

(Second Announcement)

First
Sino - American
Cold-Formed Steel Research Consortium
Colloquium



23 – 25 August, 2019
Tongji University
Shanghai, China

23 August – Technical Presentations
24 August – Short Course
25 August – CFSRC Meetings

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First Sino-American Cold-Formed Steel Research Consortium Colloquium

The inaugural Sino-American Cold-Formed Steel Research Consortium (CFSRC) Colloquium will be held on 23-25 August, 2019 in Tongji University, Shanghai, China, as the first step towards expanding and formalizing international collaboration between CFSRC, first established in America, and the active group of researchers in China advancing cold-formed steel research.

The colloquium will consist of: **day 1**, technical presentations to provide context for the interests and aptitude of the participants; **day 2**, a short course to delve more deeply into the behavior and design of cold-formed steel for engineers; and **day 3**, a workshop and meetings between the Chinese and American participants to initiate a broader exchange and seed the beginnings of the new international footprint for CFSRC. The mission, vision and expectations for a deepened Sino-American cold-formed steel research collaboration will be widely discussed by participants from both North America (U.S. and Canada) and China. Your participation is thoroughly welcomed and greatly appreciated by the hosting organizations.

The CFSRC was chartered in 2013 at the Johns Hopkins University with Prof. Ben Schafer as its Director. The CFSRC is a multi-institution shared-use platform for conducting research on cold-formed steel structures. Today CFSRC spans 11 universities in North America through both its member universities and affiliated investigators. CFSRC utilizes its team of researchers in cooperation with industry partners to develop a long-term vision of cold-formed steel research compatible with larger-scale funding initiatives and society-level priorities.

The First Sino-American CFSRC Colloquium was conceived by Prof. Yuanqi Li at Tongji University, China and CFSRC Director Ben Schafer. The objective of this event is to seek deeper collaboration between new Chinese CFSRC partners and current CFSRC investigators, and provide a rallying point in China for the increasing and high-quality cold-formed steel research being conducted. With the efforts of all partners, CFSRC is expected to be a unique international platform to assist in developing standards, coordinating future research, sharing facilities to enable efficient and unique research programs, and sharing data and achievements in cold-formed steel with a goal of providing the world's most comprehensive, innovative, and impactful research efforts dedicated to improving our understanding of the behavior, and advancing the design, of cold-formed steel structures.

CFSRC Colloquium Essentials

Location: Room 401, Sino-French Center, Tongji University, Shanghai, China

Registration: 23 August 2019 – **Technical Presentations – 1000 RMB**

24 August 2019 – **Short Course** – Students: **600RMB**, All Others: **1000RMB**

25 August 2019 –**Meetings**– By Invitation (contact Yuanqi Li or Ben Schafer)

Further registration details coming soon

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Organized by: Tongji University (**Host**), Committee of Light-weight Steel Structures - China Engineering Construction Standards Association, Cold-Formed Steel Research Consortium

Agenda

Technical Presentations (Official language: English)

23 August, 2019 (Friday): A one-day open academic colloquium	
Objective: For participants to be able to present their expertise and interests so that new collaborations can begin with an understanding of existing knowledge.	
08:30~08:45	Opening Ceremony
08:45~10:15	Session I: US CFS Research for Codes
	From Members to Mid-rise Enabling CFS Advances (Prof. Ben Schafer, Johns Hopkins University)
	Standards Development and Enabling Research for CFS (Dr. Helen Chen, American Iron and Steel Institute)
	Lateral Systems and Advancing BIM for CFS (Prof. Cheng Yu, University of North Texas)
10:15~10:30	Tea break
10:30~12:30	Session II: Chinese CFS Research for Codes
	GB50018: Research on CFS from Members to Low-rise Buildings in TJU (Prof. Yuanqi Li, Tongji University)
	CECS 23: Technical Specification for Steel Storage Racks (Prof. Xianzhong Zhao, Chief-editor, Tongji University)
	JGJ/T 421-2018: Research on CFS for Multi-story Buildings (Prof. Yu Shi & Xuhong Zhou, Chongqing University)
	CECS410-2015 : Technical Specification for Stainless Steel Structures (Prof. Ganping Shu, Chief-editor, Southeast University)
12:30~13:30	Lunch
13:30~16:30	Session III: Experimental CFS Research and Stainless Steel Research
	Research on Seismic and Fire Issues of CFSS

