

Editorial

The PowerSkin conference series is a biennial event organised cooperatively between TU München, TU Darmstadt, and TU Delft, which is already in its third edition, having started in 2017.

The conference aims to address the role of building skins in accomplishing a carbon neutral building stock. The presented papers showcase recent scientific research and developments as well as projects related to building skins from the perspectives of material, technology, and design. Topics such as building operation, embodied energy, energy generation and storage in context of the envelope, energy, and environment are considered.

The building envelope largely determines the energetic performance of the building, plays a significant part in the embodied energy of construction activities, defines the indoor qualities for the user and – quite importantly – defines the appearance of the building in an urban content. So, being central to all these aspects, the building envelope is the focus of research & development, engineering, and design. This is the scope of the PowerSKIN conferences, bringing research, industry, and users together to share and discuss new knowledge in an interdisciplinary environment (albeit an online environment this time around).

The focus of the PowerSKIN Conference 2021 deals with the question of whether simplicity and robustness are in contradiction to good performance or whether they even complement each other. Hence the question *Simplicity vs. Performance?* is tackled throughout the conference from three points of view which define the thematic sessions of the Conference: Energy, Envelope, and Environment. This special issue of the Journal of Façade Design and Engineering dedicated to PowerSKIN 2021 showcases the most prominent and relevant papers of the conference, with the aim of enhancing their visibility for a larger audience.

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