

Center for Research Libraries (CRL) and Linda Hall Library (LHL) of Science, Engineering and Technology Global Resources Partnership's Collection Management Policy for Books

The Center for Research Libraries (CRL) and Linda Hall Library (LHL) of Science, Engineering and Technology Global Resources Partnership's primary focus for collection development is to identify, select, manage and preserve serial collections that support the Partnership's mission to ensure the availability of the knowledge resources vital to research and learning in the sciences and to act as a guardian of the collective intellectual heritage with regard to the science, technology, and engineering disciplines. The Partnership seeks to sustain the role of the Linda Hall Library as the world's foremost independent research library devoted to science, engineering and technology and create a preeminent archive of the related print journals.

The primary focus of the monographic collection is to support and enrich the serials collection. Although the focus of the CRL / LHL Partnership is firmly on the management of the journal print archive, there are a few areas of excellence in the combined monographic collections that represent a valuable archive and these should be retained and preserved in their own right.

Areas of Excellence:

The following subjects should be considered areas of special emphasis based upon an analysis of the combined monographic holdings of the Center for Research Libraries and Linda Hall Library with monographic holdings from the top twenty libraries in the rankings from the Association for Research Libraries and from the Universities with the top Science, Technology and Engineering programs based on <u>US News and World Reports</u> rankings. These subject areas are of exceptional strength within the LHL and CRL Collections and these areas represent the most important for archival and future collecting activities:

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Experimental Mechanics	QC 120-169
Constitution & Properties of Matter	QC 170-197
Acoustics, Sound	QC 220-246
Heat	QC 251-339
Optics, Light, Radiation	QC 350-499
Electricity, Magnetism, Nuclear Physics	QC 501-766
Geophysics, Geomagnetism	QC 800-849
Inorganic Chemistry, General	QD 146-240
Organic Chemistry, General	QD 241-449
Analytical Chemistry	QD 71-145
Crystallography	QD 900-9999
Physical & Theoretical Chemistry	QD450-899
General Engineering	TA
Bridge Engineering	TG
Mechanical Engineering & Machinery	TJ
Electrical Engineering	TK
Optical Data Processing	TK 7885-7895

Motor Vehicles, Aeronautics, Astronautics	TL
Mining Engineering & Metallurgy	TN
Chemical Technology	TP
Manufactures	TS

The following subjects should be considered areas of emphasis for retention and preservation based upon an analysis of the combined monographic holdings of the Center for Research Libraries and Linda Hall Library with monographic holdings from the top twenty libraries in the rankings from the Association for Research Libraries and from the Universities with the top Science, Technology and Engineering programs based on <u>US News and World Reports</u> rankings. These areas were of exceptional strength within the LHL and CRL Collections but their scope falls outside of current collecting interests so the focus would be on preserving existing holdings.

Cybernetics	Q 300 – 349
Mathematical Analysis	QA 299-439
Computers, General	QA 75 - 76.5
Machine Theory, Abstract Automata	QA 75 - 76.5
Analytical Mechanics	QA 801-9999
Mineralogy	QE 351-399
Petrology	QE 400-499
Dynamic & Structural Geology	QE 500-625
Microscopy	QH 200-299
Reproduction & Life	QH 471-530
Cytology	QH 573-699
Plant Anatomy	QK 640-709
Plant Physiology	QK 710-899
Plant Ecology	QK 900-9999
Microbiology	QR 1-189.5

Foreign language Areas of Excellence:

Overall, the monographic collections of the CRL LHL Partnership are not as deep in foreign language areas as the serial collections. Few subjects show holding levels that are significantly higher than English language materials. The following language areas should be considered areas of special emphasis based upon an analysis of the combined monographic holdings in these languages of the Center for Research Libraries and Linda Hall Library with the monographic holdings from the top twenty libraries in the rankings from the Association for Research Libraries and from the Universities with the top Science, Technology and Engineering programs from <u>US News and World Reports</u> rankings. There are several language areas that represent strong collections but, unlike serials, few areas rise to the level of unique. The field of Chemistry is an exception, as there are several language

areas that are very strong and have unique titles. The percentages are based on comparing the combined total holdings of the three groups. In simple terms the Russian monographic titles held by CRL and LHL is equal to 66% of all the Russian monographs held by all twenty of the top ARL libraries. For the Slovak language area in Chemistry, the CRL/LHL partnership holds more titles than the combined titles held by the top twenty ARL libraries so the CRL /LHL collections are 111%, a little more than 10% larger than the entire ARL group. The strongest language areas are:

Russian	66%
Romanian	44%
In Chemistry	
Slovak	111%
Dutch	83%
Bulgarian	67%
Danish	50%
Polish	49%
German	44%

Unique Titles:

The combined monographic holdings of CRL and LHL represent a collection that contains some rare and unique titles. This is especially true in select foreign language areas. For example, in the field of Chemistry, for titles in the Russian language, the unique titles held by CRL and LHL represents 56% of <u>all</u> the unique titles held in the top STE libraries. Another very important consideration is that the average number of holding libraries worldwide for those unique titles held at CRL/LHL was only three libraries. The next closest organization for the number of unique titles was the University of California, Berkeley. These unique titles are important assets that must be preserved for the good of the community.

Distribution of Unique Chemistry Books in Russian Among Top STE Libraries	
CRL LHL	58%
University of California, Berkeley	22%
Stanford University	6%
Cornell University	5%
University of Illinois	3%
Massachusetts Institute of Technology	2%
University of Chicago	2%
University of Michigan	2%

Publishers / Relationship with Professional Societies:

The partnership and in particular Linda Hall Library has had a very active history with collaborations with professional societies. These have created rich collections in associated subject areas. These relationships will be important to help maintain areas of importance.

Collecting Levels for Monographs:

OUT OF SCOPE (0): The library does not intentionally collect in this subject.

MINIMAL LEVEL (1): A subject area in which few selections are made beyond very basic works. A very limited collection of materials consisting of monographs and reference works with only a few periodicals directly dealing with this topic. A collection at this level should be frequently and systematically reviewed for currency of information. Classic or standard retrospective materials are retained.

BASIC INFORMATION LEVEL (2): A selective collection of materials that serves to introduce and define a subject and to indicate the varieties of information available elsewhere. Provides a historical description of the subject's development and provides general works devoted to major topics and figures in the field. The introductory level of a basic information collection is only sufficient to support patrons attempting to locate general information about a subject. It includes a limited collection of monographs and reference works. It may include dictionaries, encyclopedias, selected editions of important works, historical surveys, bibliographies, handbooks, and major or representative general periodicals. The collection is frequently and systematically reviewed for currency of information. All materials may be retained.

SYSTEMATIC STUDY LEVEL (3): A collection that is adequate to impart and maintain knowledge about a subject in a systematic way but at a level of less than research intensity. The collection includes an extensive collection of general monographs and reference works and selected specialized general monographs and reference work; an extensive collection of general periodicals and a representative collection of specialized periodicals; limited collections of appropriate foreign language materials—e.g., foreign language learning materials for non-native speakers or foreign language materials about a topic such as German history in German; extensive collections of the works of better-known authors and selections from the works of lesser-known authors. The collection includes a wide range of basic works in appropriate formats, a significant number of classic retrospective materials, complete collections of the works of more important writers, selections from the works of secondary writers, a selection of representative journals, and the reference tools and fundamental bibliographical apparatus pertaining to the subject. The collection includes the most important primary and secondary literature. At the systematic study support level, a collection is adequate to support independent study and most learning needs of the clientele of public and special libraries. The collection is systematically reviewed for currency of information and to assure that all essential and significant information is retained, including all significant retrospective materials.

RESEARCH LEVEL (4): A collection that includes a very extensive collection of general and specialized monographs and reference works; a very extensive collection of general and specialized periodicals; extensive collections of foreign language materials; extensive collections of the works of well-known authors as well as other important but lesser-known authors. A collection that includes the major published source materials required for any independent research, including materials containing research reporting, new findings, scientific experimental results, and other information useful to researchers. It is intended to include all important reference works and a wide selection of specialized monographs, as well as a very extensive collection of journals and major indexing and abstracting services in the field. A collection in which the library endeavors, to include all significant works published works in all applicable languages, for a necessarily defined and limited field. Older material is retained for historical research and actively preserved. A collection at this level supports doctoral and other types of original research and represents a collection of special interest to the larger library community.

