# LIBRARY OF CONGRESS COLLECTIONS POLICY STATEMENTS

## Science - General
## (Class Q and selected portions of Z)

**Contents**



### I. Scope

This Collections Policy Statement covers class Q (Science, General) and applicable subclasses of Class Z. Many of the numerous abstracting and indexing services, catalogs of other scientific libraries, specialized bibliographies, and finding aids vital for accessing the serial literature are classed in Z.

### 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

The Library's collections in general science are particularly strong in the history of science, scientific exploration, the lives and contributions of scientists, the role of science in society, world science, and science education. For a discussion on collecting guidelines in the history of science, consult the

*Collections Policy Statement on the History of Science and History of Technology*.

The Library's holdings of 18th and 19th century scientific serials in all languages, and its collections of the transactions, proceedings, bulletins, and memoirs of scientific societies and institutions from around the world, provide a chronicle of scientific investigation, inquiry, and deliberation that is encyclopedic in its coverage. This collection, classed for the most part in Q, is a legacy of the Smithsonian Institution, the Smithsonian's exchange partners, and Copyright deposit. If the exploring expeditions (Lewis and Clark, Humboldt, Murray, and Wilkes) and the many voyages of discovery (HMS Endeavour, HMS Challenger, HMS Discovery, USS Albatross, the Schooner Grampus) are added to the thousands of publications generated by scientific societies and institutions, the sum is one of the most extensive records of scientific investigation and research known to man. This genre of material has expanded in the 20th and the 21st centuries to include the tracts of modern-day explorers, new scientific endeavors, new institutions, new treatises, contemporary issues, interdisciplinary research, fresh insights, and ever more scientific transactions, proceedings, and bulletins. This combination of resources in all formats provides the scientist and scholar with a comprehensive view of the pursuit of scientific knowledge throughout time. These collections are continually being carefully augmented and judiciously expanded.

Another area of distinction in the Library's general science collections is its holdings of materials summarizing the contributions of scientists to the community of knowledge. This multi-faceted/multi-formatted collection of biographical materials preserving the scientific accomplishments, achievements, and the personal and public lives of scientists is vast and covers all periods of time from classical antiquity to modern times. While book-length biographies, autobiographies, and membership directories are usually classed by subject, collected biographies, those appearing in the publications of scientific societies, institutions, and organizations, and biographical memoirs are generally classed in Q. Also classed in Q are the chronologies, milestones, breakthroughs, and landmarks of science, most of which are directly tied to the triumphs, conquests, and achievements of a single scientist or groups of scientists. These materials are substantial and have been used by historians, biographers, administrators, and policy-makers to access past accomplishments and forecast future advances in the sciences.

Science policy, the federal/private sector support/promotion of scientific research, the dissemination of scientific and technical information, and the importance of science in the national interest are areas in which the Library has also collected heavily. These materials not only support the work of the Congress, but they also further scientific inquiry, define the relationship between science, the scientific community, and society, as well as provide evidence that the application of scientific research and knowledge improves the lives and well-being of the world's citizenry. Materials on scientific enterprise, scientific instrumentation, information and communications systems, and science education and literacy are extensive, as are the collections that support the view that basic research and fundamental science are important to the development of international competitiveness and economic growth. The papers and writings of Vannevar Bush, Alan Waterman, William T. Golden, Harvey Brooks, Joshua Lederberg and Jerome Wiesner and the reports of science and technology advisory organizations and commissions analyzing science policy questions and administrative decision-making are considerable and add texture and understanding to scientific debate and policy-making.

## IV. Collecting Policy

The Library acquires material in all formats and languages, e.g., print, microform, audio, video, and electronic. The Collections Policy Statements for *Dissertations and Theses*; *Countries and Regions with Acquisitions Challenges*; and the *History of Science and History of Technology* are also used in conjunction with this policy to maintain the Library's collecting strengths in general science that will support the work of the Congress and the Library's many constituencies.

The Library considers scientific and technical information from throughout the world to be significant, and therefore collects materials in analog and digital formats on a worldwide basis to ensure full representation of the substantial literature in these fields. The Library collects non-English language materials that illuminate the science policy of many of the world's countries. These materials include data on administration of science, scientific research, scientific achievement, science education and scientific output.

## V. Acquisition Sources

The Library acquires its materials in the general sciences from a variety of sources, e.g., Copyright deposit, Cataloging in Publication (CIP), the Library's six overseas field offices, purchase, gift, and exchange. The volume of science-related publications is expected to increase in volume with more born digital content becoming available and some print titles converting to digital only.

Digital formats have increasingly blurred the line between databases of citations, abstracts and full text, so that a given database may provide what is essentially an electronic journal for one title, while providing a citation, with no text, for another journal. Differences in periods of coverage also make a precise assessment of the number and nature of available electronic resources somewhat difficult, but several reliably strong sources for electronic materials in the area of the general sciences can be identified. Particularly useful titles include the subscription databases *JSTOR; Academic Search Complete; Applied Science and Technology Full Text; Biological and Agricultural Index Plus; General Science Full Text; Biosis; Electronic Collections Online (ECO); Environment Complete; ProQuest Databases; Readers' Guide Retrospective; Web of Science; Biological and Agricultural Index; National Technical Reports Library; Garden, Landscape and Horticulture Index;* and *ProQuest Digital Dissertations & Theses Global*. Freely available electronic resources collected by the Library that often have materials of interest in general science include *Agricola, Science.gov, Encyclopedia of Earth,* and *Biographical Memoirs of the National Academy of Sciences*.

## VI. 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 and web archiving, 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.

## 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.

The Library's general science collections of reference works, monographs, and general science serials are acquired primarily at either the comprehensive level or the research level. Included at the comprehensive/research levels are directories of research institutions, laboratories, and scientists, histories of science, biographies, works describing the results of, and support for, scientific research and exploration, the importance of science to society, science literacy, communication of scientific information, cybernetics, artificial intelligence, and information theory.

The Library's collection of science fair projects, school science activities, and materials for science educators is extensive and supports a wide range of use by educators both in the United States and abroad. Secondary school textbooks, works on museums and exhibitions, laboratory manuals, problems and exercises, and syllabi are acquired selectively at an instructional support level. The Library acquires textbooks published in the United States on science written at the college level or above at the research level; non-U.S. textbooks in this field are acquired selectively at the basic level.

Materials related to the history of science, scientific method, and the process of science - creativity, basic research and development, accountability, ethics, communication, the dissemination of scientific results - as well as materials describing major scientific advances and achievements are well represented in all language and formats in the general science collection. Also acquired broadly at the research level are materials gauging the contribution of science to specific national goals and the general national welfare, those monitoring significant developments and trends in the scientific enterprise, including international comparisons, and those providing appraisals of science in the United States.

Artificial intelligence, natural language processing, cybernetics, and information theory are acquired widely at the research level in many languages, and in many formats. Much of the literature relating to these topics can be found in journals, conference proceedings, technical reports, and standards, as well as in electronic resources.

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

| LC Classification | Subject | U.S. Levels | Non-U.S. Levels |
|---|---|---|---|
| Q1-Q299 | General science, science policy, periodicals, society publications, biography, scientific voyages and expeditions, history of science, scientific research, science and society | 5 | 4 |
| Q300-385 | Cybernetics, artificial intelligence, Information theory | 5 | 4 |
| Z7491-Z7407 | Bibliography<br>Abstracting and indexing services, scientific book catalogs, bibliographies on special topics covering all aspects of general science | 5 | 4 |

Revised August 2018. Updated by CDO April 2022.