction companies.

The S960 pedestrian bridge at the Lung Yeuk Tau Interchange in the Northern Metropolitan Area is the world's first bridge designed using S960 high-strength steel. Its self-weight is only 1/10 of that of traditional concrete designs, significantly reducing construction costs. By combining prefabrication with on-site robotic welding, the welding quality of the high-strength steel was effectively improved, accelerating construction speed. The S960 pedestrian bridge is a significant project, having received two important awards this year: the Hong Kong Construction Industry Council's "2025 Construction Industry Council Innovation Award – Hong Kong Project Innovation Award" and the Hong Kong Development Council's "2025 Outstanding New Project Contract Team Performance Award" – First Prize for Excellence in Innovation and Technology Application.



S960 pedestrian overpass at Lung Yeuk Tau Intersection in the Northern Metropolitan Area

The opening ceremony commenced with a speech by Ir Michael H. S. Fong, Director of Civil Engineering and Development Department, who introduced the innovative engineering applications and advantages of the S960 pedestrian bridge. Prof. Q. W. Li, Secretary General of China Steel Structure Association, offered his congratulations through a video link on the successful completion of the S960 pedestrian bridge, fully affirming the project's significance and expressing hope for future cooperation between Hong Kong and the Mainland.

At the ceremony, Prof. Chung, as the leader of the S960 steel structure building technology research and development project, together with Ir Fong and representatives of several partners, jointly signed two technical guidelines: "Technical Guidelines for the Design of Plate and Beam Structures Using Ultra-High Strength S960 Steel" and "Technical Guidelines for On-Site Welding and Construction of Structural Steel Structures Using Robots", further promoting the use of S960 high-strength steel structures in Hong Kong. Simultaneously, Prof. Chung and Ir Fong also jointly

signed the China Steel Structure Association group standard “Design Standard for High-Strength Steel Structures from 690 to 960 MPa”, edited by CNERC, to commemorate this important moment.



Prof. Chung, Ir Fong, and representatives from the design and construction units jointly signed the agreement on “Technical Guidelines for the Design of Plate and Girder Structures Using Ultra-High Strength S960 Steel”.

The lighting ceremony for the S960 pedestrian bridge was jointly presided over by Ir Fong, Prof. Chung, and several government officials and representatives, witnessing the opening of the world’s first pedestrian bridge using S960 high-strength steel to the public.



Prof. Chung, Ir Fong, and Government officials and representatives jointly held a lighting ceremony for the S960 pedestrian overpass.



Group photo at the opening ceremony of the S960 pedestrian overpass at the Lung Yeuk Tau Intersection in the Northern Metropolitan Area



S960 pedestrian overpass lighting design



## **HKIE “Engineering Legacy: 50 Years of Excellence” Exhibition in Beijing**

From 19 to 23 April 2026, at the invitation of the Hong Kong Institution of Engineers (HKIE), Prof. K. F. Chung, Founding Director of CNERC, participated in the HKIE 50th Anniversary Commemoration – “Engineering Legacy: 50 Years of Excellence” Exhibition in Beijing. He was the keynote speaker at the exhibition’s Opening Ceremony and participated in various activities of the “High-level Talents Delegation”, including visits and exchanges with the Ministry of Commerce, the Ministry of Housing and Urban-Rural Development, and the Chinese Academy of Engineering. He exchanged views with many government officials, academicians, and researchers, introducing the research results and engineering applications of 690 to 960 MPa high-strength steel structures.

On the afternoon of 20 April 2026, Prof. Chung attended the launch ceremony of the “Engineering Legacy: 50 Years of Excellence” held at the National Science and Technology Communication Centre in Beijing and delivered a keynote speech. Attendees at the launch ceremony included Ms. Alice K. T. Chow, President of the HKIE; Ms. Bernadette H. H. Linn, Secretary for Development of the HKSAR Government; Mr. Ricky C. K. Lau, Permanent Secretary for Development (Works); Luo Hui, Vice Chairman and Co-Secretary-General of the China Federation of Engineers; and a number of Vice Presidents, Division Chairmen, government officials, senior engineers, and representatives from Mainland Governments and partner organizations.



A group photo of Prof. Chung with President Alice Chow, Ms. Bernadette Linn, Mr. Ricky Lau, and Chairman Luo Hui.

