

Visit to Beijing, China 2018.01.15 - 17

Through the liaison of the President's Office of The Hong Kong Polytechnic University and the Headquarter of The Institution of Structural Engineers, U.K., the CNERC and the Hong Kong Constructional Metal Structures Association (HKCMSA) paid an official visit to Beijing during 15 – 17 January 2018, and carried out academic and industrial exchanges with various industrial counterparts, institutions and research institutes. The delegation team consisted of:

- Ir Prof. K.F. Chung Director of CNERC and President of HKCMSA
- Mr. Y.K. Pang, Secretary General of HKCMSA

During the 3-day visit, the delegation team visited the following leaders and technical personnel:

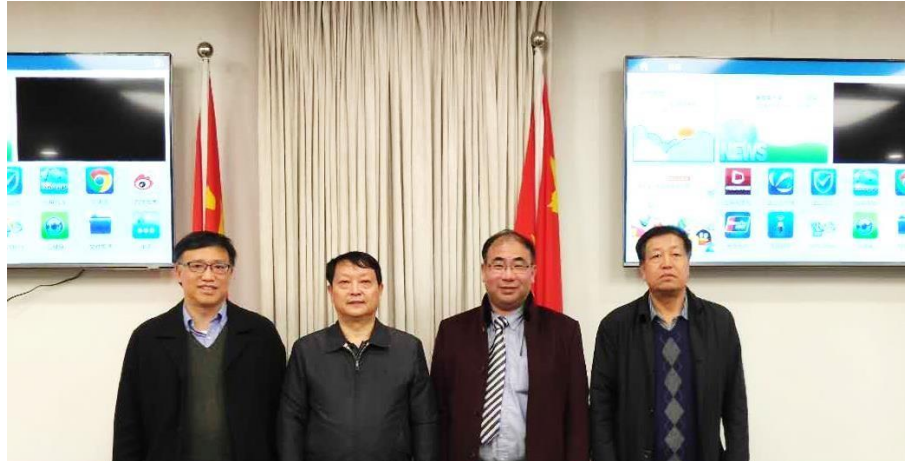
1. W. Huang, Vice-Minister; Z. W. Guo, Director; and C. J. Li, Secretary of China Ministry of Science and Technology
2. Q.R. Yue, Academician, President of China Steel Construction Society, President of CNERC – Beijing, and President of Chinese Metallurgical Construction Research Institute
3. Beijing Shougang Group Chairman Zhang Gongyan, Shougang Institute of Technology Zhu Guosen, the first vice president, Assistant Tian Zhihong
4. B. Yao, Former President; B.W. Dang, Deputy Secretary General; M. Liu, and C. Dong of China Construction Metal Structure Association
5. Y. Liu, Secretary General; M.X. He and Y.Q. Yu, Experts; and C. H. Dai, Director of China Steel Construction Society
6. Professor Y. J. Shi, Tsinghua University
7. Y. H. Wu, Dean of Chinese Metallurgical Construction Research Institute

The main itinerary of this CNERC trip was to visit the Ministry of Science and Technology (MOST), Shougang Institute of Technology, China Metallurgical Construction Research Institute, China Construction Metal Structure Association, etc., and to meet relevant leaders, experts and technical personnel to have technical exchange, as well as a better understanding of the development of the industry.

During the visit, Prof. K. F. Chung introduced the mission and vision, recent developments and major research projects of the CNERC. In addition, Prof. K. F. Chung highlighted the latest research results of the CNERC and the latest development in the application of Chinese high-quality steel structures in overseas projects. He discussed with the leaders and experts on the research development and application of new high-strength steel and its welding technology and the latest fire resistance steel products, and also exchanged views with all the leaders and experts on research trends and application prospects of steel and steel structure industries, as well as to enhance communication and collaboration between the CNERC and the steel and steel structure industries in Mainland China.