Collection Management Policy for the Biological Sciences

- Types of Materials Collected: The major types of publications collected are all types of monographs and monographic series, non-serial conference proceedings, directories and reference works. Government publications, maps, theses, dissertations, and field/technical reports are acquired very selectively. All audio/visual materials, all electronic media, and all reprints in paper are excluded.
- Imprint Dates Collected: The monographic collections of the partnership provide support for a deep and rich print archive. Current publications are collected in order to maintain excellence in areas of strength. There is no exclusion of imprints dates but the primary focus would be to collect current scholarship.
- **Chronological Focus**: Collections will be managed to provide the widest possible coverage and to support the archive.
- Languages Collected: The monographic collections of the Partnership provide support for many foreign language areas however the overall strength of the collections is limited. Materials in English should receive the primary focus of collecting activities. Select titles in Russian and Romanian may also be considered.
- Place of Publication: Place of publication will be parallel to the language area.
- Interdisciplinary Factors: Most biological research does not lend itself to classification under a single subject within the discipline, but, instead, draws on a number of sub-disciplines. The fields of biophysics, biochemistry, biostatistics, neurophysiology and animal behavior overlap into areas covered by the collections in physics, chemistry, mathematics and statistics, psychology and anthropology. For the purposes of this policy framework, subject areas will be assigned a collecting level based on the primary Library of Congress Classification and broad areas are assigned collecting levels based on that classification and not on interdisciplinary relationships.

Biological Sciences	LC CLASS	COLLECTING LEVEL
Animal Behavior, Anatomy	QL 750-9999	1
Biology, General	QH 300-425	2
Birds	QL 670-699	1
Botany, General	QK 1-474.5	2
Botany, Specific Fields	QK 474.8-639	1
Chordates – Vertebrates	QL 600-613	1
Cytology	QH 573-699	1
Ecology	QH 540-572	2
Economic Biology	QH 700-9999	1
Fishes	QL 614-639.8	1
Genetics	QH 426-470	1

Invertebrates	QL 360-599.82	1
Mammals	QL 700-749	1
Microbiology	QR 1-189.5	1
Microscopy	QH 200-299	2
Natural History	QH 1-199	1
Plant Anatomy	QK 640-709	1
Plant Ecology	QK 900-9999	1
Plant Physiology	QK 710-899	1
Reproduction & Life	QH 471-530	1
Reptiles & Amphibians	QL 640-669.3	1
Virology	QR 190-9999	1
Zoology, General	QL 1-359	1

Collection Management Policy for Chemistry

- Types of Materials Collected: The major types of publications collected are all types of monographs and monographic series, non-serial conference proceedings, directories and reference works. Government publications, maps, theses, dissertations, and field/technical reports are acquired very selectively. All audio/visual materials, all electronic media, all reprints in paper are excluded.
- Imprint Dates Collected: The monographic collections of the partnership provide support for a deep and rich print archive. Current publications are collected in order to maintain excellence in areas of strength. There is no exclusion of imprints dates but the primary focus would be to collect current scholarship.
- **Chronological Focus**: Collections will be managed to provide the widest possible coverage and to support the archive.
- Languages Collected: The collections of the Partnership provide support for many foreign language areas. Each subject area has several areas of excellence. To support these areas collections should continue to build in these language areas. The ranked list follows:

Slovak	111%
Dutch	83%
Bulgarian	67%
Danish	50%
Polish	49%
German	44%

- Place of Publication: Place of publication will be parallel to the language area.
- Interdisciplinary Factors: There are many interdisciplinary relationships in the areas of the sciences. Examples in Chemistry include biochemistry, materials science, nanosciences, macromolecular science, crystallography, medicinal chemistry and physical chemistry/chemical physics. For the purposes of this policy framework, subject areas will be assigned a collecting level based on the primary Library of Congress Classification and broad areas are assigned collecting levels based on that classification and not on interdisciplinary relationships. Thus medicinal chemistry would be classed in the RM areas and would not be given the high collecting level assigned to most of chemistry.

Chemistry		
Analytical Chemistry	QD 71-145	3
Chemistry, General	QD 1-70	2
Crystallography	QD 900-9999	3
Inorganic Chemistry, General	QD 146-240	3
Organic Chemistry, General	QD 241-449	3
Physical & Theoretical Chemistry	QD450-899	3