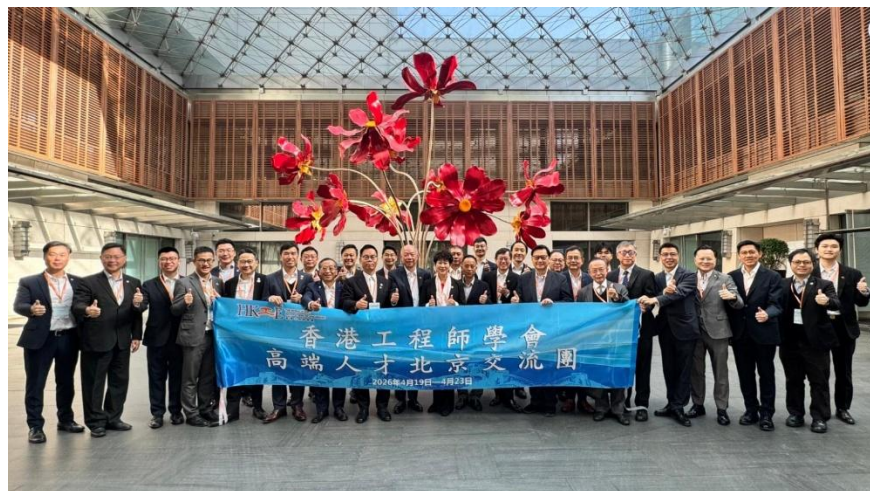




Presentation title: “Research, Development, and Engineering Application of 690 & 960 MPa High-Strength Steel Structures in Hong Kong and Macao Special Administrative Regions”.



Launch Ceremony of “Engineering Legacy: 50 Years of Excellence” Exhibition held at the National Science and Technology Communication Centre in Beijing.



Group photo of HKIE Delegation.

The HKIE “High-Level Delegation for Exchange” in Beijing visited the Ministry of Commerce in the morning of 20 April 2026, and the Ministry of Housing and Urban-Rural Development in the morning of 21 April. They exchanged views with many government officials and researchers, and introduced the engineering applications and development of S690 to S960 high-strength steel construction in Hong Kong in recent years.



The delegation visited the Ministry of Commerce and took a group photo with the officials.



The delegation visited the Ministry of Housing and Urban-Rural Development and took a group photo with the officials.



Prof. Chung introduced the development of high strength steel construction to the Ministry of Housing and Urban-Rural Development.

The HKIE delegation visited the Chinese Academy of Engineering in the afternoon of 22 April 2026, and was received by Academician Chen Jianfeng, Secretary-General of the Academy. Prof. Chung, Academician Yue Qingrui, and Academician Li Guoqiang exchanged views on promoting the application of Chinese 690 to 960 MPa high strength steel in construction in China and overseas.



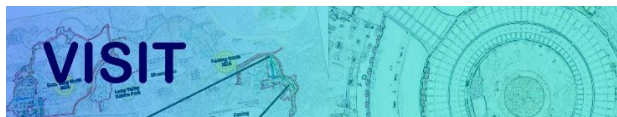
The delegation visited the Chinese Academy of Engineering and took a group photo with the leaders and the academicians.



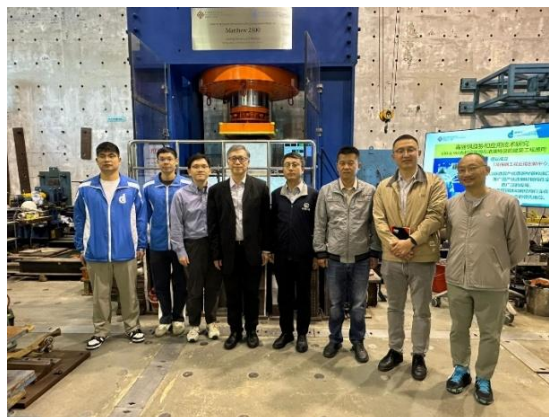
Prof. Chung introduced high strength steel construction technology to Chinese Academy of Engineering.



President Chow presented a commemorative plaque to Prof. Chung.



Delegates from Civil Division of The Hong Kong Institution of Engineers visited CNERC for technical exchange on 28 February 2026.



Mr. Jian Biao HE, China Railway International Group and delegates of China Railway Engineering Corporation visited CNERC for discussion on technical collaboration on 12 March 2026.



A delegation led by Mr. Jiangang Chen, Deputy Director of the Science and Technology Innovation Bureau of the State-owned Assets Supervision and Administration Commission of the State Council visited CNERC on 15 April 2026.

## UPCOMING EVENTS

### Technical Seminar on Effective Use of S690 to S960 High Strength Steel in Construction - Two Large Scale Footbridges using Chinese High Quality S960 Steel

Date: 22 May 2026 (Friday)

Time: 9:00 am to 5:00 pm (Registration begins at 8:40 am)

Venue: Room Z209, Block Z, PolyU

For event details and registration: [https://www.polyu.edu.hk/cnercsteel/-/media/department/cnercsteel/events/2026/upcoming\\_ts2026.pdf?rev=b62bb8999fb641b69e62237e84c6eae3&hash=57EB833212475BBD1E7488FF61C5D388](https://www.polyu.edu.hk/cnercsteel/-/media/department/cnercsteel/events/2026/upcoming_ts2026.pdf?rev=b62bb8999fb641b69e62237e84c6eae3&hash=57EB833212475BBD1E7488FF61C5D388)

Jointly organized by:

Hong Kong Constructional Metal Structures Association, and  
Chinese National Engineering Research Centre for Steel Construction (Hong Kong Branch),  
The Hong Kong Polytechnic University.

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