DESCRIPTION

Wear journal is dedicated to the advancement of basic and applied knowledge concerning the nature of wear of materials. Broadly, topics of interest range from development of fundamental understanding of the mechanisms of wear to innovative solutions to practical engineering problems. Authors of experimental studies are expected to comment on the repeatability of the data, and whenever possible, conduct multiple measurements under similar testing conditions. Further, Wear embraces the highest standards of professional ethics, and the detection of matching content, either in written or graphical form, from other publications by the current authors or by others, may result in rejection.

Submissions are invited on such subjects as:

(a) **Wear modelling and validation**. This includes modelling of fundamental mechanisms as well as the modelling of tribosystems. Approaches may employ contact mechanics, frictional considerations and lubrication concepts in the development of the model, and will always include physical validation of the model.

(b) **The development and use of new wear testing methods and standards**. This includes the rationale behind their development (including a critique of existing test methodologies where appropriate).

(c) **New wear diagnostic tools**. The need for these tools and examples of their use in either basic research or engineering should be illustrated.

(d) **The development of wear-resistant materials, coatings, or surface treatments**. Such papers should include, for example, benchmarking against materials currently employed in targeted engineering applications, or presenting a basic hypothesis underlying the work that can be validated as an advance over the current state-of-the-art. The criteria used to select the test methods employed (and the conditions under which those tests were conducted) must be robustly justified with regard to the targeted engineering applications. The proposed mechanisms of wear must be discussed in the context of data and observations that support those conclusions.

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The role of lubricants or other interfacial species in the wear of materials. Such submissions will focus on the mechanisms of wear in the presence of well-characterized interfacial environments.

The Abstracts of all submissions, whether a full paper or a shorter communication, should summarize the purpose and approach to the given problem, indicate the materials under investigation, and present the primary conclusions in a brief and concise manner. Overt commercialism or product promotion is unacceptable. Submissions to Wear will be peer-reviewed to assess their archival quality, clarity of communication, and the novelty of their contributions to the science and technology of wear.

AUDIENCE

Tribologists and lubrication engineers, mechanical engineers, production engineers and industrial designers, materials scientists in metals, polymers and ceramics, physicists and chemists in surface analysis.

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