



地址: 香港理工大学第八期

电话: (852) 3400 8441

电子邮箱: <u>cnerc.steel@polyu.edu.hk</u> 网站: <u>ht</u>

网站: <u>https://www.polyu.edu.hk/cnerc-steel/</u>

## Joint Technical Seminar on Recent Research on Composite Structures in Chongqing University 2025.05.25

On 25 May 2025, Prof. K. F. Chung, Director of CNERC, attended Joint Technical Seminar on Recent Research on Composite Structures, and made a presentation on research work on composite columns at the Seminar. The Seminar was organized by Dr. X. D. Wang of Chongqing University. Both Ms. Y. Ding and Mr. C. C. Tong, CNERC PhD. candidates, presented their research work on high strength shear connections at the Joint Technical Seminar. Dr. P. F. Men from Chongqing Jiaotong University also attended the Seminar. The Joint Seminar was organized as a platform for discussions and exchanges on research work on composite structures in bridge construction between Prof. Chung and Dr. Wang, and also among their research teams.

During the Seminar, Prof. Chung gave a technical presentation titled "*Investigations into confinement of composite columns*", and highlighted experimental and numerical investigations into confinement effects onto high strength concrete provided by high strength steel tubular sections. Ms Y. Ding introduced both experimental and numerical investigations into a novel high-strength bolted shear connection with large shear resistances, stiffnesses, and good ductility which was proposed for simple on-site assembly of composite beams. Mr. C.C. Tong introduced single-sided push-out tests and pull-out tests to examine structural behaviour of high strength bolted shear connections, and reported on key findings of a number of test series.

Afterwards, Dr. Wang gave a technical presentation titled "Seismic behaviour of self-centring CFST bridge piers with bottom encasement: Experimental investigation, retrofit, and analysis", and also a presentation titled "Developing hybrid joints between prestressed concrete and structural steel: Toward simple and resilient bridge systems". These two presentations described recent research work of Dr. Wang and his team on the seismic behaviour of a newly proposed system of self-centring CFST bridge piers, beam-column connections, and hybrid joints.

After the Seminar, the CNERC delegates were led by Dr. Wang to visit both the Structural Engineering Laboratory and the Shaking Table Laboratory of Chongqing University.



Prof. Chung gave a presentation at the Joint Technical Seminar



A group photo of CNERC delegates, and Dr. Wang and his students, together with Dr. Men



Prof. Chung and Dr. Wang standing in front of a hybrid joint of a prestressed coupling RC member two steel columns

## Joint Technical Seminar on Recent Research on Composite Structures **Chongqing University**

- Date:25 May 2025 (Sunday)Time:9:00 am to 12:05 pm
- Venue: Faculty meeting room, Faculty of Civil Engineering Chongqing University

## Programme

Time	Presentation title	Presenter
9:00 am	Welcoming message	X D Wang
	Investigations into confinement of composite columns	K F Chung
10:00 am	Structural behaviour of high-strength bolted shear connections for simple on-site assembly of composite beams	Y Ding
10:25 am	Structural behaviour of high-strength bolted shear connections bolted shear connections under shear and pull-out forces	C C Tong
10:50 am	Break	
11:15 am	Seismic behaviour of self-centring CFST bridge piers with bottom encasement: experiment, retrofit, and analysis	X D Wang
11:40 am	Developing hybrid joints between prestressed concrete and structural steel: Toward simple and resilient bridge systems	X D Wang
12:05 noon	Closing	