LIBRARY OF CONGRESS COLLECTIONS POLICY STATEMENTS

Chemical Sciences
(Classes QD, TN, TP, TR, and selected portions of Z)

Contents

I. Scope

This Collections Policy Statement covers the subclasses QD (Chemistry), TN (Mining Engineering, Metallurgy), TP (Chemical Technology), and TR (Photography). In addition, many of the numerous abstracting and indexing services, catalogs of scientific libraries, and specialized bibliographies and finding aids for these fields are classed in Z. The QD (Chemistry) class also overlaps significantly with Physics (QC), see the *Physics and Astronomy Collections Policy Statement*. **Please note, while this Collections Policy Statement and that for *Technology* cover books and other formats about the subject of photography, recommendation and acquisition of actual photographs are covered by the *Photography Collections Policy Statement*.**

II. Diverse and Inclusive Collecting Statement

As the nation's *de facto* national library, the Library of Congress strives to build an expansive, yet selective, collection that records the creativity of the United States and is reflective of the nation's diversity and complexity. The Library's mandate is to have collections that are inclusive and representative of a diversity of creators and ideas. A priority includes acquiring material of underrepresented perspectives and voices in the Library's collections to ensure diverse authorship, points of view, cultural identities, and other historical or cultural factors. The Library also seeks to build a research collection that comprises a globally representative sample of international materials that are diverse in voice and perspective, relative to their places of origin, further supporting the Library's mission to sustain and preserve a universal collection of knowledge and creativity for Congress and future generations.

Diverse collecting is mentioned within many of the Library's Collections Policy Statements. In addition, the Library has adopted several specific collection policies in an effort to ensure it is building an inclusive and representative collection. For more information, see the Library's Collections Policy Statements on

Ethnic Materials, *LGBTQIA+ Studies*, *Women's and Gender Studies*, *Independently Published and Self-Published Textual Materials*, *and* *Countries and Regions with Acquisitions Challenges*.

III. Research Strengths

A. General

The chemical sciences collections are particularly strong in their historical research value and for tracing developments in technology. Areas of particular strength include a) most of chemistry; b) many areas of mining engineering; practical mining operations; safety measures; ore deposits and mining of particular metals; ore dressing and milling; metallurgy; metallography; physical metallurgy; metallurgy of ferrous metals; coal; petroleum; natural gas; gas industry; c) most areas of chemical technology; chemical engineering; manufacture and use of chemicals; industrial electrochemistry; fuel; food processing and manufacture; oils, fats, and waxes; polymers and polymer manufacture; and c) most areas of photography. Certain specific topics within inorganic and organic chemistry (QD146-QD197 and QD241-QD441 respectively) are acquired at a near comprehensive level.

The Library has long runs of many important serials published by scholarly societies and associations, such as the American Chemical Society, the Royal Society of Chemistry, and the American Institute of Mining, Metallurgical, and Petroleum Engineers. The Library's extensive general collections in the chemical sciences are further enhanced by numerous reports held in the Technical Reports Section, and by specialized materials held by the Manuscript, Rare Book and Special Collections, Geography and Map, Prints and Photographs, and Area Studies Divisions. In addition, the Library has a significant collection of chemistry, chemical engineering, metallurgy, and mining dissertations in microform with digital dissertations acquired from the *ProQuest Dissertations and Theses Global* database.

B. Areas of Distinction

For many areas in classes TN, TP, and TR, the great strengths of the collections are long runs of U.S. and non-U.S. serials, society publications, and conferences, often back to the nineteenth century. Also of note are the many works that parallel the history and development of various fields of knowledge, including industrial electrochemistry and color photography. The Library's TR (Photography) holdings are very strong in serials (comprehensive level dating from the 1840s to the present), and artists' monographs (includes publications on major and minor practitioners). The QD and TP subclasses of greatest strength are inorganic chemistry (QD146-QD197), organic chemistry (QD241-QD441), chemical technology (general) (TP1-TP151), chemical engineering (TP155-TP156), fuel (TP315-TP360), food processing and manufacture (TP368-TP456), and polymers and polymer manufacture (TP1101-TP1185). Also of significance are works held in the Rare Book and Special Collections Division by trailblazers such as chemists Robert Boyle (1627-1691), Antoine Laurent Lavoisier (1743-1794), and Joseph Priestley (1733-1804); and inventor and photographer Eadweard Muybridge (1830-1904). The Manuscript Division's collections include the papers of a number of notables such as mining engineer Samuel Franklin Emmons (1841-1911); photographers Frederic Eugene Ives (1856-1937), Frances Benjamin Johnston (1864-1952), and Gordon Parks (1912-2006); and chemists Irving Langmuir (1881-

