#### **Information of "IABSE Online Conference 2020"**

The Executive Committee of IABSE has approved the IABSE Online Conference on September 2 and 3, 2020, with the Organizing Committee Co-chairs of Y. Ge and H-M Koh and the Scientific Committee Co-chairs of S. Nakamura and L. Sun. The Online Conference will be co-organized by the Chinese, Japanese and Korean Groups of IABSE.

## I. Organizing Committee of IABSE Online Conference 2020

Honorary Chair: Haifan Xiang, China

Co-Chair: Yaojun Ge, China Co-Chair: H-M Koh, Korea

Members:

S. Nakamura, Japan; H. Katsuchi, Japan

S. Fujikura, Japan; D. H. Choi, Korea

N. Kim, Korea; L. Sun, China

Y. Xia, China; Z. Yang, China

C. Uytiepo

### II. Scientific Committee of IABSE Online Conference 2020

Honorary Chair: Yozo Fujino, Japan Co-Chair: Shunichi Nakamura, Japan

Co-Chair: Limin Sun, China

Members:

T. Takeuchi, Japan; Yamaguchi, Japan;

T. Nagayama, Japan; H-M. Koh, Korea;

H-K. Kim, Korea; W. Park, Korea;

H. Yoon, Korea; K-S. Cho, Korea;

Y. Ge, China; C. Xiao, China;

D. Xu, China; G. Xu, China

#### **III. Conference theme:**

Facing the New Age - How do structural engineers tackle the Covid-19 era?

### IV. Keynote speakers: (30 min each)

(1) Klaus Ostenfeld: Independent Expert Consultant, Past president COWI A/S, Past president IABSEPast President of IABSE

Presentation Title: Will the Covid-19 pandemic change the way we think, plan and work as civil- and structural engineers?

- (2) Prof. Koichi KATO, University of Tokyo, Architectural Historian Presentation Title: Construction in the History of Social Change - Learning from Epidemic in Late Medieval Europe
- (3) Prof. Youngsang Kwon, Seoul National University Presentation Title: What will happen to our city after COVID-19?
- (4) Liming Yuan, Chief Engineer of Second Structure Institute, Central-South Architectural Design Institute Co., Ltd.

Presentation Title: Rapid Design and Construction Management of Emergency Specialty Field Hospital during the COVID-19

### IV. Topics and Invited Speakers: (20 min each)

### **Topic 1: Recent extreme events on infrastructures**

- 1) K. Nishijima, Kyoto University: Disaster of buildings caused by Typhoons Jebi and Faxai in Japan.
- 2) S. Fujikura, Utsunomiya University: Field Investigation and Restoration of Damaged Bridges in 2016 Kumamoto Earthquake.
- 3) Professor Alessandro Palermo, University of Canterbury: The Kaikoura bridge damage and touch base on novel technologies.

4) Yaojun Ge, Tongji Univ.: Wind-induced vibration and serviceability of Long-span cable supported bridges in China.

# Topic 2: AI-based Monitoring and Maintenance of infrastructures

- 1) Pang-jo Chun, University of Tokyo: Application of AI and data platform to infrastructure maintenance and its future prospects
- 2) Hongbin Xie, HZMB Authority: Hongkong-Zhuhai-Macau Bridge and its artificial intelligence
- 3) Prof. HyungChul Yoon, Choongbuk National University: Drone-based monitoring of long-suspended footbridges
- 4) Jose C. Matos: The contribution of AI tools in Intelligent Transportation Management Systems

### Topic 3: Development of long-span cable supported bridges

- 1) Prof. Wonsuk Park, Mokpo National University, Dynamics of long-suspended footbridges
- 2) Gongyi Xu, BRDI of China Railway: Recent long-span rail-and-road bridges in China
- 3) H. Kanaji, Hansin Expressway: Cable-stayed bridges on the Osaka Bay Road
- 4) Kent Fuglsang, Project director, COWI: The 1915 Canakkale Bridge

### **Topic 4: Digital Inclusion in Structural Engineering**

- 1) T. Nagayama, University of Tokyo: Monitoring taking advantage of and materializing digital twins
- 2) Prof. Changsu Shim, Chungang University, Digital engineering model for prefabricated bridge members
- 3) Chinese: TBD
- 4) Jerome Lynch, Univ. of Michigan: TBD
- 5) Thomas Vogel: TBD

# V. Conference Program

### September 2, 2020

- 08:30-08:45 Opening Session Chair: SC Chair; Address: OC Chair
- 08:45-09:35 Session T1, Chair: C1 Keynote speaker K1 & Invited speaker T1-1
- 09:35-09:50 Break (Advertisement)
- 09:50-11:30 Session T1, Chair: C2 Invited speakers T1-2, T1-3 & T1-4 Q&A, Discussion
- 11:30-13:30 Lunch time (Introduction of Recent structures)
- 13:30-14:20 Session T2, Chair: C3 Keynote speaker K2 & & Invited speaker T2-1
- 14:20-14:35 Break (Advertisement)
- 14:35-16:15 Session T2, Chair: C4 Invited speakers T2-2, T2-3 & T2-4 Q&A, Discussion

#### September 3, 2020

- 08:30-09:20 Session T3, Chair: C5 Keynote speaker K3 & Invited speaker T3-1
- 09:20-09:35 Break (Advertisement)
- 09:35-11:15 Session T3, Chair: C6 Invited speakers T3-2, T3-3 & T3-4 Q&A, Discussion
- 11:15-13:30 Lunch time (Introduction of Recent structures)
- 13:30-14:20 Session T4, Chair: C7 Keynote speaker K4 & Invited speaker T4-1
- 14:20-14:35 Break (Advertisement)
- 14:35-16:15 Session T4, Chair: C8 Invited speakers T4-2, T4-3 & T4-4 Q&A, Discussion
- 16:15-16:30 Closing Session Chair: OC Chair; Address: SC Chair