

# Preface

In the golden September of 2025, two international academic events dedicated to the advancement of the built environment field—the 11th International Conference on Architecture, Materials and Construction (ICAMC 2025) and the 6th International Conference on Building Science, Technology and Sustainability (ICBSTS 2025)—concluded successfully at Meijo University, Japan, from September 3 to 5, 2025. Serving as a pivotal platform for pooling global wisdom in the fields of architecture, materials, and building science, this year’s conference attracted experts, scholars, researchers, and industry practitioners from over 16 countries and regions, including Japan, China, South Korea, Thailand, Portugal, Croatia, the United States, and the United Kingdom. Over the three-day agenda, it successfully forged a cross-regional and interdisciplinary bridge for academic exchange.

The integration of academic depth and breadth defined the distinct character of ICAMC 2025 and ICBSTS 2025. The conference carefully curated four Keynote speeches, featuring Prof. Qing Wang from Taishan University (China), Prof. Ariya Aruninta from Chulalongkorn University (Thailand), Prof. Paulo Mendonça from the University of Minho (Portugal), and Prof. Tomonori Sakoi from Shinshu University (Japan). These distinguished speakers shared groundbreaking research on frontier topics such as *Superhydrophobic Materials in Civil Engineering*, *Human-Clothing-Indoor Thermal Comfort Design*, *Biophilic Development & Nature-Based Solutions Link*, and *Portugal Outdoor Microclimate Simulation & Control*, offering attendees academic insights that combined theoretical rigor with practical value. Meanwhile, five thematic parallel sessions were set up to delve into key issues. Through oral presentations and poster displays, participants exchanged the latest research findings and practical experiences, sparking numerous forward-looking academic ideas.

This proceedings volume, as the core academic output of ICAMC and ICBSTS 2025, compiles high-quality research papers from the conference, covering diverse fields such as architecture, materials, and sustainable building. It represents both a systematic collation of the conference’s academic achievements and a concentrated showcase of the wisdom of global researchers. Here, we extend our sincere gratitude to all experts, presenters, and participants for their valuable insights contributing to academic exchange; we also thank Meijo University for providing an excellent platform and support for the conference, as well as the organizing team for their dedicated efforts. May this proceedings serve as an important reference for driving innovative development in the related fields, injecting new impetus into global industry progress. We look forward to reuniting with all colleagues at future events and embarking on a new journey of academic exploration together.

**Prof. Nuno Dinis Cortiços,**  
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