Preface

This volume is a collection of edited scientific papers presented at the International Seminar on *Mechanics of Masonry Structures Strengthened with Composites Materials* (**MuRiCo4**) held in Ravenna (September 9-11, 2014).

Previous meetings, organised by AICO (Italian Association of Composites in Constructions, established in 1995), were held at University IUAV of Venice (years 2000, 2004, 2009).

This International Seminar, MuRiCo4, was organized by AICO under patronage and sponsorship of DICAM department of University of Bologna and patronage of University IUAV of Venice. It is attended by Researches from several countries. It represents a forum to promote and exchange latest theoretical, computational and experimental research work finalised to the design of structural strengthening of historic masonry constructions.

The MuRiCo4 covers a wide range of topics:

- Analysis of Mechanics of Masonry and Models;
- Testing and Computational Modelling of Masonry macro-elements under static and dynamic loadings;
- Performance of Strengthened Masonry with Composites (FRP, FRCM, TRM, SRG);
- Bond, Local Damage, Fatigue and Connections Performance in Masonry/Composites Coupling;
- Design Approaches and Inspection Programs of Masonry Structures strengthening;
- Durability, Health Monitoring (optic fibres ...), Maintenance and Repair strengthened Masonry;
- Advanced bio-composites and Nanotechnology for strengthening Historical Constructions
- Appropriate Composites Technique Evolution for Historical Constructions strengthening.
- Acceptance of Composites Technique Application for seismic protection of Monuments.
- Criticisms on Existing Guide Lines, Standards and Praxis Restoration Rules on Historical Masonry/Composites Coupling.

The Editors would like to thanks the members of Steering Committee, Professors A. Cecchi, J. Jasienko, G. Leoni, M. Savoia, F. Ubertini, and all the member of the Scientific Committee for their suggestions and help for the success of the seminar. Furthermore, we express our gratitude to the AICO promoting and organizing the seminar with cooperation of the affiliated industrial partners KERAKOLL-The GreenBuilding Company and Ruredil. A special thank to the Fondazione Flaminia of Ravenna for sponsorship and operative local support.

Finally we would like to thank all those who helped us to organise this scientific event, in particular Dr. Daniela Bufo from AICO that was with us the driving force of the meeting in Ravenna, a site of the Multi Campus at University of Bologna.

Editors

A. Di Tommaso, C. Gentilini and G. Castellazzi

ALMA MATER STUDIORUM University of Bologna, September 2014

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