1957), Glenn Theodore Seaborg (1912-1999), and Henry Aaron Hill (1915-1979).

IV. Collecting Policy

The Library acquires materials in the chemical sciences primarily at the research level and the comprehensive level. Materials acquired in chemistry (QD), mining engineering, metallurgy (TN), and chemical technology (TP) include monographs, periodicals, conference proceedings, reference works, bibliographies, and abstracting and indexing services in all formats without regard to language, place of publication, date of publication, or chronological period. Photography (TR) publications issued both in the United States and abroad are acquired at the research level, with special emphasis on materials pertaining to the medium's history, influence, and contemporary expression in the United States. The Library endeavors to acquire monographs, selected exhibit and oeuvre catalogs, and serials relating to the history, criticism, techniques, and uses of photography. There is a special emphasis on acquiring publications needed to support research in the Library's collection of original documentary and artistic photographs. College and university level textbooks in chemistry and chemical engineering published in the U.S. are generally acquired at a research level; non-U.S. elementary and secondary school level textbooks are acquired on a selective basis. College and university level textbooks in mining engineering are acquired at an instructional support level. Laboratory manuals and study guides are acquired at the basic level; those published to accompany textbooks are not acquired. Juvenile texts are acquired on a selective basis as needed to support the Library's educational outreach programs. The Library holds a significant collection of dissertations, and collects comprehensively from ProQuest. We strive to permanently acquire all doctoral dissertations accepted by universities in the United States; non-U.S. dissertations are acquired selectively.

Related Library policies include *Supplementary Guidelines for Electronic Resources*, the *Dissertations and Theses Collections Policy Statement*, the *Societies and Associations Collections Policy Statement*, and *Supplementary Guidelines for Web Archiving*.

V. Best Editions and Preferred Formats

For guidance regarding best editions for material acquired via the Copyright Office, see: http://copyright.gov/circs/circ07b.pdf.

For guidance regarding recommended formats for material acquired via all other means; e.g., purchase, exchange, gift and transfer, see: http://www.loc.gov/preservation/resources/rfs.

For information regarding electronic resources, open digital content, web archiving, and data sets, see the following Supplementary Guidelines: http://www.loc.gov/acq/devpol/electronicresources.pdf, https://www.loc.gov/acq/devpol/opencontent.pdf, http://www.loc.gov/acq/devpol/webarchive.pdf, and https://www.loc.gov/acq/devpol/datasets.pdf.

VI. Acquisition Sources

The Library currently receives the bulk of its chemical sciences collection via the copyright deposit and CIP programs, with other material received through gift, purchase, and exchange. The Library's six overseas offices acquire materials from their respective areas. Some e-journals and born digital materials are acquired at a lower rate than their print counterparts, because current copyright law does not address the deposit of electronic materials. Also some of the mechanics associated with the acquisition, storage and display of digital materials have not yet been resolved. As e-journals, e-prints, podcasts, webcasts, and new technologies for creating science material proliferate and the Copyright law includes these materials as depository items, they will be acquired. The challenge for the Library of Congress is keeping up with the volume of publications in science, keeping current, capturing those publications that are born digital before they disappear, keeping track of print titles that suddenly turn digital, and acquiring e-journals that are not purchased through an aggregated database. As more publications are acquired digitally, the Library must ensure that all important and appropriate information is added to the collections and that the data formats represented in the chemical sciences collections are maintained to assure continued access to its digital information.

