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CNERC Annual Technical Symposium 2022 **2022.08.26**

CNERC Annual Technical Symposia are organized as technical platforms to promote technical discussions and exchange among research personnel of CNERC. The first Annual Technical Symposium was held in mid-2020, and favorable responses from Project Investigators and their respective research teams.

The CNERC Annual Technical Symposium 2022 was held on 26 August 2022 as a half-day event, and it was our honour to have **Ir John Kwong, Head of Project Strategy and Governance Office of Development Bureau**, and **Ir H. S. Kan, Government Engineer of Civil Engineering and Development Department**, both of the Government of Hong Kong SAR, being our Honorable Judges. An invited presentation was made by Dr. Y. F. Hu, Research Assistant Professor of CNERC, and there were a total of 7 presentations made by Postdoctoral Fellows and senior research students.



From left: Dr. T. M. Chan, Ir H. S. Kan, Prof. K. F. Chung, Ir John Kwong, Prof. Michael Yam, Dr. Lilian Hui, and Dr. Andy Leung.

The Symposium was kicked off with a welcome speech by Prof. K. F. Chung, Director of CNERC, and followed with an invited presentation by Dr. Y. F. Hu.



Prof. K. F. Chung made a welcome speech.



Dr. Y. F. Hu presented on “Structural behaviour of T-joints between high strength S690 steel cold-formed circular hollow sections”.



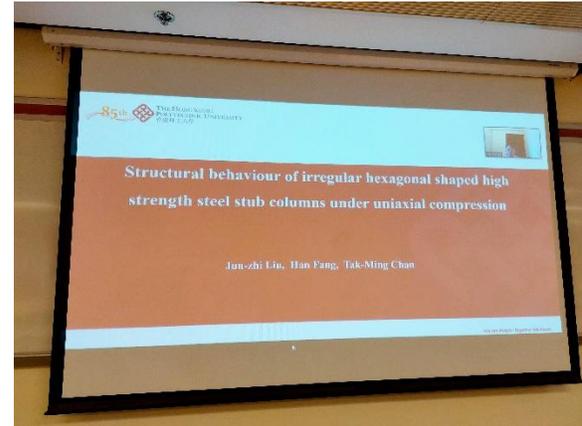
Dr. Chen WANG, Postdoctoral Fellow (CEE) presented on “Seismic Design and Parametric Study of Steel Modular Frames with Distributed Seismic Resistance”.



Mr. Eric YUEN, Research Associate (CEE) presented on “Recent development on corrosion protection and monitoring for MiC buildings in Hong Kong”.



Mr. Qun HE, Research Student (BRE) presented on “Cyclic Plasticity of High Strength Steel Q690”.



Dr. Junzhi LIU, Postdoctoral Fellow (CEE) presented on “Structural behaviour of irregular hexagonal shaped high strength steel stub columns under uniaxial compression”.



Mr. Jeffery ZHOU Peng, Research Student (ME) presented on “Automatic Vision-based Seam Detection and Path Planning for Robotic Welding/Sealing System”.



Ms. Qingyang ZHAO, Research Assistant (BRE) presented on “Superelastic SMA plates: mechanical properties and application”.



Mr. Hao JIN (presenter) and Ms. Mengfei ZHU, Research Associates (CEE) presented on “Effects of Welding to Mechanical Properties of High Strength S690 Steels: Multi-pass Welding in Thick Plates”.

After a rigorous discussion among members of the Judging Panel including Prof. K. F. Chung, Ir John Kwong, and Ir H. S. Kan, the following research personnel were selected as winners of the Young Researchers Competition 2022:

CNERC Outstanding Young Researcher Awards 2022

Mr. Hao JIN (presented) and Ms. Mengfei ZHU, Department of Civil and Environmental Engineering

Mr. Jeffery ZHOU Peng, Department of Mechanical Engineering

CNERC Young Researcher Awards 2022

Dr. Chen WANG, Department of Civil and Environmental Engineering

Mr. Eric YUEN, Department of Civil and Environmental Engineering

Mr. Qun HE, Department of Building and Real Estate

Dr. Junzhi LIU, Department of Civil and Environmental Engineering

CNERC Young Researcher Merit Award 2022

Ms. Qingyang ZHAO, Department of Building and Real Estate

CNERC Annual Technical Symposium 2022

Date: 26 August 2022 (Friday)

Time: 9:00 a.m. – 12:30 p.m.

Venue: Z504, The Hong Kong Polytechnic University

Time	Activities
9:00 – 9:25 a.m.	Opening Remarks Invited Lecture Presentation title: “ <i>Structural behaviour of T-joints between high strength S690 steel cold-formed circular hollow sections</i> ” Dr. Y. F. HU, Research Assistant Professor, CEE & CNERC-Steel
9:25 – 9:45 a.m. 9:45 – 10:05 a.m. 10:05 – 10:25 a.m.	Session I (<i>15 minutes each + 5 minutes Q&A</i>) (1) Dr. Chen WANG, “Seismic Design and Parametric Study of Steel Modular Frames with Distributed Seismic Resistance” (2) Mr. Eric YUEN Ka Fai, “Recent development on corrosion protection and monitoring for MiC buildings in Hong Kong” (3) Mr. Qun HE, “Cyclic Plasticity of High Strength Steel Q690”
10:25 – 10:35 a.m.	Break
10:35 – 10:55 a.m. 10:55 – 11:15 a.m. 11:15 – 11:35 a.m. 11:35 – 11:55 a.m.	Session II (<i>15 minutes each + 5 minutes Q&A</i>) (1) Dr. Junzhi LIU, “Structural behaviour of irregular hexagonal shaped high strength steel stub columns under uniaxial compression” (online viz ZOOM) (2) Mr. Jeffery ZHOU Peng, “Automatic Vision-based Seam Detection and Path Planning for Robotic Welding/Sealing System” (3) Ms. Qingyang ZHAO, “Superelastic SMA plates: mechanical properties and application” (4) Mr. Hao JIN, “Effects of Welding to Mechanical Properties of High Strength S690 Steels: Multi-pass Welding in Thick Plates”
12:00 – 12:30 p.m.	Judging Panel Discussion