

Official Visit to Beijing, China

2017.07.31 - 08.01

CNERC and the Hong Kong Constructional Metal Structures Association (HKCMSA) paid an official visit to Beijing, and conducted technical and academic communications with numerous Industry Associations, Universities, and Research Institutions. The delegation team consisted of:

- *Ir Prof. K.F. Chung* Director of CNERC
- *Mr. Y.K. Pang* General Secretary of HKCMSA
- *Dr. H.C. Ho* Deputy Secretary General of CNERC
- *Dr. T.M. Chan* Deputy Secretary General of CNERC
- *Ms. W. Feng* Research Assistant of CNERC

During the two-day visit, the CNERC delegation paid a visit to the leaders and experts of the following organizations:

- China Iron & Steel Association (CISA)
Prof. J.D. Chi, Prof. S.Q. Jiang, and Ms. M. Sun
- China Metallurgical Information & Standardization Institute (CMISI)
Prof. L.M. Wang
- China Construction Industry Association (CCIA)
Prof. W. Jing and Ms. S.Q. Zhai
- China Steel Construction Society (CSCS)
Mr. C.H. Dai
- Central Research Institute of Building and Construction Co., Ltd (MCC)
Prof. Y.H. Wu
- China Construction Metal Structure Association (CCMSA)
Prof. B.W. Dang, Mr. M. Liu, and Ms. C. Dong
- Tsinghua University
Prof. Y.J. Shi and Dr. H.Y. Ban
- University of Science and Technology Beijing
Prof. J.T. Han

The main itinerary of this trip is as follows:

1. To discuss the compilation issues in the book “Technical Guide of Chinese steel application in Steel Structure” with the experts of China Iron & Steel Association;
2. To conduct academic exchanges with the professors of Tsinghua University and University of Science and Technology Beijing; and
3. To visit a number of associations and organizations of China Construction Industry and Steel Structure, to communicate with relevant leaders and experts on technical matters, as well as to get information about the current trends of Chinese steel industry.

The two-day trip was successfully held, and achieved a number of collaborative proposals. During the activity, the CNERC delegates elaborated the mission and objectives of the establishment of CNERC, as well as the development process and main research areas. In addition, Prof. K.F. Chung highlighted the latest research outcomes of CNERC, including the technical guide books. After consulting the research progress and application of new high strength steel, and seeing a variety of new steel products, the CNERC delegates and steel experts from these organizations exchanged their views and suggestions on research trends and application prospects of steel and steel structure industry. Through the visit, it promoted the communication and collaboration between the CNERC and the steel and construction industry in mainland China.

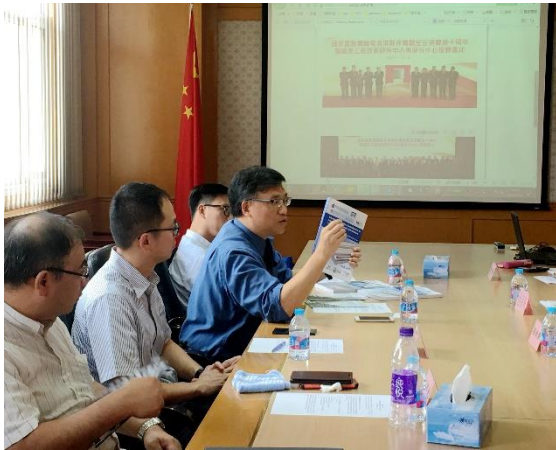
Meeting with China Iron & Steel Association (CISA)

On 31 July 2017, the CNERC delegates visited China Iron & Steel Association in Beijing, and had a technical communication meeting with Prof. J.D. Chi, the Vice Chairman of CISA, Prof. S.Q. Jiang, the Vice Department Director of CISA, Ms. M. Sun, the Vice Division Director of CISA, Prof. L.M. Wang, the Vice President of CMISI, and Ms. Y. Luan, the Chief Engineer of CMISI. In the meeting, the compilation issues were discussed for the book “Technical Guide of Chinese steel application in Steel Structure”.

