

Executive Summary
Chemistry Collection Assessment
Submitted by Alanna Cole and Paula Barnett-Ellis
October 2018

INTRODUCTION

The Chemistry collection is adequate to support the courses taught for the Bachelor of Science in Professional Chemistry with the American Chemical Society Certification (ACS) and Bachelor of Science in Applied Chemistry, as well as a Chemistry minor offered by the Department of Chemistry and Geosciences.

HOLDINGS

The Chemistry collection contains **3,464** titles in the QD 1-999 and TP1-1185 call number ranges, including **200** e-books. Total monograph expenditures for Chemistry from FY 2012/13 TO FY 2016/17 were **\$14,455.43** with **130** new titles added. These newer additions comprise **4%** of the current Chemistry collection.

These numbers represent a snapshot of the collection as titles are continually being added and withdrawn for collection maintenance and growth. These numbers do not represent additional titles available through e-book databases.

Classification	Subject Area	Library Holdings
QD1-999	Chemistry	2,344
TP1-1185	Chemical Technology	1,120
Total		3,464

Monograph Expenditures for Chemistry

Fiscal Year	Amount
2012/13	\$4,854.74
2013/14	\$2,854.59
2014/15	\$1,715.92
2015/16	\$2,495.94
2016/17	\$2,534.24
Total	\$14,455.43

PERIODICALS AND SERIALS

The Library has access to full-text journals available throughout the Library databases. There are around 688 journals in Chemistry and related subjects available electronically through database subscriptions, which can be found in EBSCO's Publication Finder at

<http://bit.ly/2zO6DiD>. The Serials expenditures in Chemistry for both print and electronic subscriptions and standing orders average **\$5,979.29** from FY 2012/13 to FY 2016/17 (see table below.)

Serial Expenditures for Chemistry

FISCAL YEAR	Total
2016-2017	\$3,953.64
2015-2016	\$5,454.47
2014-2015	\$4,468.26
2013-2014	\$4,595.01*
2012-2013	\$11,425.06
Total	\$29,896.44

**American Chemical Society Publications Online* was cancelled due to a price increase from \$8,000 to \$32,000.

Expenditures for serials have migrated away from the individual subscription model to the aggregator database model. Dollar amounts spent on aggregator databases cannot be sub-divided into subject categories. In 2016/17, aggregator databases totaled **\$259,262.08**, which came from the general fund.

DEFINED ACCESS TO ELECTRONIC RESOURCES

Defined access points users to resources through menu options on the Library's homepage by linking the user to quality, highly relevant, electronic resources. Because the Library provides access to electronic journals, documents, e-books, and video databases along with integrated quality websites that encompass the area of Chemistry, the Library's electronic collection in this subject is adequate to support the curriculum.

A complete list of all of the Library's databases can be found in the A to Z Database Listing at <http://libguides.jsu.edu/az.php>. The A to Z List also subdivides databases by subject, providing a list of all Chemistry related databases at <http://libguides.jsu.edu/az.php?s=26248>. Additionally, the Chemistry guide (<http://libguides.jsu.edu/chemistry>), which is maintained by the subject specialist, provides a list of and access to the resources specifically for this subject. Through partnerships, such as the one with the Alabama Virtual Library (AVL), the Library is able to obtain more content. Resources provided to the Library by the AVL are designated with the AVL icon.

Complete details are available in the full assessment, which is available upon request or at <http://bit.ly/2fyeMMU>.

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INTRODUCTION

The Chemistry collection is central to the University curriculum, since it supports study for the Bachelor of Science in Professional Chemistry with the American Chemical Society Certification (ACS) and Bachelor of Science in Applied Chemistry, as well as a Chemistry minor offered by the Department of Chemistry and Geosciences. The collection level is adequate to support these degree programs. Complete conspectus sheets and checklists are available upon request for a more detailed examination of the collection.

HOLDINGS

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SUPPLEMENTAL SUPPORT

Chemistry subject areas also extend beyond the boundaries of the disciplines. Holdings in the related subject collections of Agriculture, Biology, Education, Geography and

Anthropology, Geology, and Medicine provide additional support to the collection.

