

Electronic Resources Update

A Physical Sciences Newsletter

The Science Libraries Division, University of Chicago

Volume 1, Winter Quarter 2002



Welcome About this Newsletter

Why create a newsletter? We think the foremost reason is to help ensure that the Physical Sciences community at the University of Chicago is fully aware of their electronic research options. There is such an onslaught of information that keeping current is increasingly difficult. We can help by turning quantity into quality: shift through the "information overload" to find relevant information.

Article

About this Newsletter

Resources

The New Catalog

Web Sites

Biographical Information

New Titles

Electronic and in Print

Topics/Format

We have identified four categories, which will appear as regular features in the newsletter. These are Articles, Resources, Web Sites and finally New Titles. We will make every effort to ensure equal representation of topics among all of the physical science disciplines. Special categories will appear on occasion.

If there is a topic you would like us to cover - please feel free to contact Barbara Kern at 702-8717 / bkern@uchicago.edu or your bibliographer.

Frequency

The newsletter will be distributed once a quarter.

Audience

Our audience is primarily made up of faculty and graduate students in the Physical Sciences.

Distribution

The newsletter will be distributed via the web, email, and in print (upon request). If you would like to receive the newsletter in print or if you wish to be removed from the email distribution list please contact Barbara Kern at bkern@uchicago.edu or 773-702-8717.



F.Y.I. To receive this newsletter in print or via email contact Barbara Kern at 702-8717 or bkern@uchicago.edu. For WEB access go to: www.lib.uchicago.edu/e/crerar/newsletter/

RESOURCES : THE NEW CATALOG

The online catalog is the main portal to the diverse resources selected and acquired by the Library - books, journals, electronic journals, CD-ROM's, websites, and videos. It is a collection that reflects the variety of formats that support research and interdisciplinary programs here at the University.

The Catalog provides connections between print & electronic versions of titles.

As the catalog grows and develops, enhancements and new searching features are added. The latest interface to the online catalog retains the traditional alphabetical browse searching and supports innovations such as:

- ~ Fast and powerful keyword searching,
- ~ Marking and e-mailing records from the catalog for building bibliographies,
- ~ Limit options for language, date and format (such as electronic version),
- ~ Reserve catalog,
- ~ Viewing your account,
- ~ Submitting interlibrary loan (for items not found in the catalog),
- ~ Ask a Librarian (for reference assistance),
- ~ Purchase requests (for items not found in the catalog that you'd like to see in the Library collections)

There are now over 3500 electronic journals held by the science libraries.

The catalog provides connections between the print and electronic versions of titles by including links to the full text location in the catalog record. The availability of electronic journals has risen dramatically in the past five years. There are now over 3500 electronic journals held by the science libraries.

The library catalog database has grown to over six million records and continues to grow every day. In recent years, the Library of Congress card catalog has been converted to online catalog records for all libraries at the University. As part of the ongoing retrospective conversion project for library materials, the Rare Crerar Collection and the **Crerar Dewey materials are now included in the online catalog.**

With such additions, the catalog comes closer to being a comprehensive database for all Library materials. It remains a valuable tool for researchers here and at other institutions, one that reflects the richness and depth of the Library's collections.

**Need technical aid?
We are here to help!**

Contact Barbara Kem at
bkem@uchicago.edu or 702-8717



WEBSITES: BIOGRAPHICAL INFORMATION

- Chemistry
- Computer Science
- General
- Mathematics

For a complete listing see the science biography web page at: www.lib.uchicago.edu/e/su/sci/biography.html

Chemistry

Title:	Federation of European Chemical Societies (FECS) Millennium Project Celebration of 100 Distinguished European Chemists from the Chemical Revolution to the 21st Century.
URL:	www.chemsoc.org/networks/enc/fecs/100chemists.htm
Bibliographer:	Andrea Twiss-Brooks

Title:	Links for Chemists
URL:	www.liv.ac.uk/Chemistry/Links/refbiog.html
Annotation:	Chemistry section of the WWW Virtual Library Collection of links to biographies from society, educational and personal websites, including many from the Nobel Foundation website.
Bibliographer:	Andrea Twiss-Brooks

Title:	List of Obituaries and Biographical Notes Published in: ~ Angewandte Chemie (1888-2001) ~ Chemische Berichte (1918-1997) ~ European Journal of Inorganic Chemistry (1998) ~ Helvetica Chimica Acta (1918-1992) ~ Liebigs Annalen (1975-1997) ~ European Journal of Organic Chemistry (1998-2000)
URL:	www.wiley-vch.de/vch/journals/2005/biog_notes1.html
Bibliographer:	Andrea Twiss-Brooks

Title:	Federation of European Chemical Societies (FECS) Millennium Project Celebration of 100 Distinguished European Chemists from the Chemical Revolution to the 21st Century.
URL:	www.chemsoc.org/networks/enc/fecs/100chemists.htm
Bibliographer:	Andrea Twiss-Brooks