2018.01.15
Visit MOST

On the afternoon of 15 January 2018, Prof. K. F. Chung and Mr. Y. K. Pang met with the Ministry of Science and Technology (MOST) and reported to W. Huang, Vice-Minister; Z. W. Guo, Director and C. J. Li, Secretary of MOST on the latest research and achievements of the CNERC.



From left: K. F. Chung, W. Huang, Y. K. Pang, Z. W. Guo

Prof. K. F. Chung reported on the establishment, major work, recent development and main research projects of the CNERC, including:

1. Equivalent design technology for steel materials used in construction to replace steel materials from Europe, Japan, USA, Australia and Russia with Chinese high-quality steel materials, and promote the application of Chinese steel materials in overseas projects;
2. Expand equivalent technical design standards for steel application in construction to marine engineering;
3. Structural performance and welded structural performance of high-strength steel Q690 and Q960 in steel construction;
4. Research on application of high-performance fire resistance and refractory steel construction engineering (characteristics of indicators, test comparison, welding process).

MOST supports and highly recognizes the work of CNERC in line with the national development direction of the 13th Five-Year Plan. MOST will line up with Ministry of Housing and Construction to carry out specific research work with CNERC, and jointly promote Chinese steel structure industry in overseas together with the construction industry forces in Hong Kong, which provides a favorable foundation for the development of "One Belt and One Road" in overseas development as emphasized by China.

It is worth mentioning that Vice-Minister Huang was elected as Honorary Academician by the UK's Institution of Structural Engineers (IStructE) in 2008, while Prof. K. F. Chung is currently the Vice-President of the IStructE.

The IStructE was established in 1908, and chartered by Royal Charter as a professional body in 1934. IStructE is committed to developing structural engineering research and applications, and ranked first in the world among same scale of professional organizations, with more than

28,000 members, and active in 105 countries in the world. The IStructE is an internationally recognized authority on issues such as infrastructure, structural engineering and sustainable development.

The Chinese Committee of the IStructE was established in 2002, and the current President of IStructE China is Prof. J. M. Ding of Tongji Architectural Design (Group) Co., Ltd. The IStructE China has a total of about 450 members, and located in Beijing, Shanghai and Shenzhen. In the past decade, IStructE has awarded three Chinese distinguished individuals as Honorary Academicians:

- 1) W. Huang, Vice-Minister of Ministry of Construction, was awarded by Sarah Buck, President of IStructE in 2008,
- 2) K. D. Xu, Dean of the Chinese Academy of Engineering, was awarded by Dr. Graham Owen, President of IStructE in 2009, and
- 3) Prof. J. N. Chen, President of Tsinghua University, was awarded by Y. K. Cheng, President of IStructE in 2013.

Professional exchange between Chinese researchers and engineers with the IStructE will help China's "internationalization" and export "soft power" to enhance its international image.

2018.01.16

Visit China Construction Metal Structure Association and Beijing Shougang Group

On 16 January 2018, Prof. K. F. Chung and Mr. Y. K. Pang visited B.W. Dang, Deputy Secretary General; M. Liu, and C. Dong of China Construction Metal Structure Association in the morning, and exchanged views on latest development of steel structure industry.

In the afternoon, Prof. K. F. Chung and Mr. Y. K. Pang visited Shougang Group, and attended an exchange and discussion hosted by G. S. Zhu, the first Vice-President of Shougang Institute of Technology. Prof. K. F. Chung had introduced the establishment background, major work, recent development and main research projects of the CNERC. The attendees included leaders and key technical personnel from the Shougang Research Institute of Technology, Shougang International Engineering Company, Shoujian Company and Shoujian Investment Company.