Prof. Chi strongly agreed with the work direction of CNERC, which aimed to support the development strategy of "One-Belt-One-Road", as well as to promote Chinese construction steel materials to overseas markets. He also introduced the new situation in reduction of production capacity and recent development of the steel industry in mainland China. CISA expressed their strong support for the compilation work of this technical guide book, while inviting two experts from CMISI to discuss the content in details.



From left: Mr. Y.K. Pang, Dr. T.M. Chan, Prof. K.F. Chung, Dr. H.C. Ho
From right: Ms. Y. Luan, Prof. L.M. Wang, Prof. S.Q. Jiang, Prof. J.D. Chi, and Ms. M. Sun.



Prof. K.F. Chung (3rd from left) introduced the book “Selection of Equivalent Steel Materials to European Steel Materials Specifications”.



Prof. J.D. Chi (2nd from left), Prof. S.Q. Jiang (3rd from left), Prof. L.M. Wang (1st from right) browsed the two technical guide books published by CNERC.

Technical communication meeting with CISA and CMISI

With the agreement of the three parties, the technical guide would be an extensive reading of popular science. In the book, it introduces current production status and the common specifications of construction steel, and provides technical information of construction steel for drawing up project contracts and product requirements of domestic and international construction projects. It presents advices for equivalent selection of Chinese constructional steel and other countries, thereby promoting the high quality domestic steel products to the international market.



From left: Dr. T.M. Chan, Dr. H.C. Ho, Prof. S.Q. Jiang, Prof. K.F. Chung, Prof. J.D. Chi, Prof. L.M. Wang, Mr. Y.K. Pang, and Ms. Y. Luan.



From left: Dr. H.C. Ho, Mr. Y.K. Pang, Dr. T.M. Chan, Prof. L.M. Wang, Prof. K.F. Chung, Ms. Y. Luan, and Ms. M. Sun.

Group photos with the representatives of CISA and CMISI

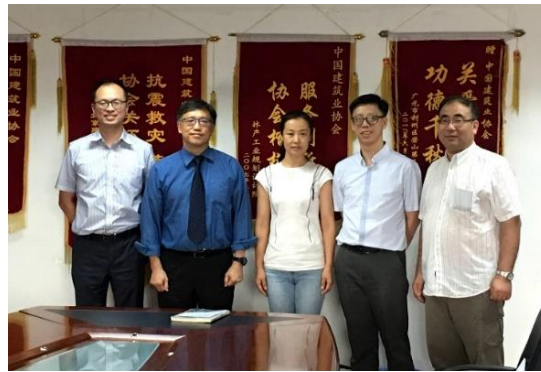
The CNERC delegates met various leaders and directors of China Construction Industry Association, China Steel Construction Society, and Central Research Institute of Building and Construction Co., Ltd.

Visit China Construction Industry Association (CCIA)

The CNERC delegates had a long discussion with Prof. W. Jing, Deputy Secretary General of CCIA, and Ms. S.Q. Zhai of CCIA, about the development of the construction industry in mainland China, Hong Kong, and Macau. Prof. K.F. Chung introduced the mission and objectives of the establishment of CNERC, as well as its positioning in the development strategy of "One-Belt-One-Road". Prof. W. Jing completely supported and appreciated the research achievements and the development direction of CNERC. He also invited Prof. K.F. Chung to give a speech at the "One-Belt-One-Road" seminar in December, to introduce foreign steel structure design codes and their differences. It would help the Chinese construction companies to learn from Hong Kong's experiences while going abroad, such as laws, regulations, professional standards, engineering project examples, etc.



From left: Mr. Y.K. Pang, Prof. W. Jing, Prof. K.F. Chung, Dr. H.C. Ho, Dr. T.M. Chan.

