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MECHANICAL AND PHYSICAL PROPERTIES OF CELLULAR/POROUS/FIBROUS MATERIALS

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ABSTRACT

Cellular, porous and fibrous materials are widely used in engineering, bioscience and medical treatment. We aim to organise a mini-session on the modelling and characterisaition of the mechanical and physical properties of cellular/porous/fibrous materials with length-scales ranging from macro down to the micro and nano scales. The presentation topics of this mini-session will include elastic properties, yield behaviour and the large deformation non-linear elastic or elasto-plastic behaviour. Geometrical and physical properties of these materials will also be considered. The objective of this mini-session is to bring the relevant researchers together to exchange their research ideas and results, and to establish research collaboration. Hopefully, this mini-session could attract more than 10 presentations from the worldwide community.

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