

IALCCE 2020

The Seventh International Symposium on Life-Cycle Civil Engineering

27-30 October 2020, Shanghai, China



IALCCE 2020

*The Seventh International Symposium on
Life-Cycle Civil Engineering*

Nowadays, people have realized the importance of creating a sustainable society to avoid or alleviate problems like climate change, environmental pollution or economic crisis. Therefore, the life-cycle thinking of civil engineering is discussed more and more frequently.

Civil engineering is mainly focused on design and construction during the past days, but contemporary society needs civil engineering to pay attention to more aspects, such as inspection, monitoring, repair, maintenance and optimal management of structures and infrastructures, in order to effectively manage the function of these structures throughout their lifetime. Considering these needs, the objective of the International Association for Life-Cycle Civil Engineering (IALCCE) is to promote international cooperation in this field of expertise to enhance the welfare of society. Its mission is to become the premier international organization for the advancement of the life-cycle civil engineering.

Previous editions of the bi-annual IALCCE symposium took place in Varenna, Lake Como (2008), Taipei (2010), Vienna (2012), Tokyo (2014), Delft (2016) and Ghent (2018). The Seventh International Symposium on Life Cycle Civil Engineering (IALCCE 2020) will be organized on behalf of IALCCE under the auspices of Tongji University in Shanghai (China) on October 27-30, 2020.

All major aspects of life-cycle engineering are addressed, with special focus on structural damage processes, life-cycle design, inspection, monitoring, assessment, maintenance and rehabilitation, life-cycle cost of structures and infrastructures, life-cycle performance of special structures, and life-cycle oriented computational tools.

We are looking forward to welcome all of you in Shanghai in 2020!

Special Session SS-7:

Time-Dependent Reliability Assessment of Deteriorating Infrastructure Systems

Objective of the Special Session SS-7



Sopokhem Lim
Waseda University
Tokyo, Japan



Mitsuyoshi Akiyama
Waseda University
Tokyo, Japan



Dan M. Frangopol
Lehigh University
Bethlehem, USA



Thanapol Yanweerasak
Kasetsart University
Bangkok, Thailand



You Dong
The Hong Kong Polytechnic University
Hong Kong, China

Civil infrastructure systems deteriorate due to aging, mechanical stressors, and harsh marine environment, among others. Major unplanned repairs or replacement of deteriorated infrastructures represent a significant economic loss. Our better knowledge on time-dependent reliability assessment of deteriorating structures is therefore indispensable for important decisions on repair and maintenance plans to preserve their structural performance and safety over certain thresholds and to prevent great economic loss.

This special session aims to invite papers dealing with the time-dependent reliability assessment of deteriorating structures under uncertainties associated with multiple hazards, by utilizing updated information from experiment, inspection, or monitoring methods.