

**Preliminary Invitation &
Call for Abstracts**

IABSE Conference Seoul 2020

9-10 November 2020
Seoul, Korea

Risk Intelligence of Infrastructures

www.iabse.org/seoul2020

Organized by





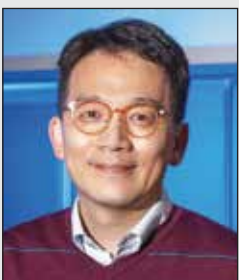
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**Chair of
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Prof. Ho-Kyung Kim
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**Vice-Chair of
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Prof. Junho Song
Seoul National University

Message from the Organizers

The IABSE Korean Group is excited to invite you to the IABSE Conference, Seoul 2020, which will be held November 9~10 in Seoul, Korea. During the past 30 years, the infrastructure in Korea has undergone dramatic growth. More than 60 cable-supported bridges were constructed in this period and about 20 more bridges are currently under construction. During this boom in construction, Korean engineers have worked with overseas engineers to construct world-famous infrastructures such as the Third Bosphorus Bridge, the Chacao Channel Bridge, and the Canakkale Bridge.

During this development, engineers and researchers have been aware of the necessity to prepare resilient and sustainable strategies and solutions for the infrastructure design and maintenance that are based on a knowledge of various risks and uncertainties. The principle of “as low as reasonably practicable” (ALARP) is now applied to some risk issues for mega-infrastructure projects. However, the types and levels of risk have yet to be discussed thoroughly by engineering and academic societies for infrastructures that include bridges, buildings, tunnels, and ocean and energy structures. Since the issues involving risk are basically based on probability and an understanding of the infrastructures, the systematic interactions between structural identification, monitoring, knowledge-based maintenance, and the management of large amounts of data management are required to develop ‘risk intelligence of infrastructures’.

The Korean Group of IABSE invites you to this special event. The Scientific Committee will invite a balance of keynote speakers and experts from engineering and academic societies, in order to discuss and share practical ways forward in this area by providing single or limited numbers of parallel sessions for the sake of concentration. This attempt is encouraged by the IABSE’s new strategy of hosting problem-focused events. The organizers hope to derive a Seoul 2020 Agenda for ‘risk intelligence of infrastructures’ through this conference. We are looking forward to your interest and support.

Objective and Scope

The goal of this conference is to attract world-class practitioners and academics for meaningful discussions on recent and future developments and applications in the areas of risk analysis and data intelligence for bridges and infrastructures.

Theme

Risk Intelligence of Infrastructures

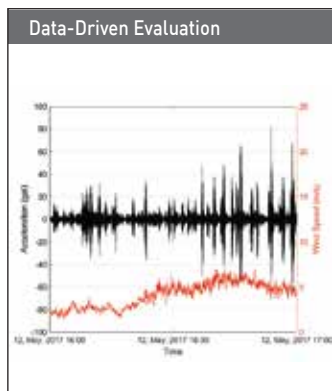
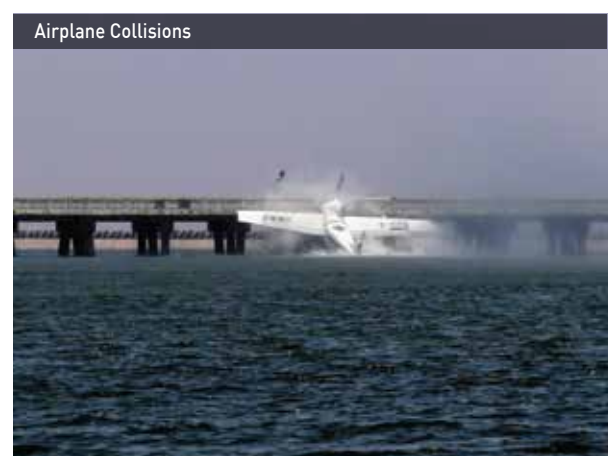
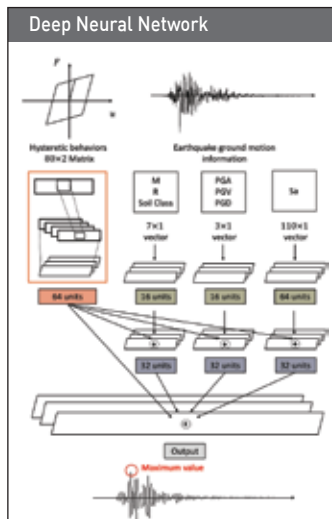
Topics

Risk analysis & multi-hazard assessment

- Design consideration for natural and man-made disasters
- Assessment of reliability, risk and resilience
- In-operation performance evaluation of structures
- Risk assessment and management of multi-hazards
- Risk-informed decision making and management
- Financial solutions for infrastructure risk management

Data intelligence & field informatics

- Value of Information (VoI)
- Smart operation and effective maintenance
- Information modeling framework for infrastructure
- Data-driven evaluation of structural conditions and decision-making
- Monitoring techniques concerning structural conditions
- Identification of structural damage, properties and loads
- Advances in NDE/NDT for assessment
- Automatic data processing of large databases



Call for Abstracts

The Scientific Committee invites submissions to the conference theme and topics of **Risk Intelligence of Infrastructures**.

