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Launching Ceremony of the Ministry of Education International Cooperation Joint Laboratory for Smart Transportation Infrastructure cum First Academic Committee Meeting
2025.07.10

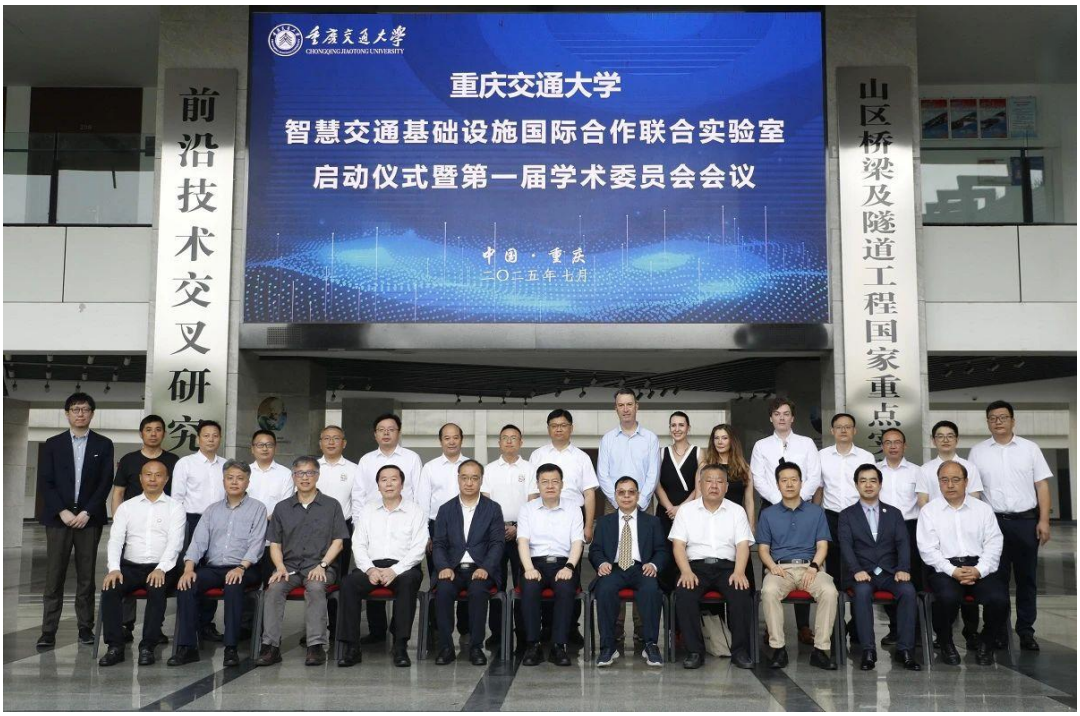
On 10 July 2025, Prof. K. F. Chung, Director of CNERC, Dr. H. Jin, Postdoctoral Fellow, and Ms. Y. Ding, PhD student, were invited by Chongqing Jiaotong University to attend the launching ceremony of the Ministry of Education International Cooperation Joint Laboratory for Smart Transportation Infrastructure, as well as to deliver academic presentations at its first Academic Committee meeting.

The members of the Joint Laboratory's Academic Committee are as follows:

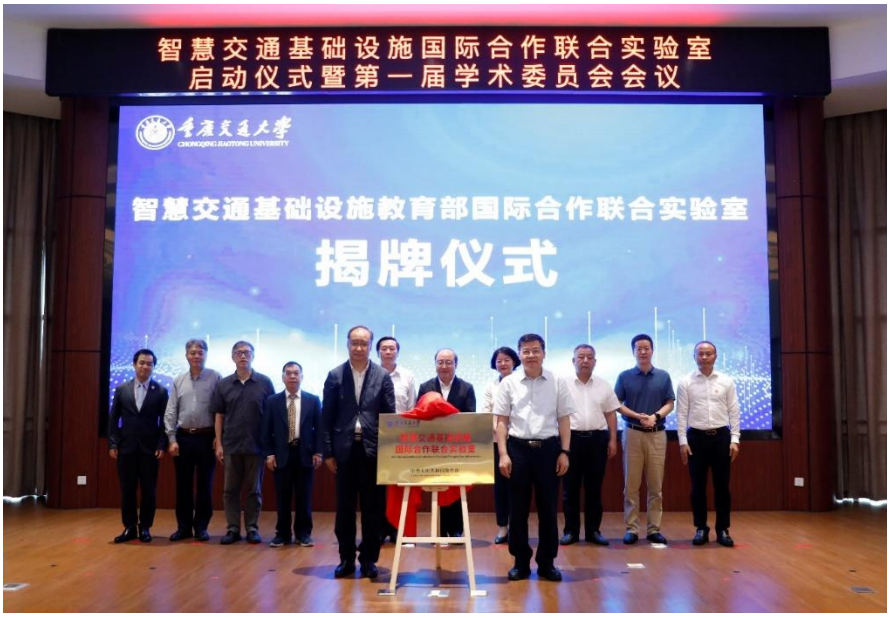
Name	Position	Affiliation	Title
Y. B. Yang	Academician of the Chinese Academy of Engineering & Foreign Member of the Austrian Academy of Sciences	Chongqing University	President
H. Hao	Fellow of the Australian Academy of Technological Sciences and Engineering & Foreign Fellow of the Chinese Academy of Engineering	Aquatin University, Australia	Vice President
X. Y. Yang	Fellow of the Canadian Academy of Engineering & Professor at the University of Guelph, Canada	University of Guelph, Canada	Vice President
C. J. Shi	Member of the Canadian Academy of Engineering & Foreign Member of the National Academy of Engineering of Ukraine	Hunan University	Vice President
J. X. Chen	Vice President of Changan University, Changjiang Scholar Distinguished Professor, Leader of the 10,000-person Programme, Academic Committee of the World Transport Congress, Vice Chairman & Chairman of the Tunnel Engineering Department	Changan University	Member
K. F. Chung	Director of CNERC & Professor at PolyU	PolyU, Hong Kong	Member
Y. L. Li	National Outstanding Young Scholar, Changjiang Scholar Distinguished Professor & Director of the Chinese Chapter, International Association for Structural Control and Monitoring	Southwest Jiaotong University	Member

J. G. Dai	Head of the Department of Architecture and Civil Engineering & Chair Professor of Structural Engineering	CityU, Hong Kong	Member
Fukuzawa Eiji	Distinguished Researcher AI Division, Yazaki General Industry Co., Ltd. & Department Manager	Waseda University, Japan	Member

On the morning of 10 July, academicians, experts, and international friends gathered at Chongqing Jiaotong University to witness the official launch of the Ministry of Education's Joint Laboratory for International Cooperation on Smart Transportation Infrastructure. China boasts the world's largest transportation infrastructure, leading the world in total mileage of highways and high-speed railways, bridges, and tunnels. With the implementation of the "going global" strategy, the volume of transportation infrastructure under construction in over 60 countries along the Belt and Road Initiative has reached over 50 trillion RMB. As the only approved Ministry of Education International Cooperation Laboratory for International Cooperation at a Chongqing municipal university in 2023, the Chongqing Jiaotong University Joint Laboratory for International Cooperation on Smart Transportation Infrastructure is dedicated to addressing major scientific issues and common applied fundamental theories in the intelligent construction and operation and maintenance of transportation infrastructure. It also actively promotes regional cultural exchange and cooperation, and advances the "soft connectivity" of Belt and Road rules and standards. This will inject strong momentum into high-quality development and strongly support the implementation of the national "Strong Transportation Nation" strategy.



A group photo of the experts at Chongqing Jiaotong University



Experts present at the meeting witnessed the unveiling of the Chongqing Jiaotong University Intelligent Transportation Infrastructure Ministry of Education International Cooperation Joint Laboratory

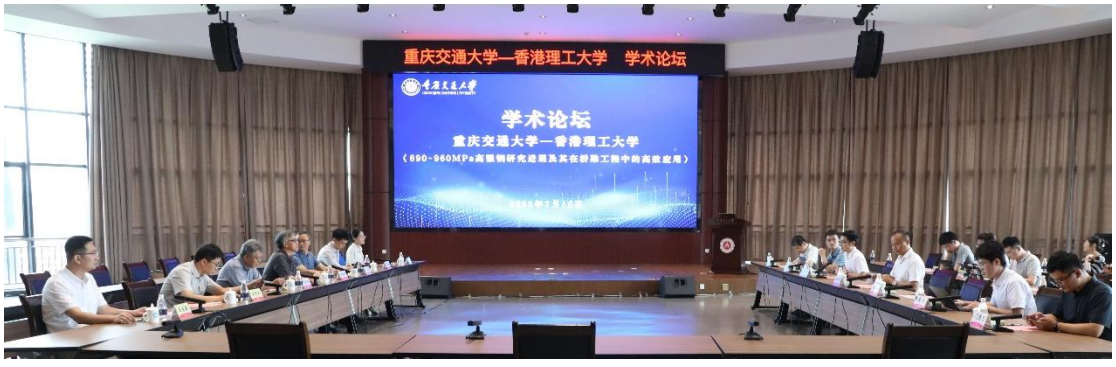
President Lai Yuanming presented the appointment letters to the first academic committee members of the Ministry of Education's International Cooperation Joint Laboratory for Smart Transportation Infrastructure. From left to right: Researcher Eiji Fukuzawa, Prof. Y. L. Li, Vice President J. X. Chen, Academician X. Y. Yang, Academician H. Hao, Prof. K. F. Chung, Prof. J. G. Dai, and President Y. M. Lai.

