



Tribology and Orthopaedics

Guest Editor:

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Deadline for manuscript submissions:

closed (28 February 2021)

Message from the Guest Editor

Nowadays, aspects of tribology concerned with biological systems (biotribology) and tribological properties of implantable biomaterials are extremely important in orthopaedics research.

Currently, joint replacements are expected to work for 10–15 years; however, with increasing life expectancy, patients living more active lives, and the greater demand for all types of joint replacements, it is necessary to improve their function to provide patients with a better quality of life.

This Special Issue aims to emphasise the profound interaction between tribology and orthopaedics, promote cooperation between researchers from different scientific areas, and collect manuscripts on, but not limited to, the following themes:

- synovial and cartilaginous natural joints: contact mechanics and lubrication;
- artificial tissue replacements;
- prosthesis and implants;
- new biomaterials in orthopaedics;
- surface modification for orthopaedic implant-bearing surfaces;
- in-vitro and in-silico (bio)tribological and (bio)tribocorrosion models of artificial implants; and
- biomechanical modelling of the human body for determining artificial joint load conditions.

