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ABSTRACT

Tribology is the science and technology of interacting surfaces in relative motion. It incorporates a number of scientific fields, including friction, wear, lubrication, materials science, and various branches of surface physics and surface chemistry. Tribology forms a vital part of engineering science. The interacting surfaces may be on machinery or engine parts, moving joints, bearings, on tools and on machines and the parts on which they work. This guide lists information resources on tribology which are available in the collections of the Library of Congress. This is not intended to be a comprehensive bibliography. The information references are classified as introductions, texts, handbooks, proceedings, abstracts, journals, articles, reports, bibliographies, and materials. About 60 items are listed. (Author/YP)

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TRIBOLOGY
Compiled by George D. Havas

TB 87-10

December 1987

SCOPE: Tribology is the science and technology of interacting surfaces in relative motion. It incorporates a number of scientific fields, including friction, wear, lubrication, materials science, and various branches of surface physics and surface chemistry. Tribology forms a vital part of engineering science. The interacting surfaces may be on machinery or engine parts, moving joints, or bearings, or on cutting, drilling, or shaping tools and machines and the parts on which they work. This guide lists information sources on tribology which are available in the collections of the Library of Congress. Not intended to be a comprehensive bibliography, this compilation is designed--as the name of the series implies--to put the reader "on target."

INTRODUCTIONS

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SUBJECT HEADINGS used by the Library of Congress, under which books on tribology can be located in most card, book, and online catalogs, include the following:

TRIBOLOGY (Highly relevant)
 LUBRICATION (Highly relevant)
 LUBRICATION AND LUBRICANTS (Highly relevant)
 LUBRICATING OILS (Relevant)
 LUBRICATION SYSTEMS (Relevant)
 FRICTION (Related)
 MECHANICAL WEAR (Related)
 SURFACES (PHYSICS) (Related)
 SURFACES (TECHNOLOGY) (Related)

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Proceedings of the International Conference in Tribology in the 80's, sponsored by the Structures and Mechanical Technologies Division of the NASA Lewis Research Center, held in April 1983.

Conference proceedings are also published in ASLE Transactions (see Journals section of this guide).

ABSTRACTING AND INDEXING SERVICES that index relevant journal articles are listed below. Some terms are provided as aids in searching.

Applied Mechanics Reviews (1948-) TA1.A63953*

See Section 292: Friction & Wear

Applied Science & Technology Index (1913-) Z7913.I7*

See: Tribology
Bearings
Friction
Lubrication and Lubricants
Surfaces

Engineering Index (1884-) Z5851.E62*

See: Tribology

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See: Tribology

Metals Abstracts Index (1968-) TN1.M51532*

See: Tribology

JOURNALS that often contain articles on tribology are

ASLE (American Society of Lubrication Engineers) Transactions

TJ1075.A2A25

Industrial Lubrication and Tribology TJ1075.A2S28

Journal of JSLE (Japan Society of Lubrication Engineers)

International Edition TJ1075.A2J66

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Soviet Journal of Friction and Wear (English translation of Trenie i iznos) TA418.72.T7334
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REPORTS and other types of literature dealing with tribology are indexed in the following:

Government Reports Announcements & Index (1946-) Z7916.G78*

NTIS Title Index on Microfiche (1964-)*

SELECTED TECHNICAL REPORTS sold by the National Technical Information Service, Springfield, Virginia 22161, include:

Buckley, Donald, and Kazuhisa Miyoshi. Fundamental tribological properties of ceramics. Cleveland, Ohio, NASA Lewis Research Center, Jan. 1985. 25 p.
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AN ADDITIONAL SOURCE OF INFORMATION

Society of Tribologists and Lubrication Engineers
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