Group photo of K. F. Chung, Y. K. Pang, G. S. Zhu and Z. H. Tian



The CNERC held a panel discussion with Shougang Technology Research Institute on "Steel Technology and Steel Structure Engineering" as hosted by G. S. Zhu, first Vice-President of Shougang Institute of Technology

- a) Prof. K. F. Chung introduced the work development of CNERC
 1. Equivalent design technology of Chinese steel materials;
 2. Ductile behavior of high performance steel Q690 under unidirectional and cyclic loading; and
 3. High-performance Q690 welded H-type structural components.
- b) Mr. Z. H. Tian introduced the development of steel structure industry in Shougang, including the latest steel products and business development of Shougang Institute of Technology, Shougang International Engineering Company, Shoujian Company and Shoujian Investment Company.

After that, the CNERC delegates visited the pilot plant of Shougang Institute of Technology and laid the foundation for technical collaboration between the two parties.

1. Hot rolling test machine
2. Cold-rolled simulator
3. Back simulator
4. Galvanizing simulator

The CNERC was interested in the following collaboration with the Shougang Institute of Technology:

1. Jointly set up a laboratory on high-strength steel engineering, and develop welding skills and techniques (Q690, Q960 and fire-resistant weathering steel),
2. Set up a database for steel standards, and promote equivalent technical designs of steel in overseas,
3. Conduct research on application of steel structure housing, prefabricated construction and metal construction maintenance system, and

4. Strengthen Shougang's steel structure applications in overseas construction design standards (materials, structural design, construction, assembly, welding, certification).

2018.01.17

Visit China and Japan Steel Structure Application and Development Conference cum AOTS China Disaster Prevention Technology of Beijing Steel Popularization Project Seminar

On 17 January 2018, Prof. K. F. Chung and Mr. Y. K. Pang attended the Sino-Japanese steel structure technical collaboration meeting held by China Metallurgical Construction Research Institute Co., Ltd. The keynote speaker of the conference was Academician Q. R. Yue, and his report entitled "The Current Status and Challenges Facing by the Chinese Steel Structure Industry." Masahiro Nagata, Japanese expert, Executive Director and Director of Japan Steel Structure Association, gave a presentation entitled "Measures taken by Japan to promote steel structures for earthquake disaster and subsequent recovery and rejuvenation."



Prof. Q. R. Yue, Keynote speaker of the Conference



From left: Y. K. Pang, Y. H. Wu, K. F. Chung, Y. J. Shi

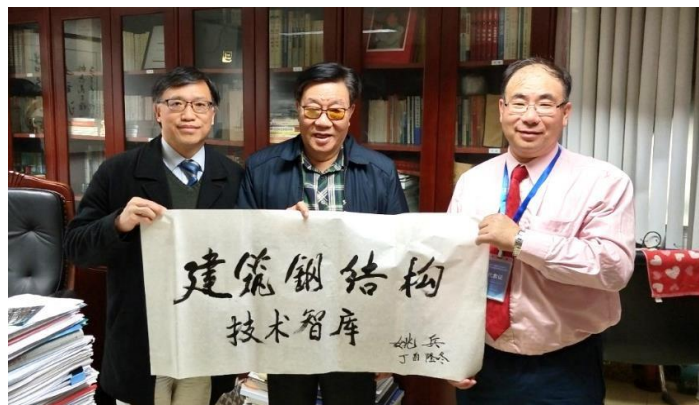


From left: Y. H. Wu, M. X. He, Y. Liu, Masahiro Nagata, Yukinori Kudo, K. F. Chung, Y. K. Pang, and Y. Q. Yu

2018.01.17

Visit the Ministry of Housing and Urban-Rural Development (MOHURD)

On 17 January 2018, Prof. K. F. Chung reported to B. Yao, Vice-President of the MOHURD, President of the Discipline Inspection Commission and Former President of China Construction Metal Structure Association about the work of the CNERC. President Yao immediately given his calligraphy of "Think Tank of Steel Structure Engineering" to the CNERC as an appreciation of its work.



President Yao's calligraphy as an appreciation of the CNERC's work



President Yao presented a vase to Prof. K. F. Chung