

IALCCE 2020

The Seventh International Symposium on Life-Cycle Civil Engineering

27-30 October 2020, Shanghai, China



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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-1:

Design, Disaster Prevention and Repair for the Life-Cycle of Rapid Construction Bridges

Objective of the Special Session SS-1



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Compared with the traditional cast-in-place construction technology with scaffolding, Accelerated Bridge Construction (ABC) has the advantages of small traffic impact, low total cost, high construction safety and quality, and can effectively realize the industrialization of construction. However, at present, the research on the life-cycle design performance, theoretical methods, disaster prevention and reduction of the bridges built by ABC as well as the replacement and restoration of old bridges is not mature, especially in the developing countries. ABC technology and bridge performance built by ABC are still in the exploration stage.

This session will focus on the state-of-the-art and practices of ABC technology, the innovative Accelerated Bridge Construction (ABC) methods, the structural performance, theoretical methods of design, disaster prevention and reduction, and relative guides or standards etc for the life-cycle of rapid construction bridges.