After the launching ceremony, experts from the Academic Committee put forward opinions and suggestions on the steady development of the laboratory from the aspects of research direction, team building, international cooperation, and achievement transformation, focusing on the laboratory construction plan.

The Academic Committee meeting brought together the collective wisdom of many academicians and experts from China, Australia, Canada and other countries. The forward-looking guidance they put forward with a global perspective anchored the laboratory's research direction of "solving bottleneck technologies and defining future transportation forms".

A group photo of the experts in the Bridge Laboratory of Chongqing Jiaotong University

In the afternoon, under the leadership of Vice President J. T. Zhou, the Chongqing Jiaotong University-Hong Kong Polytechnic University academic forum on "Research Progress of 690~960MPa High-Strength Steel and Its Efficient Application in Bridge Engineering" was officially held in the lecture hall on the second floor of Zhiyuan Building, Chongqing Jiaotong University.



Vice President Prof. J. T. Zhou

Prof. K. F. Chung

Guests attending the meeting included:

CNERC:

Prof. K. F. Chung, Director
Dr. H. Jin, Postdoctoral Fellow
Ms. Y. Ding, PhD student

Chongqing Jiaotong University:

Prof. J. T. Zhou, Vice President
Prof. H. Zhang, Executive Deputy Director, State Key Laboratory of Mountain Bridge and Tunnel Engineering
Prof. J. Yang, Deputy Director, State Key Laboratory of Mountain Bridge and Tunnel Engineering
Prof. Y. Zou

Chongqing University:

Prof. X. D. Wang

T.Y. Lin International Engineering Consulting (China) Co., Ltd.:

Li Sidong, Chief Bridge Engineer

China Railway Changjiang Design Group Co., Ltd.:

Liu Xiaohui, Deputy General Manager

Chongqing Jiaotong University:

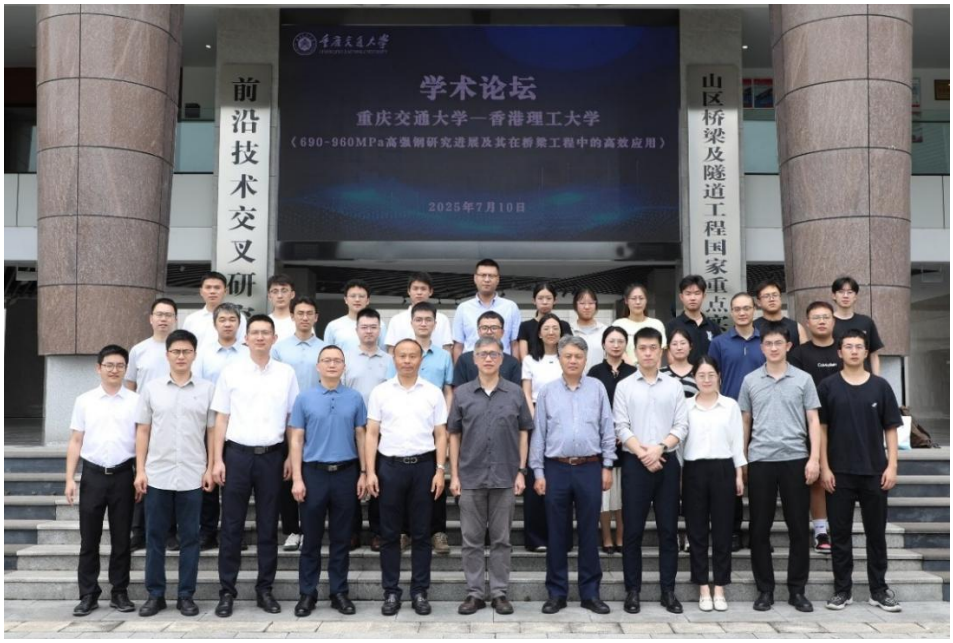
Prof. Y. Jiang, Prof. C. S. Cheng, Prof. Z. Y. Zhang
Prof. H. L. Yu, Prof. Y. Xiang, Prof. Y. Zhou
Dr. P. F. Men, Dr. X. M. Wang, Dr. J. Du