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	(Prof. Jihong Ye, China University of Mining and Technology)
	Experimental CFS Building Performance (Asst. Prof. Kara Peterman, University of Massachusetts - Amherst)
	Research on Seismic Behaviors of Three-story CFS Structures (Prof. Mingzhou Su, Xi'an University of Architecture and Technology)
	Research on Stainless Steel Structure in Tongji University (Prof. Feng Zhou, Tongji University)
	Research on CFS Beams with Web Openings in Bending, Shear, and Combined Actions (Associate Professor Liping Wang, Central South University & Prof. Ben Young, The Hong Kong Polytechnic University)
16:30~16:45	Tea break
	Session IV: Modeling, Manufacturing and Buildings
	Modeling Advances in Support of CFS Asst. Prof. Zhanjie Li (State University of New York - Polytechnic)
16:45~18:15	Portal Frames and Next Gen Steels for CFS (Asst. Prof. Hannah Blum, University of Wisconsin – Madison)
	Manufacturing and Fabrication in CFS Buildings (Mr. Ding, Dahezhongbang (XiaMen) Intelligent Technology Co., Ltd)
18:30~20:30	Banquet for invited guests

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Short Courses (Official language: Chinese)

24 August, 2019 (Saturday): One-day short courses on design of CFS Structures	
Objective: Dissemination of knowledge to enable CFS engineers and graduates	
08:30~12:10	Dr. Helen Chen (AISI): General Introduction: Specifications for CFS in AISI and Their Application
	Houjun Xu (GB50018): General Introduction: Specifications for CFS in China and Their Application
	Asst. Prof. Zhanjie Li and Prof. Ben Schafer (AISI): Member Design – Basics, History, and Prospect of the Direct Strength Method of Design
	Prof. Yuanqi Li (GB50018): Members Design Based on China CFS Code- History and Prospect of EWM
12:10~13:30	Lunch (12:30-13:30)
13:30~17:10	Prof. Cheng Yu and Asst. Prof. Kara Peterman (AISI): CFS Seismic Design Based on the US Code
	Asst. Prof. Kara Peterman and Asst. Prof. Hannah Blum (AISI): CFS Connection Design - Performance and Design Based on the AISI Code
	Prof. Yu Shi (JGJ/T 421-2018): Introduction to Technical Standard for Cold-formed Thin-walled Steel Multi-story Residential Buildings (JGJ/T 421-2018)
	Dahezhongbang (XiaMen) Intelligent Technology Co., Ltd: Design Software for CFSS in China
18:00-20:00	Reception for invited guests

Note: 45 minutes for each course and 10 minutes for questions and break.

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CFSRC Meetings (Official language: English)

25 August, 2019 (Sunday) : Sino-US CFSRC meeting	
Objective: To explore the details and initiate the steps that will provide enhanced research capabilities and outcomes for the combined CFSRC effort	
8:30~9:30	Morning tour to State Key Laboratory in TJU (Siping Campus)
9:30~11:30	<ol style="list-style-type: none">1. Invited lecture by Prof. Yin Zhou: Introduction of Sino-U.S. Joint Laboratory sponsored by TJU and UC Berkeley2. Introduction of motivation on CFSRC mission, vision, expectation setting for Sino-U.S. collaboration (Prof. Ben Schafer)3. Initial consideration on Sino-U.S. CFSRC collaboration (Prof. Yuanqi Li)4. Participant Roundtable Discuss/revise mission, vision, expectations for collaboration; Discuss in country and across country organization? What individual investigators hope to achieve? How to help seed productive multi-nation pairings?5. Organizational Strawmen for discussion: Task Groups suggested from China side are as follows: 1) CFSS; 2) Stainless; 3) Racks; 4)Members; 5)Connections; 6)Seismic; 7)Fire; 8) Wind; 9) Materials; 10)Concrete Composite Task Groups envisioned from U.S. side as follows: 1) Visioning/Needs Advocacy, 2) Proposal support, 3) Standards Support, 4) Shared Facilities, 5) Students/Internal Training6. First take on projects to initiate collaboration on Topics of mutual interest, synergistic capability, and \$ potential7. Possible events and activities (in the next two years)
11:30~11:45	Ceremonial start of CFSRC China (by Prof. Ben Schafer and Prof. Yuanqi Li)
11:45~12:00	Summary & Comments (Prof. Ben Schafer)
12:00~13:30	Lunch