VII. Collecting Levels

Meeting the Library's Diverse and Inclusive Collecting Statement (see Section II) and the collecting levels outlined below requires continual evaluation of the publishing landscape, sources of expression, current events, and socio-cultural trends to thus maintain effective collecting policies and acquisitions methods. Changes in publishing or in the creation of materials covered by this policy statement may necessitate collecting efforts not explicitly referenced here. Such efforts will be handled on a case-by-case basis while the Library evaluates the need for policy statement updates.

For explanation of the Collecting Levels used by the Library, see https://www.loc.gov/acq/devpol/cpc.html.

Chemistry

LC Classification	Subject	U.S. Levels	Non-U.S. Levels
QD1-QD65.2	Chemistry (General)	4	4
QD71-QD142	Analytical Chemistry	4	4
QD146-QD197	Inorganic Chemistry	4	4
QD241-QD441	Organic Chemistry	4	4
QD450-QD882	Physical and Theoretical Chemistry	4	4

LC Classification	Subject	U.S. Levels	Non-U.S. Levels
QD901-QD999	Crystallography	4	4
Z5521-Z5526	Bibliography	4	4

Mining Engineering. Metallurgy

LC Classification	Subject	U.S. Levels	Non-U.S. Levels
TN1-TN257	Mining Engineering (General)	4	4
TN263-TN265	Mineral Deposits; Metallic Ore Deposits; Mineral Ores (General)	4	4
TN269-TN269.88	Geophysical Surveying	4	4
TN270-TN271	Prospecting	4	4
TN400-TN580	Ore Deposits and Mining of Particular Metals	4	4
TN600-TN799	Metallurgy	4	4
TN799.5-TN948	Nonmetallic Minerals	4	4
TN950-TN997	Building and Ornamental Stones	4	4
Z6678-Z6679	Metals; Metallurgy Bibliography	4	4
Z6736-Z6740	Mines and Mining Bibliography	4	4

Chemical Technology

LC Classification	Subject	U.S. Levels	Non-U.S. Levels
TP1-TP151	Chemical Technology (General)	5	4
TP155-TP156	Chemical Engineering	5	4
TP157-TP159	Apparatus and Supplies	5	4

LC Classification	Subject	U.S. Levels	Non-U.S. Levels
TP200-TP248	Chemicals (Manufacture and Use)	5	4
TP249-TP261	Industrial Radiochemistry; Industrial Radiation Chemistry; Industrial Electrochemistry	5	4
TP265-TP301	Chemistry of Fire and Fire Prevention; Explosives and Pyrotechnics	4	3
TP315-TP360	Fuel	5	4
TP368-TP456	Food Processing and Manufacture	5	4
TP480-TP498	Low Temperature Engineering; Cryogenic Engineering; Refrigeration and Icemaking	4	3
TP500-TP660	Fermentation Industries; Beverages; Alcohol	4	3
TP669-TP699	Oils, Fats, and Waxes	5	4
TP700-TP770	Gas Manufacture; Gas Industry; Acetylene Industry	4	3
TP785-TP869	Clay Industries; Ceramics; Glass	4	4
TP870-TP873.5	Artificial Minerals; Artificial Stone; Artificial Gems	3	3
TP875-TP888	Cement Industries	4	4
TP890-TP933	Textile Bleaching, Dyeing, Printing, Etc.	4	4
TP934-TP949.95	Paints, Pigments, Varnishes, Ink Manufacture, Etc.	4	3
TP950-TP994	Miscellaneous Organic Chemical Industries	4	3
TP1080-TP1185	Polymers and Polymer Manufacture	5	4
Z7914.C4	Bibliography	4	4

Photography

LC Classification	Subject	U.S. Levels	Non-U.S. Levels
TR1-TR225	Photography (General)	4	3
TR287-TR500	Photographic Processing; Darkroom Technique (General)	4	3
TR504-TR508	Transparencies; Diapositives	4	3
TR510-TR545	Color Photography	4	3
TR623.2-TR835	Applied Photography	4	3
TR845-TR899.5	Cinematography; Motion Pictures; Video Recording	4	3
TR900-TR923	Industrial Reproduction	5	4
TR925-TR1050	Photomechanical Processes	5	4
Z7134-Z7137	Bibliography	4	3

Revised November 2017. Updated by the Collection Development Office May 2022.