

# 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-5:

Advances in Understanding Transport-Related Phenomena in  
Cement-Based Materials

### Objective of the Special Session SS-5



**Zhidong Zhang**  
ETH Zürich  
Zürich, Switzerland



**Chunsheng Zhou**  
Harbin Institute of  
Technology  
Harbin, China



**Ueli Angst**  
ETH Zürich  
Zürich, Switzerland

Durability of reinforced concrete structures is closely related to transport-related phenomena, such as moisture, gases, ions, reactive transport, and heat transfer. Over recent years, the understanding of transport phenomena, in terms of experimental techniques, modelling methods, and fundamental theories, is largely improved. Therefore, this session will provide a forum for experts and researchers who work on transport-related phenomena to discuss recent developments in the following topics, but not limited to:

- New findings from experiments
- Advanced modelling methods
- Development in fundamental theories of transport phenomena
- Recent application of transport theory in engineering