

Call for papers “**tribo-lyon2013**”
a Joint Event in Lyon - France, prior to WTC'2013 Torino, Italy
<http://tribo-lyon2013.sciencesconf.org>

With the opportunity to organize two important tribology-related events, **40th Leeds-Lyon Symposium on Tribology** and **Tribochemistry Forum 2013**, prior to the WTC'2013 Torino, the organizers have decided to merge them into a Joint Event to be held at Lyon - France, from Wednesday 4th to Friday 6th September 2013. The Conference Organizing Committee is excited to announce the opening of the **tribo-lyon2013** call for papers.

40th Leeds-Lyon Symposium on Tribology

Leeds-Lyon at 40: is the past still present?

Since the Leeds-Lyon Symposium on Tribology was first conceived by Professors Dowson and Godet in 1973, the participants have tackled the toughest problems in our field – indeed some of the most difficult problems in science and technology. Among the earliest conference themes proposed in Lyon were as follows: Super Laminar Flow in Bearings, Surface Roughness Effects in Lubrication, Thermal Effects in Tribology, The Running-in Process in Tribology, Mechanisms and Surface Distress ...

There have been notable successes and failures emerging from these topics. Since 1973, tribology can claim credit for such triumphs as extended trouble-free automotive life, previously unimaginable levels of information storage, and prosthetic joint replacement to improve the quality of life of an aging population. On the other hand, the fundamental origins of friction and wear in most applications remain a mystery. **The 40th Leeds-Lyon anniversary** seems like an appropriate time for a major retrospective. Each of these topics still has relevance. Thus we welcome submissions on the vast array of previous Symposium subjects and particularly papers which can place current research in historical perspective, according to the topics below (**T1 to T4**).

Tribochemistry Forum 2013

Exploring tribochemical processes through computer simulation and/or advanced experiments

Improving the performance of increasingly severe sliding contacts is an important technological challenge, impacting economic and environmental issues. Regimes like mixed lubrication, boundary lubrication or solid lubrication are thus more frequently encountered, causing tribologically-induced chemical changes of rubbing surfaces. **Tribochemistry Forum 2013** aims at fostering exchange and discussion for improving the knowledge and the understanding, down to the nanometer scale, of such tribochemical processes and their consequences on tribological performance. The conference will address issues related to the role of lubricant additives, nanoparticles, coatings, and related topics. Contributions are expected to promote innovative experimental and/or numerical approaches (topics **T5, T6**).

Those wishing to attend **tribo-lyon2013** are invited to contact us at an early stage. The offer of paper should include the proposed title, names of authors, and a synopsis (not exceeding one A4 page). Please submit through the following website in accordance to the proposed topics:

- T1- Extending the limits of lubrication**, e.g., granular lubrication, non linearities, free surfaces, boundary settings
- T2- Surface roughness effects**, e.g., wettability, numerical treatment, friction induced vibrations
- T3- Thermal effects in tribology**, e.g., high temperature interfaces, multiphase flow, rolling-sliding contacts
- T4- Running-in and surface distress**, e.g., surface damage, inspection & prevention, material transformation
- T5- Advanced tribometry**, e.g., in-situ analyses, experimental modeling, gas phase lubrication
- T6- Computer simulation**, e.g., molecular dynamics, quantum chemistry

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before Friday 1st March 2013 at the latest