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Technical Seminar on Efficient Design and Application of High Strength S690 Steel 2023.02.07

On 7 February 2023, Ir Prof. K. F. Chung, Director of CNERC, Ir Dr. H. C. Ho, Deputy Executive Secretary of the CNERC, and Dr. Y. F. Hu, Research Assistant Professor were invited as principal speakers in the Technical Seminar entitled “*Efficient Design and Application of High Strength S690 Steel*”. Over a period of three hours, they shared their experience on structural advantages, design development and codification as well as applications of high strength S690 steel at the Headquarter of Housing Authority in Ho Man Tin.

The Technical Seminar was hosted by Ir. P. Y. Wong, Structural Engineer of Housing Department. About 70 engineers and architects attended the seminar, and many of them participated actively with questions and discussions on various technical areas.



Contents:

- a) Key research findings on S690 steel
- b) Structural behaviour of S690 steel members
- c) Design development and codification of S690 steel
- d) Potential applications of S690 steel in various types of structural systems
- e) Practical issues on design and construction associated with S690 steel

Presentations:



“Effective use of high strength S690 steel in construction”

- Material properties, welding and microstructural changes, mechanical properties and structural behaviour, cross-section and member resistances, design methods

by Prof. K. F. Chung



“Design and construction of high strength S690 steel in civil engineering projects”

- Design development for CoP Steel, project specifications, comparison between S355 and S690 steel, welding procedures, design examples, and practical issues

by Dr. H. C. Ho



“High strength S690 tubular structures and joints”

- Cold-formed tubular sections, hot rolled vs cold-formed sections, mechanical properties, structural behaviour, welded tubular sections, design examples, integrated numerical approach

by Dr. Y. F. Hu