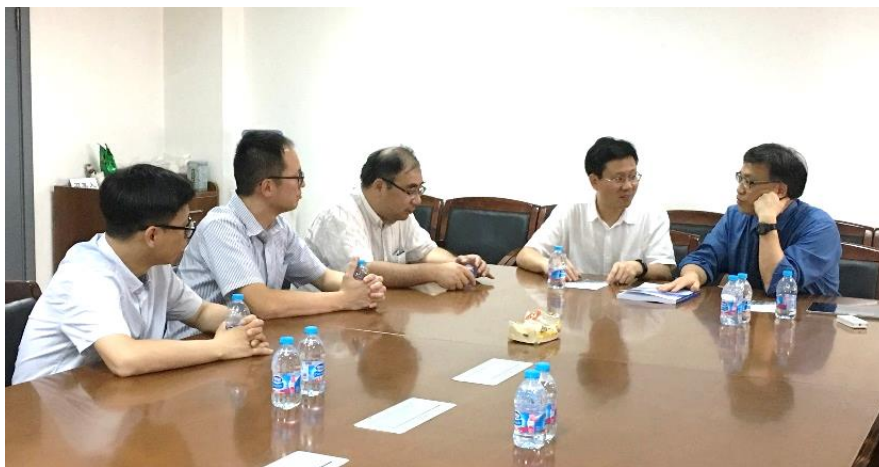


From left: Dr. T.M. Chan, Prof. K.F. Chung, Ms. S.Q. Zhai, Dr. H.C. Ho, Mr. Y.K. Pang.

CNERC visited China Construction Industry Association

Visit of China Steel Construction Society (CSCS) and Central Research Institute of Building and Construction Co., Ltd (MCC)

The CNERC delegates firstly met with Mr. C.H. Dai, Director of CSCS, to have a short conversation about the development of Chinese steel structure technologies. Then, the CNERC delegates had a meeting with Prof. Y.H. Wu, Dean of the Design Institute of MCC. Prof. K.F. Chung introduced the recent work outcomes and the new technical guides to be published, which included the second edition of "Selection of Equivalent Steel Materials to European Steel Materials Specifications", and the book "Design and Construction of High-rise Residential Buildings in Hong Kong Using Prefabrication and Mechanization" written by Prof. Y.W. Mak, Chief Engineer of CNERC. Mr. Dai and Prof. Wu fully affirmed CNERC's work and put forward some constructive suggestions on the development of CNERC.



From left: Dr. H.C. Ho, Dr. T.M. Chan, Mr. Y.K. Pang, Prof. Y.H. Wu, Prof. K.F. Chung.



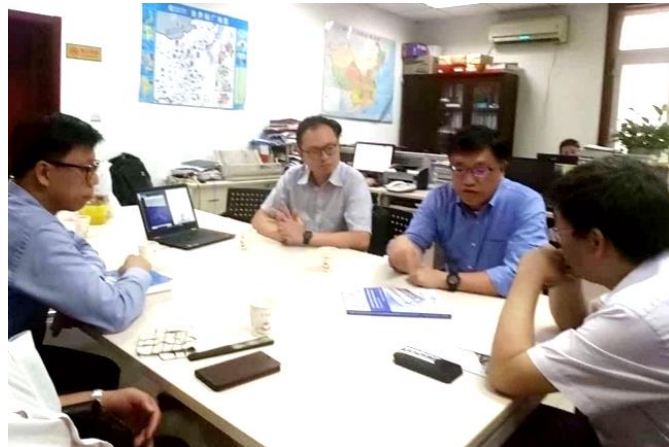
From left: Dr. T.M. Chan, Prof. K.F. Chung, Prof. Y.H. Wu, Mr. Y.K. Pang, Dr. H.C. Ho.

