



Tribo-System Design and Analysis

Guest Editors:

Prof. Dr. Zhinan Zhang

School of Mechanical
Engineering, Shanghai Jiao Tong
University, Shanghai 200240,
China

Dr. Shuaihang Pan

Department of Mechanical and
Aerospace Engineering,
University of California-Los
Angeles, Los Angeles, CA 90095,
USA

Dr. Zhiguo Xing

National Key Lab for
Remanufacturing, Army Academy
of Armored Forces, Beijing 10072,
China

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Message from the Guest Editors

Dear Colleagues,

Current development to reduce the failure and risk induced by tribological processes and maximize the applications of tribo-designs requires a systematic measurement and investigation, a promoted performance of current and novel tribo-systems, and a comprehensive integration of tribological theories, simulation, experiments, and analytical approaches and methodology.

The scope of this Special Issue will serve as a forum for papers in the following concepts:

1. Novel tribometers for performance measurement of tribo-systems both ex situ and in situ.
2. The improvement of current tribo-systems and development of novel tribo-systems facing extreme conditions (e.g., ultra-small scale, high temperature, high radiation, etc.).
3. Tribo-informatics approach in tribology system design and analysis, e.g., machine learning approach in wear prediction, data-driven approach for mechanism identification.
4. Computer modelling and simulation (particularly new algorithm) to accurately reproduce and predict the behaviour and processes in tribo-systems.
5. Other new theory, methods and tools integrated for tribo-system design and development.



Editors-in-Chief

Prof. Dr. Wei Pan

State Key Laboratory of New
Ceramics and Fine Processing,
School of Materials Science &
Engineering, Tsinghua University,
Beijing 100084, China

Dr. Emerson Coy

NanoBioMedical Centre, Adam
Mickiewicz University in Poznań,
ul. Wszechnicy Piastowskiej 3, 61-
614 Poznań, Poland

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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Coatings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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