

Contact Mechanics and Tribology

Scientific area: Computational Solids And Structural Mechanics

Contact mechanics and tribological interactions play a crucial role in numerous engineering and natural systems from tyre-road interaction to earthquakes. During recent years, a considerable progress was achieved in computational aspects of the contact mechanics and tribology and it remains a growing and diversifying field of research. At the same time, the research topic goes far beyond applied mathematics and numerical methods and attracts engineers and researchers from physics, solid mechanics, mechanical engineering, chemistry and material sciences working at various scales from atomistic to structural one. The topics of interest of this minisymposium include but are not limited to: contact interaction between solids, friction, wear, adhesion, lubrication, heat and electric charge exchange through contact interfaces, biomechanical and geophysical contact interfaces, all of which could be studied from atomical up to geological scales within a multiscale and/or multiphysical context.

This minisymposium aims to provide a broad forum for young researchers working on problems related to contact mechanics and tribology from different perspectives of computational science and engineering. It will allow a discussion of the most recent advances and perspectives for the future development of this highly multidisciplinary topic.

Organizers:

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