

The 16th China-Japan-Korea International Workshop on Wind Engineering

CJK 2024



August 23 (Friday), 2024 Seoul National University in Seoul, Korea

Hosted by The Wind Engineering Institute of Korea (WEIK)

CHAIR

Prof. Thomas Kang (Seoul National University, Korea)



The 16th China-Japan-Korea International Workshop on Wind Engineering (CJK2024)

Date: August 23, 2024 (Friday)

Venue: Seoul National University (Building 39, Room B103)

Time	Content	
9:30 - 9:45	Opening Session & Welcome Remark (President Ham, WEIK)	
9:45 – 10:30	Keynote Lecture Chair: Thomas Kang Speaker: Soon Duck Kwon (Jeonbuk National University) The impact of wind loads on energy systems	
10:30 – 10:45	Coffee Break	
10:45 – 12:00 Session A	Chair: Hiroshi Katsuchi [10:45-11:00] Invited Lecture Speaker: Yoshihide Tominaga (Niigata Institute of Technology) Wind tunnel experiment of sand surface deformation around obstacles [11:00-11:15] Invited Lecture Speaker: Jin-Young Kim / Hyun-Goo Kim (Korea Institute of Energy Research) Development of wind resource potential map in Korea [11:15-11:30] Invited Lecture Speaker: Genshen Fang (Tongji University) Joint probability analysis and mapping of typhoon-induced wind, wave and surge hazards along southeast China [11:30-11:45] Invited Lecture Speaker: Sejin Kim (Chungbuk National University) Estimation of hurricane-induced damage in building communities using computational fluid dynamics and artificial intelligence [11:45-12:00] Invited Lecture Speaker: Lizhi Wen (Kyoto University) Investigation of trajectories of windborne debris in residential area	
12:00 – 14:00	Lunch & Short Tour (Prof. Ho-Kyung Kim's wind tunnel testing laboratory)	
14:00 – 15:45 Session B	Chair: Thomas Kang [14:00-14:15] Invited Lecture Speaker: Qingshan Yang (Chongqing University) Wind-structure interaction of membrane structures	

14:00 – 15:45 Session B	[14:15-14:30] Invited Lecture Speaker: Thomas Kang (Seoul National University) Performance-based wind design of high-rise buildings [14:30-14:45] Invited Lecture Speaker: Kazuyoshi Nishijima (Kyoto University) A wind engineering application for heavy-rain control [14:45-15:00] Invited Lecture Speaker: Liguo Yang (China Academy of Building Research) Predictions and measurements of the stack effect in a high-rise building [15:00-15:15] Invited Lecture Speaker: Rongmao Li (Kyoto University) Comparison of 2D and 3D Fourier neural operator architectures for predicting outdoor airflow around a building [15:15-15:30] Invited Lecture Speaker: Nam Seok Kim / Seok Hyun Choi (Seoul National University of Science & Technology / Englink co., Ltd) Introduction to AI-CFD based on computational fluid dynamics for building wind simulation and predicting wind environment [15:30-15:45] Invited Lecture Speaker: Qiang Zhou (Southwest Jiaotong University) Effect of turbulent integral scale on the characteristics of wind loads on rectangular cylinders
15:45 – 16:00	Coffee Break
16:00 – 17:30 Session C	Chair: Ledong Zhu [16:00-16:15] Invited Lecture Speaker: Zhiwen Huang (Hunan University) Closed-form optimal design of eddy current dampers for VIV control of long-span suspension bridges [16:15-16:30] Invited Lecture Speaker: Saang Bum Kim / Jong Dae Kim (bnesTech) Wind-fire interaction analysis for a soundproof tunnel [16:30-16:45] Invited Lecture Speaker: Kyohei Noguchi (Kyoto University) Study on the effects of handrails on the aerodynamic instability of a box girder bridge

16:00 – 17:30 Session C	[16:45-17:00] Invited Lecture Speaker: Haiwei Xu (Zhejiang University) Wind-induced vibration suppression of long-span cable-suspended photovoltaic modules [17:00-17:15] Invited Lecture Speaker: Sung Goon Park (Seoul National University of Science & Technology) Numerical simulations of wind-wave-turbine interactions for offshore wind energy [17:15-17:30] Invited Lecture Speaker: Kai Li (Changsha University of Science & Technology) Influence of geometric nonlinearity on 3D post-flutter responses of long span bridges	
17:30 – 18:00	Closing Remark & Group Photo	
18:00 - 20:00	Banquet (Building 38, B1, Rakhujung)	

CJK2024 Participants List

China

No.	Name	Affiliation
1	Yan Han	Changsha University of Science & Technology
2	Kai Li	Changsha University of Science & Technology
3	Liguo Yang	China Academy of Building Research
4	Min Liu	Chongqing University
5	Lin Zhao	Guangxi University
6	Yiwen Cao	Hunan University
7	Zhiwen Huang	Hunan University
8	Yang Yang	Southwest Jiaotong University
9	Qiang Zhou	Southwest Jiaotong University
10	Genshen Fang	Tongji University
11	Ledong Zhu	Tongji University
12	Wenjuan Luo	Zhejiang University
13	Haiwei Xu	Zhejiang University

Japan

No.	Name	Affiliation
1	Rongmao Li	Kyoto University
2	Kazuyoshi Nishijima	Kyoto University
3	Kyohei Noguchi	Kyoto University
4	Lizhi Wen	Kyoto University
5	Yoshihide Tominaga	Nigata Institute of Technology
6	Tatsuya Kurihara	Tokyo Electric Power Services Co., Ltd.
7	Kichiro Kimura	Tokyo University of Science
8	Hiroshi Katsuchi	Yokohama National University

Korea

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No.	Name	Affiliation
1	Saang Bum Kim	bnesTech
2	Jae-Seung Hwang	Chonnam National University
3	Sejin Kim	Chungbuk National University
4	Sungsu Lee	Chungbuk National University
5	Jeongah Um	Chungbuk National University
6	Seok Hyun Choi	Englink co., Ltd.
7	Hyang Ha Lee	Englink co., Ltd.
8	Sang Ryul Park	Englink co., Ltd.
9	Yoon Cheol Shin	Englink co., Ltd.
10	Soon-Duck Kwon	Jeonbuk National University
11	Wonsul Kim	Korea Authority of Land & Infrastructure Safety
12	Jin-Young Kim	Korea Institute of Technology
13	Nam Seok Kim	Seoul National University of Science & Technology
14	Sung Goon Park	Seoul National University of Science & Technology
15	Sooyeon Cho	Seoul National University
16	Youchan Hwang	Seoul National University
17	Thomas Kang	Seoul National University
18	Ho-Kyung Kim	Seoul National University
19	Jaehong Shim	Seoul National University