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**Structural Studies, Repairs
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Published by

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Ashurst Lodge, Ashurst, Southampton, SO40 7AA, UK

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25 Bridge Street, Billerica, MA 01821, USA

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<http://www.witpress.com>

British Library Cataloguing-in-Publication Data

A Catalogue record for this book is available
from the British Library

ISBN: 978-1-84564-196-2

ISSN: 1746-4498 (print)

ISSN: 1743-3509 (on-line)

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Preface

This book contains most of the papers presented at the 11th International Conference on Structural Repairs and Maintenance of Heritage Architecture held in Tallinn in 2009 (STREMAH/09). The STREMAH Conference series started in 1989 at Florence and since then, they have been held in a series of locations all over the world, including Seville (1991), Bath (1993), Crete (1995), San Sebastian (1997), Dresden (1999), Bologna (2001), Halkidiki (2003), Malta (2005), and Prague (2007).

STREMAH is now well established and recognised as the best meeting of its type, attracting specialists from all over the world. Over the years, the Conference has continued to evolve and grow as the importance of the architectural heritage is becoming increasingly appreciated.

This series of conferences represents an important contribution to the state of the art in this field as each meeting gathers the most recent advances in research and up to date studies of heritage buildings to make them accessible to a wide circle of scholars and professionals.

Since 1993, all the papers in the series are also archived in electronic form in the Web Library of Wessex Institute (library.witpress.com) where the contributions are rapidly and easily available to the international community.

This volume of STREMAH covers a wide range of topics, with the papers divided into the following sections:

- Heritage architecture and historical aspects
- Structural issues
- Material characterisation
- Simulation and modelling
- Surveying and monitoring

- Assessment and retrofitting
- Seismic behaviour and vibrations
- Reuse of heritage buildings
- Modern (19th/20th Century) heritage

The Editor is grateful to the authors for their excellent papers and to the members of the International Scientific Advisory Committee and other colleagues who helped in their selection.

The Editor
Tallinn, 2009

Luigia Binda



This volume of STREMAH is dedicated to Professor Luigia Binda from the Politecnico di Milano. Luigia is an international authority on masonry research. Over the last 25 years, she has created a research group at the Department of Structural Engineering working on Architectural Heritage.

Her area of expertise in the field of preservation and structural restoration of historic buildings includes in-situ and laboratory experimental investigation for the evaluation of the mechanical and physical damage of masonry structures, limit analysis of masonry structures, effects of the chemical–physical alteration in the mechanical behaviour and in the durability of masonry, long term behaviour of masonry under constant and cyclic loads, and study of the seismic/vulnerability of historic masonry buildings.

Her work is internationally renown; she has participated in consulting work all over the world and organized post-graduate courses and PhD programmes in structural restoration of masonry structures.

Professor Binda contributed to the development of the European Standards and worked in close association with RILEM as well as other international institutions. Among her many awards and recognitions, she received in 2007 the Wessex Institute of Technology’s Medal for outstanding scientific work during the STREMAH (Structural Repairs and Maintenance of Heritage Architecture) Conference held in Prague. In 2008, WIT Press – the publishing arm of the Institute – published Luigia’s very successful book “Learning from Failure” which presented the State of the Art in Heritage Masonry Research and Applications.

WIT is proud to have been associated with Luigia for a long time and hope that this collaboration will continue to grow.

Carlos A. Brebbia
Director
Wessex Institute of Technology, 2009

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