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)
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


Tribology, the science of combatting wear. By William A. Glaeser and others. Columbus, Ohio, Battelle, Columbus Division, c1981. 56 p. (Battelle technical inputs to planning, rept. no. 26)

*Available in reference collection, Science Reading Room
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)
FRICITION (Related)
MECHANICAL WEAR (Related)
SURFACES (PHYSICS) (Related)
SURFACES (TECHNOLOGY) (Related)

TEXTS


*Available in reference collection, Science Reading Room


**HANDBOOKS**


**CONFERENCE PROCEEDINGS**


TJ1075.A2L43 1985

TJ1075.A2N49 1985

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

International Aerospace Abstracts (1961-) TL500.I57*
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)

Lubrication Engineering TJ1075.A2L83

*Available in reference collection, Science Reading Room
Soviet Journal of Friction and Wear (English translation of Trenie i iznos) TA418.72.T7334
Transactions of the ASME: Journal of Tribology (Formerly the Journal of Lubrication Technology) TJ1075.A2J68
Tribology International TJ1075.A2T75

REPRESENTATIVE JOURNAL ARTICLES


Hirano, F., and others. Chain matching between hydrocarbon and fatty acid as interfacial phenomena. Tribology international, v. 20, Aug. 1987: 186-204. TJ1075.A2T75


REPORTS and other types of literature dealing with tribology are indexed in the following:

Government Reports Announcements & Index (1946-) Z7916.C78*

NTIS Title Index on Microfiche (1964-)*

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


Miyoshi, Kazuhisa, Donald H. Buckley, and Taivaldis Spalvins. Tribological properties of boron nitride synthesized by ion beam deposition. Cleveland, Ohio, NASA Lewis Research Center, Apr. 1985. 15 p.


**Available in microform collection, Science Reading Room

Bibliographies, sold by the National Technical Information Service but NOT held by the Library of Congress, include:

"PB86-853926."

"PB86-856317."

"PB85-864213."

"PB86-872363."

SELECTED MATERIALS available in the Science Reading Room pamphlet boxes include:

ASLE (American Society of Lubrication Engineers) changes name to STLE (Society of Tribologists and Lubrication Engineers). Lubrication engineering, v. 43, Aug. 1987: 672.


**Available in microform collection, Science Reading Room


AN ADDITIONAL SOURCE OF INFORMATION

Society of Tribologists and Lubrication Engineers
(Formerly American Society of Lubrication Engineers)
838 Busse Highway
Park Ridge, Illinois 60068
Telephone: (312) 825-5536