

Assessment of Library Collections

Chemistry and Biochemistry

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This report was prepared by Tony Schwartz, Associate Director for Collection Management, with Patricia Pereira-Pujol, Sciences Librarian.

Journals

Library subscriptions by general count

According to the Citation Linker on the library's web page, FIU has 1,361 online Chemistry journals with these sub-counts: Analytical Chemistry, 97; Applied Chemistry, 55; Biochemistry, 480; Chemical Engineering, 168; Clinical Chemistry, 27; Crystallography, 37; Electrochemistry, 30; Environmental Chemistry, 42; General and Others, 304; Inorganic Chemistry, 48; Kinetics, 22; Medicinal Chemistry, 34; Nuclear Chemistry, 20; Organic Chemistry, 77; Petroleum, 29; Pharmaceutical Chemistry, 53; Physical Chemistry, 75; Polymers and Plastics, 97; Radiation Chemistry, 14; Synthesis, 18; and Toxicology, 86.

With the 39 print-journal subscriptions for Chemistry and Biochemistry, FIU has in sum about 1,400 journals for this program, of which 97% are online.

Citation-ranked literatures

The library's holdings in 13 citation-ranked literatures are outlined in Table 1. As shown, the overall proportion of holdings is 64% (593 of the total 923 journals).

Journal collection development progress

Development of these collections in recent years can be marked in at least three ways.

- PhD program development. In 2007, the library—following a collections assessment for the planned PhD program in Biochemistry—added the following resources, selected on the basis of citation-impact factors: *Annual Review of Biochemistry*; *Cell*; *Nature Medicine*; *Annual Review of Cell and Developmental Biology*; *Nature Cell Biology*; *Nature Reviews Molecular Cell Biology*; *Annual Review of Plant Biology*; *Molecular Cell*; and *Annual Review of Biophysics*. The overall cost was about \$25,000. In addition, the library was provided supplemental funding for the *Nature* journal archive (from 1987) and the *Science* journal archive (from 1888).
- Citation-ranked journals. Since 2005 (the last collection assessment), FIU has added 143 citation-ranked journals in Chemistry and Biochemistry, bringing the overall proportion of the library's holdings of these literatures from 43% to 64%.

- High-priority journals. In 2003, the faculty of Chemistry and Biochemistry identified from the citation-ranked literatures 149 journals as high priorities. As shown in Table 1, in 2005 the library had 109 of those 149; it now has 122 (82%) of them.

Field	number of titles in literature	number held by library	% held by library	number <u>not</u> held by library	high-priority journals identified in 2005 faculty review, total count	high-priority journals held by library in 2005	high-priority journals held by library in 2008	% of high-priority journals now held
Analytical	67	41	61%	26	23	15	18	78%
Applied	56	27	25%	29	7	6	7	100%
Biochemistry and Molecular Biology	307	203	66%	104	not part of the high-priority journal review of 2003			
Electrochemistry	15	10	67%	5	0			
Geochemistry and Geophysics	47	36	77%	11	0			
Inorganic and Nuclear	42	28	67%	14	21	15	17	81%
Medicinal	36	27	75%	9	13	7	9	69%
Microscopy	9	9	100%	0	0			
Multidisciplinary	118	65	55%	53	32	21	25	78%
Organic	51	34	67%	17	26	23	23	88%
Physical	93	65	70%	28	27	22	23	85%
Polymer Science	73	42	58%	31	0			
Legal Medicine (Forensic Science)	9	6	67%	3	0			
Totals	923	593	64%	330	149	109	122	82%

Online-journal packages

The journal collections are developed largely on the basis of publisher-based packages through the state university library consortium. Of direct relevance to Chemistry and Biochemistry are those of the American Chemical Society (ACS); American Society for Microbiology; Elsevier Science Direct; Wiley Interscience; and Springer. The Nature Publishing package is selective (19 titles). Most packages have online archives from 1997; the ACS archive is comprehensive.

Books

The library's book approval plan for Chemistry and Biochemistry, as for the sciences generally, covers all university press titles, as well as all trade-publisher titles on contemporary social or public policy aspects of science, engineering, and technology. In the social sciences (Chemistry and Biochemistry extends, for example, to environmental fields), the approval plan is fairly comprehensive, without any substantive subject limitations.

The library has 13 monograph standing orders in Chemistry and Biochemistry: *Advances in Chemical Physics*; *Advances in Inorganic Chemistry*; *Advances in Photochemistry*; *Advances in Organometallic Chemistry*; *Advances in Physical Organic Chemistry*; *Advances in Quantum Chemistry*; *Annual Review of Physical Chemistry*; *Inorganic Syntheses*; *Organic Reaction Mechanisms*; *Organic Reactions*; *Organic Syntheses*; *Progress in Inorganic Chemistry*; and *Topics in Current Chemistry*.

Both campus libraries have expansive budgets for faculty orders of additional books, reference materials, and audio-visual resources. In FY07, such orders for Chemistry and Biochemistry amounted to \$3,053. In FY08 so far, such orders amount to \$13,677 (mostly for the online *Encyclopedia of Computational Chemistry*).

Of FIU's approximately 55,000 online books, 278 have *chemistry* as a keyword descriptor, and 28 have *biochemistry* as a keyword descriptor.

Databases

The library's collections of databases, about 300 in number, have at the core for Chemistry and Biochemistry *SciFinder Scholar*; *CRC Handbook of Chemistry and Physics*; *Science Citation Index*; and *Applied Science and Technology Full Text*.

Supplementary databases for Chemistry and Biochemistry include *Access Science*; *AGRICOLA*; *ANTE: Abstracts in New Technologies and Engineering*; *Bacteriology Abstracts (Microbiology B)*; *Biotechnology and Bioengineering Abstracts*; *Biological Abstracts (BIOSIS)*; *Biological and Agricultural Index Plus*; *Biological Sciences*; *BNA Environment Library*; *Chemoreception Abstracts*; *EIS: Digests of Environmental Impact Statements*; *Environmental Sciences and Pollution Management*; *General Science Full Text*; *Ellis and Messina Catalogue of Foraminifera and Ostracoda*; *Oxford Reference Online Premium*; *Gale Virtual Reference Library*; *NetLibrary Reference Center*; *Pollution Abstracts*, *Toxicology Abstracts*, and *TOXLINE*.