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GLASS PERFORMANCE

Glass Structures & Engineering; themed issue: "Glass Performance"

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Just before the release of this themed issue on "Glass Performance", the Glass Structures & Engineering journal has been accepted for indexing in the Emerging Sources Citation Index (ESCI). This is an important step forward, as it signifies the importance of the journal and contributes to further establishing this journal. We trust that you will continue to support us in this way forward by submitting high quality papers, providing reviews and citing papers elsewhere, so that the journal will serve the glass engineering community to its greatest extent.

Glass and its performance are essential components of the Glass Structures & Engineering journal and form the core of this themed issue on "Glass Performance". Within this themed issue we have collected seven double-blind peer-reviewed papers that are addressing varying aspects of the performance of glass and affiliated materials in glass engineering.

Understanding the *performance of glass* is of key importance for glass engineering. Besides understanding the strength of glass upon first installation, it is equally important to understand how this is affected during its service life due to damage accumulation at the glass surface. In this respect, the first paper of this themed issue investigates the strength of naturally and artificially degraded glasses (Datsiou and Overend 2017). Also, related to the increasing demand for curved glass surfaces in contemporary architecture, it is important to understand the strength of curved glass as opposed to flat glass. The second paper of this themed issue addresses this aspect and investigates to what extent co-axial double-ring testing is applicable for strength testing of biaxially curved glass (Müller-Braun and Schneider 2017). The third paper of this themed issue provides a validation of an FE-model for estimating the remaining strain energy in fragments of fractured tempered glass (Nielsen and Bjarrum 2017). The presented method is of importance for a deeper understanding of tempered glass and is of relevance for glass forensics.

Understanding the *performance of polymer materials* that are often applied in conjunction with glass

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is mutually important for a proper design of glass structures. In this respect, the fourth and fifth papers of this themed issue provide parameter identification methods for material models to predict the performance of visco- and hyperelastic materials (Kraus et al. 2017) and calculation methods to determine the performance of structural silicone joints (Descamps et al. 2017).

Evidently, the *overall performance of glass structures* is strongly dependent on the structural performance of its constituent components and connections. In this respect, the last two papers of this themed issue provide experimental investigations into the structural performance of innovative glass solutions, such as bundled glass columns (Oikonomopoulou et al. 2017) and glass fins with embedded connections (Torres et al. 2017).

We would like to thank all authors for contributing to this themed issue and all reviewers for providing constructive feedback. Moreover, we would like to express our gratitude to Jorma Vitkala and Brown Onduso for supporting us in collecting suitable papers for this themed issue.

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