Special Issue

Elastohydrodynamic Lubrication

Message from the Guest Editor

It has been nearly 80 years since the first research work was published on elastohydrodynamic lubrication (EHL). Thereafter, extensive research work has broadened our EHL knowledge utilising both numerical modelling methods and advancing experimental techniques. EHL is a lubrication regime generally happens between non-conformal surfaces, in which applied load on a small contact area results in very high local pressure typically ranging from 1 to 3 GPa. This high contact pressure leads to an increase in lubricant viscosity and elastic deformation of surfaces. Such phenomenon can be widely observed in lubricated machine components, such as rolling bearing, gears, cams and tappets, vane pumps, etc. It, therefore, requires better understanding of EHL to optimize lubricant formulation, increase machine efficiency and durability, and improve machine performance. This Special Issue welcomes researchers to present their recent progress and insights into the field of EHL and deliver guidance to both academia and industries.

Guest Editor

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Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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