CNERC visited China Steel Construction Society and Central Research Institute of Building and Construction Co., Ltd

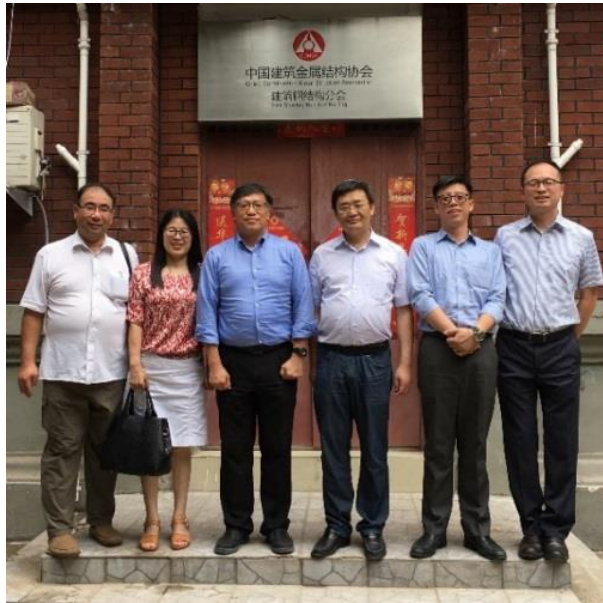
Visit of China Construction Metal Structure Association (CCMSA)

In the morning of 1 August 2017, the CNERC delegation team visited the CCMSA. Prof. K.F. Chung briefed the recent work of CNERC and the new technical guides to be published. While introducing the contents of the 2nd edition of “Selection of Equivalent Steel Materials to European Steel Materials Specifications”, Prof. Chung especially emphasized the new part of Russian steel standards and presented this book to Prof. B.W. Dang, Deputy Secretary General of CCMSA. Besides, Prof. Chung also showed Prof. Dang the latest outcome, namely the book “Design and Construction of High-rise Residential Buildings in Hong Kong Using Prefabrication and Mechanization”, in which it summarized the practical achievements of prefabrication technologies applied by Hong Kong Housing Authority in the past 30 years. The author, Prof. Y.W. Mak, had managed the entire design and construction process of the prefabrication buildings for 20 years, while he worked in the HK Housing Authority. Prof. B.W. Dang highly evaluated CNERC’s achievements and actively supported the publication work of technical guides by CNERC.

Prof. Dang also talked about the design rules and the management requirements of the seismic and fire resistance of steel structures in mainland China, as well as the current revised progress of Code for Design of Steel Structure. In the end, Prof. Dang invited Prof. Chung to participate in the forum on Application and Development of Steel Structure and High Strength Steel.



Prof. K.F. Chung introduced to Prof. B.W. Dang about the 2nd edition of "Selection of Equivalent Steel Materials to European Steel Materials Specifications".



From left: Mr. Y.K. Pang, Ms. C. Dong, Prof. K.F. Chung, Prof. B.W. Dang, Dr. H.C. Ho, and Dr. T.M. Chan.

CNERC visited China Construction Metal Structure Association

Visit of University of Science and Technology Beijing

In the afternoon of 1 August 2017, the CNERC delegation team visited the School of Materials Science and Engineering, University of Science and Technology Beijing, and conducted academic exchanges with Prof. J.T. Han. Prof. Han enthusiastically showed his recent research findings to the CNERC delegates. One of them is the high-strength-steel square tube with sharp angles, having the strengthened plasticity after secondary hot-rolled forming. The other is the combined cold-formed thin-walled steel pipe, adopting a new connection type. By test specimens and 3D printing models, Prof. Han explained the characteristics, advantages and treatment process of the sharp-angle square tube. Prof. K.F. Chung and Prof. Han also compared notes on the application prospects of this new-shape square tube in the field of building structures.

During the meeting, Dr. T.M. Chan briefly introduced the plan of the book “Tube Structure Design Guide”, and asked for Prof. Han’s guidance and recommendation of commonly used steel specifications in China. In the end, Prof. Chung and Prof. Han discussed details of further work plans. A primary collaborative agreement was established on the applied research of the new-shape square steel tube in building structures.



The CNERC representatives conducted academic exchanges with Prof. J.T. Han.



From left: Ms. W. Feng, Dr. T.M. Chan, Dr. H.C. Ho, Prof. J.T. Han, Prof. K.F. Chung, Mr. Y.K. Pang.

Academic meeting between the CNERC and Prof J.T. Han of University of Science and Technology Beijing