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DESCRIPTION

Biotribology is the science of friction, lubrication and wear when applied to biological systems or natural phenomena. It is a diverse and multidisciplinary field which impacts all aspects of our daily life from prosthetic implants to personal care products and ice skating. The journal provides an international, peer-reviewed forum for this important, exciting and rapidly expanding field. Original research papers, critical review articles and case studies are solicited from scientists, engineers and clinicians working in the field. Subject areas include, but are not limited to, the following topics:

- **Natural joints and ligaments:** Synovial and cartilaginous joints; function, damage and failure
- **Artificial tissue replacements:** Bio-scaffolds, hydrogels, skin, dental, bone, meniscus and tendons
- **Prosthesis and implants:** Articular joints, catheters, heart pumps, stents
- **Biomimetics:** Bio-inspired materials, surfaces and lubricants
- **Locomotion:** human and animal; slip and accidents; pavement surface design
- **Drug delivery:** Oral dispersive medicines; injections: tissue-needle interaction
- **Ocular tribology:** Ocular surfaces, contact lenses, tear lubrication
- **Skin tribology:** Damage and blistering mechanisms, bedsores, sweat lubrication
- **Haptics:** Tactile perception and surface texture, ergonomics
- **Personal care:** Skin and hair products, cosmetics, exfoliants
- **Oral processing:** Foodstuffs and beverages, mouth feel and texture perception
- **Dental tribology:** Tooth and implant wear, implant anchoring, tribo-corrosion and fracture
- **Biotribology for industry:** Test methods, correlation with customer experience, products and packaging
- **Sports Tribology:** Sports surfaces; equipment grip, snow and ice sports, low-friction design
- **Tribology of natural phenomena:** Earthquakes; avalanches; landslip

Biotribology embraces the highest standards of work ethics and expects authors to provide approval letters for both human subject and animal research. Financial relationships that may have influenced or biased the study design or analysis must be disclosed.

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INSPEC

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Original research papers, critical review articles and case studies will be solicited from scientists, engineers and clinicians working in the field. The topic of research should include a biological surface as part of the interface (e.g. articular cartilage, skin or dental enamel) or have a direct impact on biological function (e.g. prosthetic joints, dental implants). The scope of the journal will include all aspects of the tribology of bio-interfaces. Subject areas include: Natural joints: Synovial joints, articular cartilage, meniscus, mechanically and biochemically induced damage Artificial articular joints: Partial and total joint replacement, spinal discs, explant analysis, implant corrosion and wear, artificial cartilage, bio-scaffolds Prosthesis tribology: Prosthetic human interfacing and coupling, tribological function Biological implants: Catheters, heart pumps, stents, bio-probes, intravenous, needles Biomimetics: Bio-inspired tribology, insect tribology, Ocular tribology: Ocular surfaces, contact lenses, tear lubrication and Dry Eye Syndrome Skin tribology: Damage mechanisms, blistering mechanisms, bedsores, sweat lubrication Haptics: Tactile perception and surface texture, ergonomics Personal care: Hair conditioners, skin creams, cosmetics, shaving products, exfoliants, toothpaste Oral processing: Foodstuffs and beverages, mouth feel and taste perception, food texture and rheology Dental tribology: Tooth and implant wear, implant anchoring, tribo-corrosion of dental surfaces, fracture mechanism of teeth Biotribology for industry: Identifying new opportunities, developing test methods, correlation with customer experience, consumer products and packaging Sports Tribology: Equipment design and development, preparation, deterioration and testing of sport surfaces, grip, player interaction and gait analysis

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[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59. <https://doi.org/10.1016/j.Sc.2010.00372>.

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[2] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, 2018. The art of writing a scientific article. *Heliyon.* 19, e00205. <https://doi.org/10.1016/j.heliyon.2018.e00205>.

Reference to a book:

[3] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[4] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[5] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13 March 2003).

Reference to a dataset:

[dataset] [6] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

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