The seminar aimed to strengthen academic exchanges between the Hong Kong and China and to discuss the feasibility of using S690-S960MPa high-strength steel in bridge engineering with experts from design and construction companies. At the seminar, Prof. K. F. Chung presented presentations titled “Effective Use of S690 High-Strength Steel in Construction and Its Application in Bridges” and “Efficient Application of S960 High-Strength Steel in Giant Stiffened Box Girders for Pedestrian Bridge Systems”. These presentations summarized the recent achievement of the CNERC research team in the design, construction, and welding of S690 and S960 steels, sharing numerous successful examples of the current application of S690-S960MPa steel in infrastructure projects in the HKSAR. Dr. H. Jin presented a presentation titled “The Effect of Welding on the Structural Performance of Thick Plate Weldments of High-Strength Steel”, drawing on Hong Kong’s first S690 steel bridge, the Tseung Kwan O Cross-Bay Link project, detailing the research findings and applications of high-strength steel welding. Y. Ding introduced a new type of high-strength bolt shear connector suitable for simple on-site assembly of composite beams. After experiments and numerical simulation analysis, the connector has excellent shear bearing capacity, stiffness and good ductility.

Dr. X. D. Wang from Chongqing University gave a presentation titled “Seismic Performance of Self-Resetting CFST Piers with Outsourced Pier Footings: Experimentation, Repair, Analysis, and Application Prospects”, showcasing Dr. Wang and his team’s latest research findings on the seismic performance of a new self-resetting CFST pier system, beam-column connections, and hybrid connections.

After that, along with representatives from the design and construction organizations, discussed the current prospects for high-strength steel applications in bridges. Drawing on existing demonstration projects, they clarified the technical and economic advantages of high-strength steel in bridge structures. They also proposed different application solutions for different bridge structures. Experts from T.Y. Lin International Engineering Consulting (China) Co., Ltd. and China Railway Changjiang Design Group Co., Ltd. also raised questions about the technical difficulties of high-strength steel welding during design and construction, and the CNERC team provided the answers.

After discussion, both parties fully affirmed the application prospects of high-strength steel in bridge engineering and laid a cooperative foundation for future high-strength steel demonstration projects.



A group photo in front of Zhiyuan Building of Chongqing Jiaotong University

Programme rundown:

重庆交通大学—香港理工大学　学术论坛
《690~960MPa高强钢研究进展及其在桥梁工程中的高效应用》

会议时间：2025 年 7 月 10 日　14:00-18:00

会议地点：重庆交通大学科学城校区致远楼二楼报告厅

会议主持：山区桥梁及隧道工程国家重点实验室副主任　**杨 俊**

时　间	学术论坛
14:00-14:10	重庆交通大学**周建庭**副校长致辞
14:10-14:50	S690 高强钢在建筑中的有效使用及其在桥梁中的应用 报告人：**钟国辉**　教　授
14:50-15:10	焊接对高强钢厚板焊接件结构性能的影响 报告人：**金　皓**　博士后
15:10-15:30	大跨度拱桥智能建造研究进展与高强钢应用展望 报告人：**周　银**　副教授
15:30-15:40	**茶　歇**
15:40-16:00	设置外包式墩脚自复位 CFST 桥墩抗震性能：试验、修复、分析与应用展望 报告人：**王宣鼎**　副教授
16:00-16:20	装配式钢-混凝土组合梁中高强螺栓连接件的结构性能 报告人：**丁　艳**　博士研究生
16:20-16:40	超大跨混凝土拱桥装配化建造技术初探与展望 报告人：**邹　杨**　教　授
16:40-17:05	S960 高强钢在人行桥系统巨型加劲箱梁中的高效应用 报告人：**钟国辉**　教　授
17:05-18:00	与会人员交流讨论
18:00-19:30	**工作餐**