



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) 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.

Mini - Symposium MS 4-1:

Seismic System Identification for Life-Time-Prediction

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The behaviour of masonry under seismic loads has recently become of great interest. New methods for design and analysis, as well as for resistance, have been developed. The main focus has been on experimental and analytical research for the development of new brick material and mortar. With the introduction of Eurocode 8, the behaviour of old masonry structures under seismic load became an interesting topic for engineers. In particular, the available resistance capacity of existing masonry structures is highly relevant to the restructuring of existing buildings.

SEISMID is a research project funded by the Austrian Research Promotion Agency with partners from the US, Japan, Germany and Austria. The main focus of the projects is on the seismic assessment of old masonry buildings, especially the so called "Wiener Gründerzeithäuser". Topics covered by the project:

- (a) Seismic zonation by the use of satellite images
- (b) Seismic microzonation based on field measurements
- (c) Laboratory testing of typical Vienna masonry
- (d) Modelling of the seismic behaviour of Vienna masonry
- (e) Assessment of Masonry buildings based on measurements

The research project was finished by the end of 2010. The mini-symposium intends to give an overview on the research results and to propose an applicable approach for the seismic assessment of old masonry buildings.