

# Special Issue

## Tribology of Space Mechanisms

### Message from the Guest Editor

From the very beginning of space exploration, “space tribology” has been a specific field of competences in its own right. Over the last 70 years, researchers and engineers have developed a keen understanding of the fact that tribology in space is a real challenge. This Special Issue aims to promote the current advances and future trends in the field of space tribology, which is not limited to vacuum tribology. Papers dealing with both fundamental and application-driven studies of lubricants to meet the challenge of lubricating space mechanisms are welcome. Lubricants that are of interest in this Special Issue include but are not limited to solid lubricants (bulk, coatings, composites), fluid lubricants, and greases. Moreover, theoretical and experimental work are also of interest. Researchers working in space tribology and related fields are gratefully invited to submit their paper. Both academic and industrial contributions are welcome. Principal topics include, but are not limited to:

- Tribology;
- Space mechanism;
- Fluid lubricants;
- Grease;
- Dry lubricants;
- Vacuum;

---

### Guest Editor

Dr. Guillaume Colas

Institut Femto-st, CNRS UMR 6174, Department of Applied Mechanics,  
24 rue de l'Épitaphe, 25030 Besançon, France

---

### Deadline for manuscript submissions

closed (28 February 2020)



## Lubricants

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.9  
CiteScore 4.5



[mdpi.com/si/26644](https://mdpi.com/si/26644)

*Lubricants*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[lubricants@mdpi.com](mailto:lubricants@mdpi.com)

[mdpi.com/journal/  
lubricants](https://mdpi.com/journal/lubricants)





# Lubricants

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.9  
CiteScore 4.5



[mdpi.com/journal/  
lubricants](https://mdpi.com/journal/lubricants)



## About the Journal

### Message from the Editor-in-Chief

Friction, wear, and lubrication are tribological phenomena that govern the behavior of interacting surfaces in a wide range of machine components. Understanding the physical and chemical nature of these phenomena is critical to achieving long component lifetime and economical operation. Research in the field of tribology is highly interdisciplinary, and encompasses the fields of physics, chemistry, engineering, and mathematical modeling. *Lubricants* invites contributions on new advances in all areas of tribology for publication as peer-reviewed research articles, reviews of current research, letters, and communications. We are committed to providing timely reviews of all articles submitted. Please consider sharing your work with the scientific community through publication in *Lubricants*.

---

### Editor-in-Chief

Prof. Dr. Homer Rahnejat  
School of Engineering, University of Lancashire, Preston PR1 2HE, UK

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Mechanical Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).