

## Preface by the editors

The SUBLime Conference - Towards the next generation of sustainable masonry systems: Mortars, renders, plasters and other challenges – is a forum to discuss, exchange ideas and gain insights into challenges, innovations and new trends in masonry.

This Conference is held within the scope of the SUBLime Network, a Marie Skłodowska-Curie Action European Innovative Training Network. SUBLime (Sustainable Building Lime Applications via Circular Economy and Biomimetic Approaches) trained researchers in multiple scientific and engineering fields for a better understanding and development of sustainable innovation solutions for mortars, renders and plasters in new construction and conservation of the built heritage. This conference is a key platform for dissemination of the SUBLime's results, together with an opportunity to discuss and share research on sustainable masonry systems and other challenges.

The SUBLime Network contributes with original research in areas that have been relatively unexplored in the context of lime-based materials. These include microstructural and chemical characterization, test methods for delayed effects and durability, simulation of microstructural development, and upscaling towards meso- and macro-scales. The Network also aims to deepen understanding of fundamental mechanisms such as creep and shrinkage, and to develop new functional materials that provide self-cleaning, self-healing, or other capabilities, like accelerated hardening. Innovations are geared towards achieving carbon neutrality or even negativity, aligning with EU objectives on environmental performance.

The scientific programme of the SUBLime Conference comprises four keynote lectures from internationally renowned researchers and is structured in several thematic sessions in different fields of research. The diverse range of topics covered in these proceedings reflect the interdisciplinary nature of the field, spanning advanced material technologies, structural optimization, environmental impact assessments, and real-world applications.

More than 140 participants from more than 30 different countries joined, making the SUBLime Conference a truly international event. An exciting program includes 120 contributions concerning a wide range of activities and research fields in masonry. This conference benefits immensely from joining young researchers with more senior academics and professionals, with PhD students representing 40% of participants, foreseeing a bright future for this community.

We warmly thank the contributors, authors, reviewers, speakers and the sponsors of the event and are sure that the conference offers fruitful discussions and a pleasant time in Funchal, Madeira.

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