



IALCCE 2018

October 28–31, 2018

Special Session SS-13: Life-Cycle of slope and river bank protection system considering soil bioengineering as well as conventional structures

IALCCE and IALCCE 2018

The IALCCE 2018 symposium is organized on behalf of the International Association for Life-Cycle Civil Engineering (IALCCE) under the auspices of Ghent University on 28-31 October 2018 in Ghent, Belgium. The IALCCE activities encompass all aspects of life-cycle assessment, design, maintenance, rehabilitation, and monitoring of civil engineering systems. The IALCCE 2018 symposium provides an opportunity for academics, engineers, consultants, architects, constructors and decision makers from around the world to keep themselves up to date with the latest developments in the field of life-cycle civil engineering. Within this symposium several Special Sessions and Mini-Symposia are organized.

Objective of the Special Session SS-13

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Soil bioengineering pursues the same objectives as conventional civil engineering structures. A really essential distinction is the use of different construction materials. Soil bioengineering solutions are based on the application of living plants and other additives as the construction materials wood and stone to achieve technical as well as ecological oriented and natural landscape solutions. The Life-Cycle of this kind of “living” engineering structures is dominated by the dynamic development and capacity of the plants and material properties of the additives. The efficiency of a soil bioengineering system has to be evaluated periodically. All these facts have to be taken into account from an engineering point of view related to process planning, design, construction, operation, monitoring and maintenance of soil bioengineering systems.

This Special Session provides a forum to present and discuss relevant issues for soil bioengineering structures with the specific focus of Life-Cycle assessment:

- Development of “living engineering structures”
- Life-Cycle assessment of soil bioengineering structures
- Environmental and economic aspects associated with the Life-Cycle of soil bioengineering systems
- Operation, maintenance and best practice
- Management of soil bioengineering structures
- Impact of external hazards on soil bioengineering systems
- Conventional versus soil bioengineering materials and structures



Submitting abstracts

Authors willing to present a paper at the symposium are kindly invited to submit a 300 word abstract in accordance with the themes and topics **before June 30** through the online submission system available on the symposium website (www.ialcce2018.org). Please indicate in the submission system if you would like to submit an abstract to this particular Special Session.