Collection Management Policy for Computer Science

- Types of Materials Collected: The major types of publications collected are all types of monographs and monographic series, non-serial conference proceedings, directories and reference works. Government publications, maps, theses, dissertations, and field/technical reports are acquired very selectively. All audio/visual materials, all electronic media, all reprints in paper are excluded.
- **Imprint Dates Collected**: The monographic collections of the partnership provide support for a deep and rich print archive. Current publications are collected in order to maintain excellence in areas of strength. There is no exclusion of imprints dates but the primary focus would be to collect current scholarship.
- **Chronological Focus**: Collections will be managed to provide the widest possible coverage and to support the archive.
- Languages Collected: The monographic collections of the Partnership provide support for many foreign language areas however the overall strength of the collections is limited. Materials in English should receive the primary focus of collecting activities.
- Place of Publication: Place of publication will be parallel to the language area.
- Interdisciplinary Factors: Computer Science is a fairly new discipline; consequently the subject is treated in many other disciplines in including the physical sciences and engineering. For the purposes of this policy framework, subject areas will be assigned a collecting level based on the primary Library of Congress Classification and broad areas are assigned collecting levels based on that classification and not on interdisciplinary relationships.

Computer Science		
Computer Networks	QA 75 - 76.5	1
Computer Programming & Programming		
Languages	QA 75 - 76.5	1
Computer Science - General	QA 75 - 76.5	2
Computer Software	QA 75 - 76.5	1
Computers, General	QA 75 - 76.5	1
Cybernetics	Q 300 - 349	1
Machine Theory, Abstract Automata	QA 75 - 76.5	1
Management Information Systems	T 58.5 -58.62	1
Modeling & Simulation	TK 7885-7895	1
Office Automation	HF 5546-5548.6	1
Online Data Processing	T 58.5 -58.62	1
Optical Data Processing	TK 7885-7895	1
Special Computers & Systems	QA 75 - 76.5	1
Special Topics in Computer Science	QA 75 - 76.5	1

Collection Management Policy for Engineering & Technology

- Types of Materials Collected: The major types of publications collected are all types of monographs and monographic series, non-serial conference proceedings, directories and reference works. Government publications, maps, theses, dissertations, and field/technical reports are acquired very selectively. All audio/visual materials, all electronic media, all reprints in paper are excluded.
- Imprint Dates Collected: The monographic collections of the partnership provide support for a deep and rich print archive. Current publications are collected in order to maintain excellence in areas of strength. There is no exclusion of imprints dates but the primary focus would be to collect current scholarship.
- **Chronological Focus**: Collections will be managed to provide the widest possible coverage and to support the archive.
- Languages Collected: The monographic collections of the Partnership provide support for many foreign language areas however the overall strength of the collections is limited Materials in English should receive the primary focus of collecting activities. Select titles in Russian and Romanian may also be considered.
- Place of Publication: Place of publication will be parallel to the language area.
- Interdisciplinary Factors: There are many interdisciplinary relationships in the areas of the sciences. There
 are many areas in the physical sciences and geosciences that are interdependent with areas in engineering.
 For the purposes of this policy framework, subject areas will be assigned a collecting level based on the
 primary Library of Congress Classification and broad areas are assigned collecting levels based on that
 classification and not on interdisciplinary relationships.

Engineering & Technology		
Bridge Engineering	TG	3
Building Construction	TH	2
Chemical Technology	TP	3
Domestic Engineering	TX	1
Electrical Engineering	TK	3
Environmental Technology	TD	2
General Engineering	TA	3
General Technology	Т	3
Handicrafts, Arts & Crafts	TT	1
Highway Engineering	TE	3
Hydraulic Engineering	TC	3
Manufactures	TS	3
Mechanical Engineering & Machinery	TJ	3
Military Engineering	UG 1-159	1

Mining Engineering & Metallurgy	TN	3
Motor Vehicles, Aeronautics, Astronautics	TL	3
Naval Architecture, Shipbuilding, etc.	VM 1-14	1
Navigation, Merchant Marine	VK 15 - 124	1
Printing	Z 4-659	1
Railroad Engineering	TF	3

Collection Management Policy for Geography & Earth Sciences

- Types of Materials Collected: The major types of publications collected are all types of monographs and monographic series, non-serial conference proceedings, directories and reference works. Government publications, maps, theses, dissertations, and field/technical reports are acquired very selectively. All audio/visual materials, all electronic media, all reprints in paper are excluded.
- Imprint Dates Collected: The monographic collections of the partnership provide support for a deep and rich print archive. Current publications are collected in order to maintain excellence in areas of strength. There is no exclusion of imprints dates but the primary focus would be to collect current scholarship.
- **Chronological Focus**: Collections will be managed to provide the widest possible coverage and to support the archive.
- Languages Collected: The monographic collections of the Partnership provide support for many foreign language areas however the overall strength of the collections is limited. Materials in English should receive the primary focus of collecting activities.
- Place of Publication: Place of publication will be parallel to the language area.
- Interdisciplinary Factors: For the purposes of this policy framework, subject areas will be assigned a collecting level based on the primary Library of Congress Classification and broad areas are assigned collecting levels based on that classification and not on interdisciplinary relationships.