Computer Science

Title:	Past Notable Women of Computing
URL:	www.cs.yale.edu/homes/tap/past-women-cs.html
Annotation:	Provides brief biographies for a select group plus links to relevant web sites.
Bibliographer:	Brenda Rice

Title:	Pioneers of Computing (Virtual Museum of Computing)
URL:	vmoc.museophile.sbu.ac.uk/pioneers/
Annotation:	Provides links to biographical information for over 70 computer scientists and links to other biographical web sites.
Bibliographer:	Brenda Rice

Title:	Pioneers
URL:	kerryr.net/pioneers/
Annotation:	Informative biographies of 10 historical figures in computer science; includes Charles Babbage, Vannevar

	Bush, George Boole, and Nikola Tesla.
Bibliographer:	Brenda Rice

Title:	International biographical dictionary of computer pioneers. Fitzroy Dearborn, 1995.
Print:	QA76.2.A2L442 1995 Crerar Library Reference Collection
Annotation:	Includes biographies for over 250 computer pioneers. Most articles contain a list of selected publications and biographical references.
Bibliographer:	Brenda Rice

General

Title:	Society for Advancement of Chicanos and Native Americans in Science (SACNAS) Biography Project
URL:	www.sacnas.org/bio/index.html
Annotation:	While geared toward K-12 educators and students, this resource features scientists not well covered by standard biographical resources. Funded by the Sloan Foundation and the National Institutes of Health.
Bibliographer:	Andrea Twiss-Brooks

Title:	Bright Sparcs
URL:	www.asap.unimelb.edu.au/bsparcs/bsparcshome.htm
Annotation:	Register of biographical information on over 2,000 Australian scientists, including geologists, chemists, physicists, and more.
Bibliographer:	Andrea Twiss-Brooks

Title:	Great Canadian Scientists
URL:	www.science.ca/scientists/scientists.php
Annotation:	Biographical information on a number of Canadian scientists. Includes arrangement by name and by field.
Bibliographer:	Andrea Twiss-Brooks

Title:	4000 Years of Women in Science
URL:	www.astr.ua.edu/4000WS/4000WS.html
Annotation:	This site is hosted by the Astronomy Dept. at the University of Alabama. Excellent for biographical information and personal pictures.
Bibliographer:	Fritz Whitcomb

Mathematics

Title:	Biography Index, MacTutor History of Mathematics Archive - St. Andrews
URL:	www-history.mcs.st-and.ac.uk/history/BiogIndex.html
Annotation:	This collection of over 1400 biographies of mathematicians can be accessed alphabetically or chronologically.
Bibliographer:	Brenda Rice

Title:	History of Mathematics - School of Mathematics, Trinity College, Dublin
URL:	www.maths.tcd.ie/pub/HistMath/HistMath.html
Annotation:	Biographical information for a select group of mathematicians. Also includes Mathematicians of the Seventeenth and Eighteenth Centuries.
Bibliographer:	Brenda Rice

Title:	Biographies of Women Mathematicians - Agnes Scott College
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URL:	www.agnesscott.edu/lriddle/women/women.htm
Annotation:	Biographical essays or comments on many women mathematicians with some photographs. "Other Resources" provides links to other relevant web sites.
Bibliographer:	Brenda Rice

Title:	Notable Mathematicians: from Ancient Times to the Present. Robyn V. Young, editor; Zoran Minderovic, associate editor. Gale, 1998.
Print:	QA28.N66 1998 Eckhart Library Reference Collection
Annotation:	Biographical information for more than 300 mathematicians, including photographs, list of selected writings, and further reading lists.
Bibliographer:	Brenda Rice

Title:	Biographical Encyclopedia of Mathematicians. Edited by Donald R. Ransceschetti. Marshall Cavendish, 1999. 2 vols.
Print:	QA28.B544 1999 Eckhart Library Reference Collection
Annotation:	Biographies for approximately 200 prominent mathematicians with photographs or pictures of each person. Entries have chronology, descriptions of research, and selected bibliographies.
Bibliographer:	Brenda Rice

Title:	Biographical Dictionary of Mathematicians: Reference Biographies from the Dictionary of Scientific Biography. Scribner; Maxwell Macmillan International, 1991. 4 vols.
Print:	QA28.B5340 1991 Eckhart Library Reference Collection
Annotation:	Biographical information for more than 1000 mathematicians or persons who enriched the discipline. Includes a chronology index.
Bibliographer:	Brenda Rice

NEW TITLES : PRINT AND ELECTRONIC

- Astronomy
- Chemistry
- Computer Science
- Geology
- Material Science
- Physics