TITLES ADDED/TITLES PUBLISHED

Below is a comparison of the number of book titles added to the Houston Cole Library collection versus those made available for sale each fiscal year through GOBI.

Monographs Added Versus Published Comparison

Fiscal Year	Added to Chemistry Fund Code*	GOBI New Titles Report ¹	Percentage
2012/13	34	437	8%
2013/14	33	474	7%
2014/15	22	451	5%
2015/16	16	434	4%
2016/17	25	442	6%
Total	130	2,238	6%

*See Technology Collection Assessment for details on titles added in TP classification.

CHECKLIST SUMMARIES

Bibliographies including *Choice's Outstanding Academic Titles (OATs)* and *Resources for College Libraries* were used to measure the quality of the Library's collection. In checking the bibliographies against the Library's catalog, the following percentages were revealed in the subject area of Chemistry. See the Technology Collection Assessment for details on the TP classification.

<i>Choice's Outstanding Academic Titles 2012-2017: Chemistry</i>			
Year	Collected	Listed	Percent Held
2016	2	2	100%
2015	3	3	100%
2014	4	5	80%
2013	5	5	100%
2012	4	6	67%
TOTAL	18	21	86%

<i>Resources for College Libraries 2013-2018</i>			
Subject	Collected	Listed	Percentage Held
Chemistry	70	210	33%

¹ GOBI New Titles Report
https://www.gobi3.com/StaticContent/GOBIContent/YBP/Private/Help/Pages/newtitlereport_us.html

Total	70	210	33%
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WITHDRAWALS

As currency of information is very important in the Chemistry collection, older books are withdrawn on a regular basis or as newer editions supersede them and new books are ordered to fill gaps as curriculum requirements change. The table below shows withdrawals from the QD and and TA-TP classifications. (There is no further breakdown for titles in the T classification)

Fiscal Year	QD1-999 Titles Withdrawn	TA-TP Titles Withdrawn
2016/17	3	13
2015/16	1	76
2014/15	12	121
2013/14	40	398
2012/13	0	20
Total	56	628

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be sub-divided into subject categories. In FY 2016/17, aggregator databases totaled **\$259,262.08**, which came from the general fund.

The following indexes and bibliographies were checked against the Library's holdings for serial titles pertaining to Chemistry revealing the corresponding percentages:

Titles	Collected	Listed	Percent Held
<i>Magazines for Libraries</i> 23 rd Edition 2015	27	40	68%
<i>American Chemical Society Committee on Professional Training Recommended Journal List</i> 2015	59	95	62%

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SUMMARY

Strengths:

Total holdings, conspectus evaluation and checklist comparisons indicate the overall Chemistry collection is more than adequate to support the curriculum. Of note on the conspectus worksheet are the holdings in the subject areas of: General Chemistry, Organic Inorganic Chemistry (General), and Physical and Theoretical Chemistry.

A check of the journal holdings show that the Library provides access to 62% of the titles on the American Chemical Society's *Journal List for Undergraduate Programs (As of 2015)*.

Weaknesses:

Total holdings, conspectus evaluations, and checklist comparisons indicate that some of the weakest areas of the Chemistry subject areas are: Conditions & Laws of Chemical Reactions – Thermodynamics, Conditions & Laws of Chemical Reactions – Catalysis, Qualitative Analysis (Organic & Inorganic) – General and Inorganic Polymers.

Recommendations:

The growth rate of the Chemistry Collection should be maintained in order to continue providing support for the undergraduate degree programs in Chemistry. The monograph collection should be generally increased, based on budget, with a strong focus on core and outstanding titles. The periodical collection available via databases is substantial and should be maintained. The weak subject areas (noted above) should also be addressed in future additions to the collection.

According to the American Chemical Society's *Undergraduate Professional Education in Chemistry: ACS Guidelines and Evaluation Procedures for Bachelor's Degree Programs*, for approved programs, a broad range of peer-reviewed chemical literature must be readily accessible for faculty and students. Therefore, the Library must maintain subscriptions and online periodical databases that cover Chemistry and related subject areas to keep access at current levels.