Geography & Earth Sciences		
Atlases. Globes	G 1000-3179	0
Cartography	GA 1-9999	1
Dynamic & Structural Geology	QE 500-625	1
Environmental Sciences	GE	1
Geography, General	G 1-999	1
Geology, General	QE 1-350	1
Geomorphology	GB 400-649	1
Geophysics, Geomagnetism	QC 800-849	3
Hydrology	GB 651-4999	1
Maps	G 3180-9999	1
Mathematical Geography	GA 1-9999	1
Meteorology	QC 850-974	2
Mineralogy	QE 351-399	1
Natural Disasters	GB 5000-9999	1
Oceanography	GC	1

Paleontology	QE 700-760	1
Paleozoology, Paleobotany, Palynology	QE 761-9999	1
Petrology	QE 400-499	1
Physical Geography	GB 3-399	1
Regional Geology	QE 1-350	1
Stratigraphy	QE 640-699	1

Collection Management Policy for Mathematics

- Types of Materials Collected: The major types of publications collected are all types of monographs and monographic series, non-serial conference proceedings, directories and reference works. Government publications, maps, theses, dissertations, and field/technical reports are acquired very selectively. All audio/visual materials, all electronic media, all reprints in paper are excluded.
- Imprint Dates Collected: The monographic collections of the partnership provide support for a deep and rich print archive. Current publications are collected in order to maintain excellence in areas of strength. There is no exclusion of imprints dates but the primary focus would be to collect current scholarship.
- **Chronological Focus**: Collections will be managed to provide the widest possible coverage and to support the archive.
- Languages Collected: The monographic collections of the Partnership provide support for many foreign language areas however the overall strength of the collections is limited. Materials in English should receive the primary focus of collecting activities.
- Place of Publication: Place of publication will be parallel to the language area.
- Interdisciplinary Factors: For the purposes of this policy framework, subject areas will be assigned a collecting level based on the primary Library of Congress Classification and broad areas are assigned collecting levels based on that classification and not on interdisciplinary relationships.

Mathematics		
Algebra	QA 150-272	1
Geometry, Topology	QA 440-800	1
Mathematical Analysis	QA 299-439	1
Mathematics, General	QA 1-100	1
Numeration, Arithmetic, Elementary		
Mathematics	QA 101-149	0
Probabilities, Math. Stats., Interpolation	QA273-298	1

Collection Management Policy for the Physical Sciences

- Types of Materials Collected: The major types of publications collected are all types of monographs and monographic series, non-serial conference proceedings, directories and reference works. Government publications, maps, theses, dissertations, and field/technical reports are acquired very selectively. All audio/visual materials, all electronic media, all reprints in paper are excluded.
- Imprint Dates Collected: The monographic collections of the partnership provide support for a deep and rich print archive. Current publications are collected in order to maintain excellence in areas of strength. There is no exclusion of imprints dates but the primary focus would be to collect current scholarship.
- **Chronological Focus**: Collections will be managed to provide the widest possible coverage and to support the archive.
- Languages Collected: The monographic collections of the Partnership provide support for many foreign language areas however the overall strength of the collections is limited. English, Russian and Romanian are those languages that should receive the primary focus of collecting activities.
- Place of Publication: Place of publication will be parallel to the language area.
- Interdisciplinary Factors: There are many interdisciplinary relationships in the areas of the physical sciences. Examples include: materials science, nanosciences, macromolecular science, crystallography, and physical chemistry/chemical physics. For the purposes of this policy framework, subject areas will be assigned a collecting level based on the primary Library of Congress Classification and broad areas are assigned collecting levels based on that classification and not on interdisciplinary relationships.

Physical Sciences		
Acoustics, Sound	QC 220-246	3
Analytical Mechanics	QA 801-9999	3
Astronomy	QB	2
Chronology	CE 1-20	1
Constitution & Properties of Matter	QC 170-197	3
Electricity, Magnetism, Nuclear Physics	QC 501-766	3
Experimental Mechanics	QC 120-169	3
Heat	QC 251-339	3
Optics, Light, Radiation	QC 350-499	3
Physics, General	QC 1-80	2
Science, General	Q	2
Weights & Measures	QC 81-114	1