

Researching a Biomedical Engineering Topic

Please remember that researching biomedical engineering topics can be challenging. There is no medical school/library at the University of Texas at Austin and this means:

- there is limited access to clinical journals & there is no one place to go to find information
- you will need to use Interlibrary Loan to gain access to materials not owned here

ASK FOR HELP – the meek get nothing!

McKinney Engineering Library

Call: 495-4511 | E-mail: englib@lib.utexas.edu | Internet: www.lib.utexas.edu/engin/ | Visit: ECJ 1.300

Dictionaries, Encyclopedias, Handbooks

Online:

- **StatRef!** – provides full text access to key medical reference sources and textbooks.
- **Kirk Othmer Encyclopedia of Chemical Technology** - reference source covering chemical and process engineering, industrial and applied chemistry, materials science, polymer science, biotechnology, and more.

Access Instructions: From www.lib.utexas.edu, select “Research Tools” and then “*Databases and Indexes to Articles*” then “*Databases Alphabetical by Title*” and click on the appropriate letter to access the link to the resource you would like to search.

In Print (some examples from our collections):

- **The language of biotechnology : a dictionary of terms.** / Walker, John M., 1948- / 2nd ed. / Washington, D.C. / 1995
TP 248.16 W35 1995 Chemistry Library
TP 248.16 W35 1995 Engineering Library
- **Encyclopedic handbook of biomaterials and bioengineering.** / New York / 1995
R 856 A3 E52 1995 PT.A,V.1 Engineering Library
R 856 A3 E52 1995 PT.A,V.2 Engineering Library
R 856 A3 E52 1995 PT.B,V.1 Engineering Library
R 856 A3 E52 1995 PT.B,V.2 Engineering Library
- **The biomedical engineering handbook.** / 2nd ed. / Boca Raton, FL / 2000
R 856.15 B56 2000 V.1 Engineering Lib Reserves
R 856.15 B56 2000 V.2 Engineering Lib Reserves
- **Biomedical technology and devices handbook.** / Boca Raton / 2004
R 856.15 B565 2004 Engineering Library

Please search for these and other print materials in the Library Catalog: UTNetCAT. From www.lib.utexas.edu, select “Research Tools” and then “*Databases and Indexes to Articles*”

Journals:

Use the **Library Catalog** to find full-text online and print journals. Some examples of journals in our collections:

Journal of medical engineering & technology, Biomedical microdevices. IEEE engineering in medicine and biology magazine, Journal of biomechanical engineering, Annals of biomedical engineering. IEEE transactions on bio-medical engineering, Tissue engineering

Indexes

Articles that have appeared in magazines, journals, newspapers, and papers that have been published in conference proceedings can best be found with the help of an **index**.

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Academic Search Premier: a good source for undergraduates; many full-text articles; interdisciplinary, with good coverage of the applied sciences.

Chemical Abstracts - Student edition: indexes over 200 of the most widely held chemistry journals. Designed specifically for use by undergraduate students. Use *SciFinder* for the complete *Chemical Abstracts*.

~~InfoTrac OneFile~~ (formerly **Expanded Academic, ASAP**): interdisciplinary and a good undergraduate engineering source; many articles.

***EI, Engineering Index (Compendex, EI WEB):** indexes *scholarly journals* and conferences in all areas of engineering.

***INSPEC:** indexes *scholarly literature* in physics, electronics, and electrical and computer engineering.

MEDLINE: the primary index for medical literature, including medicine, nursing, dentistry, and veterinary medicine.

PubMed: provides access to MEDLINE plus additional information.

Web of Science (Science Citation): a subject/author index but unique in its cited-reference search -- which scientific works have been cited and by whom.

Also of Interest:

Industry Standards: See <http://www.lib.utexas.edu/engin/standards/usstds.html> for the list of subscriptions.

Patents: see <http://www.uspto.gov> for the web pages of the U.S. Patent and Trademark Office. See <http://www.lib.utexas.edu/engin/> for helpful supplemental information. The web site of the European Patent Office, <http://ep.espacenet.com>, is another useful source.

Reliable Sources on the Internet (some examples):

Government Resources

- National Library of Medicine (<http://www.nlm.nih.gov/>)
- National Institutes of Health Biomedical Imaging and Bioengineering (<http://www.nibib.nih.gov/>)
- National Center for Health Statistics (<http://www.cdc.gov/nchs/>)
- National Science Foundation (<http://www.nsf.gov>)
- National Institute of Standards and Technology Biomaterials Group (<http://polymers.msrl.nist.gov/researcharea/biomaterials/index.html>)
- NTIS (<http://www.ntis.gov/>)

Professional Organizations and Society Web Sites

- Biomedical Engineering Network (<http://www.bmenet.org/BMEnet/>)
- American Society of Biomechanics (<http://www.asb-biomech.org/>)
- Association for the Advancement of Medical Instrumentation (<http://www.aami.org/>)
- Biomedical Engineering Society (<http://www.bmes.org/>)
- IEEE Engineering in Medicine and Biology Society (<http://www.eng.unsw.edu.au/embs/index.html>)
- Society for Biomaterials (<http://www.biomaterials.org/>)