Astronomy

Origin of elements in the solar system : implications of post-1957 observations / edited by O.K. Manuel. New York : Kluwer Academic/Plenum Publishers, c2000. QB450 .O78 2000 Crerar Library Reference

Singularity theory and gravitational lensing / Arlie O. Petters, Harold Levine, Joachim Wambsganss. Boston : Birkhauser, c2001. QB857.5.G7P48 2001 c.1 Crerar Library

The chemical evolution of the galaxy / by Francesca Matteucci. Dordrecht ; Boston. : Kluwer Academic Publishers, c2001. QB857.7.M38 2001 c.1 Crerar Library

For a complete list of new books see: www.lib.uchicago.edu/e/crerar/newbooks/

Chemistry

Encyclopedia of chromatography. New York : Marcel Dekker, c2001. QD 79.C4 E63 2001 c.1 Chemistry Library Reference

Chemical dynamics in extreme environments / editor, Rainer A. Dressler. Singapore ; River Edge, NJ : World Scientific, c2001. QD 501 .C4627 2001 c.1 Chemistry Library

Solid-liquid interface theory / J. Woods Halley, editor. Washington, DC : American Chemical Society : Distributed by Oxford University Press, c2001. QD509.S65S66 2001 c.1 Chemistry Library

Semiconductor electrochemistry. Weinheim ; New York : Wiley-VCH, c2001. QD553 .M46 2001 c.1 Chemistry Library

The physics and chemistry of materials / Joel I. Gersten, Frederick W. Smith. New York : Wiley, c2001 QD478 .G47 2001 c.1 Crerar Library

For a complete list of new books see: www.lib.uchicago.edu/e/su/chem/recacqs.html

Computer Science

Parallel and distributed computing: a survey of models, paradigms, and approaches. Leopold, Claudia. New York: Wiley, 2001. Wiley series on parallel and distributed computing. QA76.58 .L465 2001 c.1 Eckhart Library

Approximation algorithms. Vazirani, Vijay V. Berlin; New York: Springer, c2001. QA76.9 .A43V39 2001 c.1 Eckhart Library

Rough set methods and applications: new developments in knowledge discovery in information systems / Lech Polkowski, Shusaku Tsumoto, Tsau Y. Lin, editors. Heidelberg; New York: Physica-Verlag, c2000. Studies in fuzziness and soft computing; 56. QA76.9 .D343R68 2000 c.1 Eckhart Library

Cellular automata: a discrete universe. Ilachinski, Andrew. Singapore; River Edge, NJ: World Scientific, c2001. QA267.5 .C45I43 2001 c.1 Eckhart Library

Quantum computing. Hirvensalo, Mika. Berlin; New York: Springer, 2001. Natural computing series. QA76.889 .H57 2001 c.1 Eckhart Library

Instance selection and construction for data mining / edited by Huan Liu, Hiroshi Motoda. Boston: Kluwer Academic Publishers, 2001. Kluwer international series in engineering and computer science; 608. QA76.9 .D343I57 2001 c.1 Eckhart Library

Learning and soft computing: support vector machines, neural networks, and fuzzy logic models. Kecman, Vojislav. Cambridge, Mass.: MIT Press, c2001. Complex adaptive systems. QA76.9 .S63K43 2001 c.1 Eckhart Library

For a complete list of new books see: www.lib.uchicago.edu/e/eck/eckacq.html

Geology

Global biogeochemical cycles in the climate system San Diego : Academic Press, c2001. QC981 .G56 2001 c.1 Crerar Library

Atlas peri-Tethys palaeogeographical maps / J. Dercourt ... [et al.]. Paris, France : Gauthier-Villars : CCGM [distributor], 2000. QE501.4.P3A75 2000 c.2 Crerar Library

For a complete list of new books see: www.lib.uchicago.edu/e/crerar/newbooks/

Material Sciences

CRC materials science and engineering handbook / [edited by] James F. Shackelford, William Alexander. Materials science and engineering handbook 3rd ed. Boca Raton, FL : CRC Press, c2001. 1949 p. ; 26 cm. TA403.4 .C74 2001 c.1 Crerar Library

Influence of gravity on granular soil mechanics. Rotterdam [Netherlands] ; Brookfield [Vt.] : A.A. Balkema, 2000. xii, 467 p. ; 28 cm. TA710.I54 2000 c.1 Crerar Library

Physics

Interacting electrons in nanostructures / Rolf Haug, Herbert Schoeller (eds.). Berlin ; New York : Springer, c2001. QC176.8.N35I58 2001 c.1 Crerar Library

Supermaterials / edited by Rudi Cloots ... [et al.]. Dordrecht ; Boston : Kluwer Academic Publishers : Published in cooperation with NATO Scientific Affairs Division, c2000. QC611.94 .S885 2000 c.1 Crerar Library

For a complete list of new books see: www.lib.uchicago.edu/e/crerar/newbooks/

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