



MINNEAPOLIS

78th ANNUAL MEETING & EXHIBITION

May 19-23, 2024 | Minneapolis, Minnesota | Minneapolis Convention Center

**Society of Tribologists and Lubrication Engineers (STLE)**

**78<sup>th</sup> Annual Meeting & Exhibition**

<https://www.stle.org/annualmeeting>

*19<sup>th</sup>-23<sup>rd</sup> May 2024, Minneapolis Convention Center,  
Minneapolis, Minnesota, USA*

Dear Friends and Colleagues,

The Biotribology technical committee invites you to present your research in the **Biotribology** session to be held at the 78<sup>th</sup> Annual STLE Meeting and Exhibition in Minneapolis, Minnesota, US). *The session focuses on fundamental and applied aspects of tribology in living organisms (human, animals, plants) and interfaces between biological, natural and artificial systems*, covering a multi-disciplinary range of topics. Presentations will be either 40 minutes or 20 minutes, including discussion. Authors can indicate their preference during abstract submission (although a 40-minute slot cannot be guaranteed).

Biotribology topics include, but are not limited to:

- Natural joints and ligaments
- Artificial tissue replacements, prostheses and implants
- Tribology of metals, ceramics, soft matter, polymers, and composites for biological applications
- Biomimetics
- Drug delivery: Oral dispersive medicines; injections: tissue-needle interaction.
- Ocular and skin tribology
- Haptics and personal care
- Oral processing and dental tribology
- Sports Tribology: Sports surfaces; equipment grip, snow and ice sports, low-friction design.
- Biolubricants
- Tribology of natural phenomena: Earthquakes; avalanches; landslip

Submission deadline for abstracts is **October 2<sup>nd</sup>, 2024**. To submit an abstract, please visit <https://stle2024.abstractcentral.com/> and select the “Biotribology” topic during submission.

**Biotribology will participate in a joint session** “Tribology of Biomaterials” in conjunction with the Materials Tribology technical committee. Please see the call for papers included below.

For all questions on the Biotribology session, please contact  
Meagan B Elinski at [elinski@hope.edu](mailto:elinski@hope.edu)

Sincerely yours,

Meagan B Elinski, Paper Solicitation Chair (PSC)

Quentin Allen, Vice Paper Solicitation Chair

Max Marian, Vice Paper Solicitation Chair

Md. Mahmudul Hasan, Secretary

Marc Masen, Vice Chair

Angela Pitenis, Chair

## **Joint Session on Tribology of Biomaterials**

The Biotribology and Materials Tribology Technical Committees invite you and your colleagues to submit abstracts for the upcoming sessions at the 78<sup>th</sup> Annual STLE Meeting and Exhibition at the Minneapolis Convention Center in Minneapolis, Minnesota (USA). *The session focuses on the tribology of biomaterials, either natural or synthetic.* Submissions may include experiments, simulation, and/or theory. Presentations will be either 40 minutes or 20 minutes, including Q&A. Authors will have the opportunity to request either a 40 minute or 20 minute time slot during abstract submission. Specific topics include, but are not limited to the following:

- Structure-property relationships of biocompatible materials used in various biological applications, including but not limited to:
  - articulating joint biomaterials
  - dental biomaterials
  - ocular biomaterials
- Tribology of biomimicking synthetic surfaces
- Tribology of bio-hybrid materials and systems
- Relationships between the biological environment and the tribological behavior of biomaterials
- Simulations and modeling of biomaterials tribology at multiple length scales

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