



# IALCCE 2012

Third International Symposium  
on Life-Cycle Civil Engineering

3 - 6 October 2012  
Hofburg Palace, Vienna, Austria

## IALCCE

The Symposium is organized on behalf of International Association for Life-Cycle Civil Engineering (IALCCE) under the auspices of the University of Natural Resources and Life Sciences. IALCCE ([www.ialcce.org](http://www.ialcce.org)) is a young Association founded in October 2006. Its activities encompass all aspects of life-cycle assessment, design, maintenance, rehabilitation, and monitoring of civil engineering systems.

The International Symposium on Life-Cycle Civil Engineering is a biennial event. In 2012, Austria will host the Symposium for the first time. The IALCCE 2012 Symposium provides an opportunity for academics, engineers, architects, and builders from Austria, Europe, and around the world to keep themselves up to date with latest developments in the field of life-cycle civil engineering.

## Special - Sessions SS 4-3:

### Increasing Durability of Concrete Structures

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The durability of concrete structures is an important issue in contemporary design. An application of advanced materials and suitable technological processes may significantly contribute to the improvement of the quality of concrete structures and to their durability. Increasing strength of concrete has an influence on its resistance to environmental effects.

Higher quality of materials, correct reinforcement and suitable technology of production lead to reduction of cracking. The working joints and its positions significantly influence the performance of watertight structures and of dynamically loaded structures.

The detailing of reinforcement belongs to the significant factors influencing cracking and durability. Fibre reinforcement (steel and non-ferrous) may contribute to improvement of performance of concrete in different ways.

The session will be focused of the following topics:

1. Application of HSC and UHPC
2. Application of FRC
3. Casting process on the site
4. Influence of hydration heat
5. Cracking of concrete structures