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## Editorial

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**Biographical notes:** Giovanni Castellazzi is an Associate Professor of Mechanics of Solids and Structures, Department of Civil, Chemical, Environmental, and Materials Engineering at the University of Bologna and the Deputy President of the Italian Association of Composites for Civil Engineering applications. He was a Post-doctoral Fellow at the University of California San Diego (UCSD) and he completed his PhD in Structural Mechanics at the University of Bologna. His research interests lie broadly in the field of computational mechanics but are primarily focused on the area of masonry structures: from coupled models for the study of mechanical degradation of porous materials to computational tools for the seismic assessment of masonry structures.

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Historic and architectural heritage in many countries worldwide mainly consists in masonry buildings. As it is well known, many of these buildings are vulnerable to natural disasters such as earthquakes, floods and landslides. For this reason, there is an urgent need to upgrade and improve historic building structural performance as well as safety.

Although extensive research has been devoted to address such aspects, several issues regarding proper theoretical, experimental and computational approaches are still persisting.

The aim of the special issue is to discuss open, challenges and achievements in analytical, experimental and numerical modelling as well as in the fields of NDT and SHM applied to historic masonry structures.

The special issue is divided into two parts.

This second part of the special issue *Recent Trends in Historic Masonry Building Assessment: Principles, Models, Methods, and Practices* collects eight papers.

The papers ‘Experimental investigation of the horizontal load orientation on masonry corner failure’ by Colombo et al., and ‘Consolidation of historic buildings damaged by settlements with composite materials’ by Fofiu et al. deal with experimental testing on masonry structures.

The papers ‘Motion magnification technique for the monitoring of masonry structures’ by Modesti and Gentilini and ‘The detect-ageing prototype building, a benchmark for structural health monitoring of masonry structures’ by Virgulito et al. deal with SHM approaches applied to masonry structures.

The papers ‘Garisenda tower in Bologna (Italy): structural assessment and numerical simulation’ by Di Tommaso et al., ‘FE modelling for the nonlinear dynamics of a historic tower in Central Italy’ by Ferrante et al., ‘Sensitivity to uncertainties in the dynamic response of masonry arches’ by Lucchesi et al. and ‘Damage assessment of Apennine masonry churches severely damaged during the 2016 Central Italy Seismic Sequence’ by Giordano et al. are concerned with numerical and theoretical modelling of masonry structures.