Abstracts must be submitted via the official website link at www.iabse.org/Seoul2020. Official language is English.

Note: Presenters of accepted papers are expected to register and attend the conference.

Important Dates

Jan 31, 2020	Abstract submission
Feb 29, 2020	Notification of abstracts acceptance
Apr 15, 2020	Submission of full papers
May 15, 2020	Notification of full papers acceptance
Jun 05, 2020	Final invitation
Sep 01, 2020	Deadline for early-bird registrations
Nov 9-10, 2020	Conference

Format

To facilitate problem-oriented in-depth discussions, main topics will be discussed in organized sessions, which will be combined with general and poster sessions over two days. The organized session will be opened by a keynote lecture, which will be followed by presentations from experts. Before the Closing Ceremony, a special session will be provided to wrap up the presentations and discussions.

Tentative Program

Nov. 8 (Sun)	Nov.9 (Mon)	Nov.10 (Tue)	Nov.11 (Wed)
	Opening		Technical Visit
	Session 1	Session 4	
	Lunch	Lunch	YEC* (to Nov.12)
	Session 2	Session 5	
	Session 3	Wrap-Up & Closing	
Welcome Reception	Conference Dinner		

* IABSE Young Engineer Colloquium in East Asia will be held in conjunction with this conference from Nov.11 to Nov. 12. Technical visit program (Nov. 11) will be shared for groups from both the conference and the colloquium.

Technical Visit

A technical field trip will demonstrate the latest technology in cable-stayed bridge design and construction. Featured will be the Goduk Bridge, which is a concrete cable-stayed structure crossing the Han River in Seoul with a main-span length of 540 m. The superstructure will be under construction around the time of the conference.



Venue



Grand Room

The conference venue will be the Convention Center of the Hoam Faculty House located at Seoul National University.

Direct limousine bus services between the Incheon Airport and the Hoam Faculty House (duration: about 1.5 hrs) are available in intervals of approximately 30 minutes.

Accommodations

Accommodations are available at the conference venue, the Hoam Faculty House. Participants can enjoy a relaxed atmosphere with a view of the Gwanak Mountain. Alternative accommodations are available in downtown areas with access to public transportation.



Hoam Faculty House

Seoul, the Soul of Korea

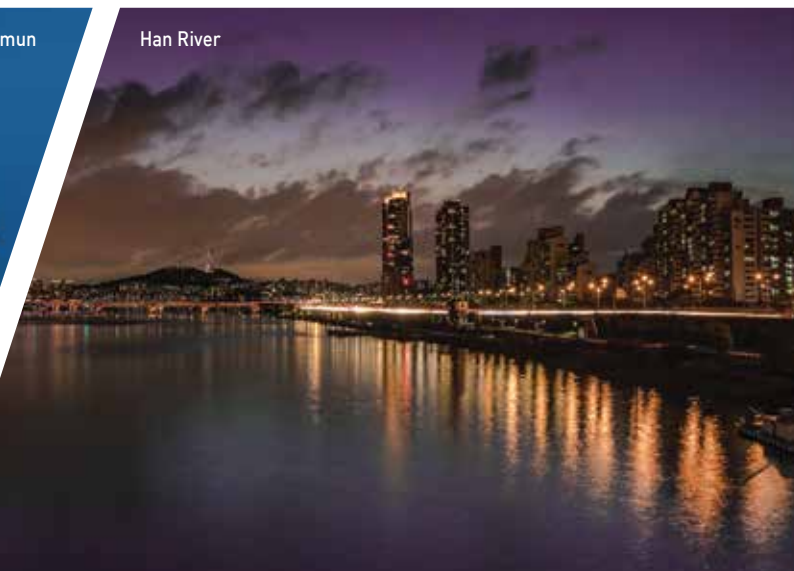
Center of politics, economy, and culture for six centuries.

Seoul is a historically cultural city, and has served as the capital of Korea for more than 600 years. It is a metropolis with a population of more than 10 million. Being one of the world's largest and most advanced cities, Seoul serves as the political, economic, and educational hub of Korea. The city lies in a natural basin surrounded by a series of mountains and hills, and its grandeur and magnificent scenic beauty makes it one of the most attractive metropolitan cities of the world. Aside from enjoying a bustling pace of life and modern architecture, the residents of Seoul take great pride in a number of invaluable cultural assets that showcase the city's long history. (www.seoul.go.kr)

Gwanghwamun



Han River



About IABSE

The International Association for Bridge and Structural Engineering (IABSE) was founded in 1929. Today, IABSE has members in approx. 100 countries and 55 National Groups around the world. IABSE's aim as a technical society is to promote the advancement of structural engineering practice while taking into account technical, economic, environment, aesthetic and social aspects. IABSE deals with all structures and with all materials. To fulfil its mission IABSE organises conferences and publishes the quarterly journal Structural Engineering International (SEI), conference reports, as well as books reflecting the work of its technical groups. It creates technical groups, as required by needs and technological progress, offers activities within National Groups of IABSE, supports Young Engineers with a programme and presents annual awards for outstanding achievements in research and practice that advance the profession of structural engineering.

IABSE Secretariat

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Conference Secretariat

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See you in SEOUL, 2020 !