

Lyon-Valpré, 3-6 September 2017

Tribomotion, where Performance and Motion meet Friction

Call for abstracts

Tribology is the study of the science and engineering of interacting surfaces in relative motion. While many tribology conferences have addressed various aspects of surfaces, this Leeds-Lyon Symposium will focus on the relationship between motion and friction - Tribology enables motion and how to improve the system's performance through tribological considerations. The velocity in tribological contacts can vary from barely perceptible (as in some tectonic flows, for example) to supersonic (as in some high speed foil bearings). The motion of surfaces can vary in kinematic complexity, from simple steady sliding to movements that are highly variable in time and direction. Examples of areas of interest include, but are not limited to:

- Sports and leisure activities, areas in which motion is a major parameter,
- Mechanical transmissions, where complex geometry or kinematics superpose,
- Biomechanical applications, such as the human joints or the eyelid.

Indeed, the performance of any item suggested above is directly related to friction. Depending on the desired outcome, the optimal friction may be either maximum or minimum. These topics are exceedingly broad in terms of the application as well as the tribological mechanisms taking place (mechanics, physics, chemistry, materials science, etc.).

Thus the Symposium will aim to gather researchers from very diverse scientific and technological backgrounds to share expertise and discuss on how to apply their skills to address important and interesting problems of the present and future.

Those wishing to participate at the Leeds-Lyon Symposium on Tribology 2017 are invited to submit their abstract, *by the 24th of February at the latest* through the following website http://leeds-lyon.sciencesconf.org/, and in accordance to the proposed topics:

- Energy and friction in sport and leisure activities
- Motion and performance of everyday life objects
- Smart interfaces and adaptive tribo-systems
- Performance of viscoelastic interfaces
- Friction and energy saving in machine elements
- Tribological performance evaluation and rating
- Dissipative processes in dynamic biotribology

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