Editorial

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EDITORIAL

Editorial: Journal Impact Factor

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We, as the Editors-in-Chief, are proud to present this third issue of Glass Structures & Engineering in the eight volume (2023) and inform our readers and authors that the journal has achieved an impact factor. The impact factor, which is currently 1.9, is a further formal confirmation that the journal is well received and referenced. It also witnesses that Glass Structures & Engineering has now become a well-established source of information for the international glass community. The current issue continues our approach to merge science and technology and it contains eight papers discussing innovative aspects of glass and glass design.

The first paper provides the background of the conceptualisation of the Technical Specification CEN/TS 19100 part 1 to 4 and summarises some of the most important rules and the technical and scientific basis of the code. Also, the second article focuses on codes and specifications, which are important tools for designers. More specifically, it provides an overview of the new Technical Specification SIA 2057 Glass Structures in Switzerland, with focus on laminated safety glass design and post fracture limit state verification.

Due to the development of thinner and stronger glass, increasingly large deflections in bending strength tests are observed. Consequently, the third paper provides a discussion on the validity of the current EN1288-3 for cases with very large deflections in four point bending tests. Thinner glass in structures will unavoidably lead the thoughts of many designers towards stability issues, which is the topic of the next paper.

The methods for determination of buckling loads for structural elements made of elastic materials, such as monolithic glass, are well established both in academic literature and design practice. However, formulas for laminated glass are less known and the fourth paper presents strategies for determining the moment capacity of beams with laminated glass and continuous flexible buckling restraints such as structural silicone.

The fifth paper in this issue investigates the manufacturing and curing effects of adhesives used for structural glazing and suggests statistically validated strength and stiffness parameters representing the load-bearing behaviour, considering the adhesive's curing state and the joint's nominal stress.

Failure prediction of glass is, and most likely always will be, a very important topic for the glass community.

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The next paper advances a procedure to calculate the flaw parameters used in the two-parameter form of the glass failure prediction model for holes based on the well-known maximum likelihood estimator method for data evaluated from destructive testing. Additionally, a three-parameter model, including residual stresses, for heat strengthened glass is proposed.

The last two papers of this issue consider impact loading of laminated glass. The seventh paper applies stereo digital image correlation using high-speed cameras to study fracturing of the glass. Finally, the last paper studies the characteristic fracture patterns in laminated windshields to assist in forensic work.

We hope you enjoy reading this issue of Glass Structures & Engineering.