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High-level Visit of Shougang Group

2018.04.24-25

A team of delegates from Shougang Group visited The Hong Kong Polytechnic University on 24 April 2018. The following key members of the delegation team visited the CNERC:

- Dr. Tian Zhihong, Assistant to Director of Shougang Research Institute of Technology
- Dr. Liu Kun, Chief Engineer of Shougang Research Institute of Technology
- Mr. Qi Weizhong, Manager of Assembled Construction Division, Beijing Shougang Construction Group Company Limited
- Mr. Yuan Nixi, Professional Designer of Beijing Shougang International Engineering Technology Company Limited
- Ms. Sun Wei, Assistant Director of the Hong Kong and Macao Office of Beijing Leading Group for Talented Professionals Overseas Human Resources Department for Beijing Holdings Limited
- Ms. Sun Wenwen, Assistant Director of the Hong Kong and Macao Office of Beijing Leading Group for Talented Professionals Overseas Human Resources Department for Beijing Holdings Limited

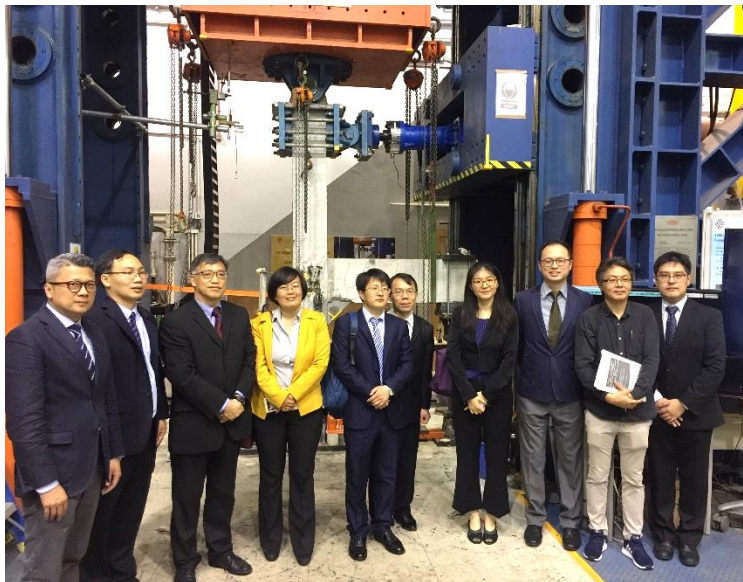


Group photo of the Shougang delegation team and the PolyU representatives.

Prof. K F Chung, Director of CNERC, introduced its missions, work themes, and major research projects.



The Shougang delegates visited the Welding Laboratory of the CNERC.



The Shougang delegates visited the Structural Engineering Research Laboratory of the PolyU.

2018.4.25 SRIT / CNERC Collaboration Conference - Joint Laboratory in High-Strength Steel Welding Technology

In line with the strategic policies of the Government of PRC on Green Steel Construction, Shougang Research Institute of Technology (SRIT) and CNERC established a collaboration plan to promote steel construction, to facilitate development of product specifications and design standards, and to promote advances in structural steel engineering.

The collaboration takes the advantages of both SRIT and CNERC to form a partnership by leverage of both resources, capabilities, and expertise for mutual benefits. Thus, it is proposed to establish a **Joint Laboratory in High-Strength Steel and Welding Technology** in Hong Kong. The **Joint Laboratory** aims to promote technology advancement in structural applications of high strength steel materials. Those advanced steel materials should not only meet the basic mechanical requirements, but also achieve the requirements of green construction. Hence, a meeting was held on 25th April 2018 with details as follows:

Attendees:

Shougang Group Delegates	CNERC for Steel Construction (HKB)
Dr. Zhihong Tian	Prof. K F Chung
Dr. Kun Liu	Dr. H C Ho
Mr. Weizhong Qi	Dr. Leo X Liu
Mr. Nixi Yuan	Mr. Eric H Jiang

Collaborative projects:

- i Application of “Fire and Weather Resistant Steel Deckings” in composite construction
“Fire and Weather Resistant Steel” is one of the newly developed steel products by Shougang Group. It can be applied to cold formed steel deckings for composite construction with its improved fire resistance and weather resistance. As such, the load carrying capacities of composite structures under fire limit state design can be improved with prolonged service life.

CNERC will collaborate with other parties to carry out structural performance tests, to draft design specifications and to promote use of these steel products in construction projects.
- ii Structural application of high strength Q690 welded steel sections
The strength reduction of “Heat Affected Zone” in high strength steel weld section has been the major hindrance of their structural applications. Hence, it is important to solve the technical problems by the following means:
 - Establishment of mechanical requirements of structural design for high strength steel structures;
 - Advancement in welding technology based on the principles of engineering metallurgy;
 - Establishment of standardized effective welding procedures;

- Verification of various mechanical properties by standard tensile tests and cyclic tests;
 - Establishment of design rules for structural engineering design.
- iii Promotion of steel products of Shougang Group in overseas construction projects
- The CNERC will publish technical documents for Shougang to promote various steel products in overseas construction projects, including “Technical Guide on Selection of Equivalent Steel Materials to Structural Eurocodes” and “Design Guide on Effective Use of High Strength Steel Materials”.



Visit of Shougang Research Institute of Technology – Delegates of Shougang Group and CNERC (HKB)

From left to right: Dr. Leo Liu, Dr. Kun Liu, Prof. K F Chung, Dr. Zhihong Tian, Dr. H C Ho
and Mr. Eric H Jiang