AALBORG UNIVERSITY

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Glasses across chemistries and length scales

Invited Talk

Smedskjær, Morten Mattrup

[Link to publication from Aalborg University](#)

Glasses across chemistries and length scales

Morten M. Smedskjær, Department of Chemistry and Bioscience, Aalborg University

Glasses are non-equilibrium materials that exhibit a glass transition and have a non-crystalline structure. Glass materials can therefore be found across a variety of chemical compositions, from oxides to metal-organic frameworks. They feature heterogeneity and exhibit varying degree of structural disorder on different length scales, which has profound consequences for their properties. In this talk, I will discuss how we attempt to decipher their structure-property relations using topological data analysis, constraint theory and machine learning methods. I will then highlight how this knowledge can be used to design more fracture-resistant glasses.