



Collection Policy for History of Science, Technology, and Mathematics

This policy describes in general terms the purpose and scope of Oxford's collection relating to the study of history of natural and physical sciences, technology, mathematics, and constituencies served.

Separate policies exist for related subjects, most notably for History of Medicine and British and Western European History¹.

1. Overview

The subject of History of Science, Technology and Mathematics is vast, spanning many different disciplines which have evolved over the course of centuries and which have touched on all aspects of human life throughout the ages. The study of this subject also embraces the study of individuals, their inventions, the history of scientific organisations and the development of scientific methods and instrumentation². The collection for this subject has to be selective. This policy outlines the priorities. Researchers in this field will also benefit from strong general history collections which are held in Oxford libraries.

1.1 General coverage of subject in Bodleian Libraries and other Oxford libraries

The **Upper Reading Room, Old Bodleian Library**, has the Bodleian Libraries' open-shelf collection in History of Science, Technology and Medicine (4,000+ books). Eleven key periodical titles are integrated into the Humanities Periodicals collections in the Lower Gladstone Link. The collections support the research community as well as relevant taught Master's courses and form a core collection for medieval to modern history of science, largely of the Western world, and covering primary and secondary sources.

Much of the Bodleian Library collection (including that of the Radcliffe Science Library, RSL), comprising itself 1 million volumes, is also a rich quarry for history of science, technology and mathematics. Particular strengths are in 19th century holdings.

Researchers focussing on specific geographical areas may also draw on the collections in the Bodleian Library of Commonwealth and African Studies at Rhodes House, the Vere Harmsworth Library at the Rothermere American Institute, Bodleian Library South Asian collections and the Oriental Institute Library.

Founded in the 1930s, the **Alexander Library of Ornithology**, located in the Department of Zoology, is one of the foremost ornithological reference libraries in the world.

The core library collection of the **Museum of the History of Science (MHS) Library** comprises printed books, pamphlets, and periodicals. It now numbers some 20,000 items, dating from 1476 to the present. It has just over 5,000 early printed and antiquarian collections and just over 6,800 modern monographs. The strengths of this library lie in scientific instruments, antique scientific books on astronomy, chemistry, applied mathematics, and other cultural materials relevant for history of science.

¹ See <http://www.bodleian.ox.ac.uk/subjects-and-libraries/subjects>

² See **6. Coverage for individual scientific disciplines** (p.11) for more details.



The library and archival holdings of the **Oxford University Museum of Natural History** are a rich source for the research of geology and zoology.

The **Sherardian Library of Plant Taxonomy** covers research in plant taxonomy, systematics, floristics and plant evolution, in addition to special collections and historical material.

Whitehead Library of the Mathematical Institute has a small section on the history of maths (approx. 100 items as well as a collection of mathematicians' Collected Works (approx. 150 titles).

Nuffield College Library has useful collections relevant to the history of technology and related areas of industrial and business history.

History Faculty Library

The research collections are supplemented by core history of science lending collections held primarily at the Bodleian History Faculty Library (HFL), which is embedded in the Radcliffe Camera since September 2012.

SOLO is Oxford's discovery tool to locate the vast collections of books and journals in Bodleian Libraries.

1.2 Legal Deposit

The Bodleian Library's extraordinary strength in British History, in both breadth and depth of the printed collections, derives primarily from the workings of the legal deposit privilege which the Library has enjoyed since 1610.

Early printed books published in England and received by the Bodleian Library since 1610 serve as primary sources for historians. Critical monographic works, modern printed source material but also popular titles on British History are received substantially through Legal Deposit.

Modern Legal Deposit titles are, to a large extent, placed in the Bodleian Library's Lower Gladstone Link (high-use materials and last 3 year's intake) and otherwise in the Book Storage Facility (BSF). Wherever possible, titles important for the Honour School of Modern History degree are placed on open shelves in the Upper Camera, Bodleian Library, and those important for research and postgraduate teaching on the open shelves in the Upper Reading Room, Bodleian Library.

UK titles published within the last year are actively claimed, wherever possible, by the staff in the Bodleian's Legal Deposit Operations. If despite a claim a title fails to arrive and the claim is signed off, then generally the title will be purchased in order to complete the collections. However, delays, often of some months, in the receipt of UK publications may occur.

Details of the Collection management policy relating to Legal Deposit can be found at <http://www.bodleian.ox.ac.uk/about-us/policies/collection-management-policy-legal-deposit>

Electronic Legal Deposit

On 6 April 2013, new legislation came into force allowing the Bodleian Libraries and the other Legal Deposit Libraries in the UK and Ireland, to access electronic books, articles, web pages and other electronic documents published in the UK. The 2013 Regulations 2013 are being implemented gradually over several years, as the Legal Deposit Libraries agree collectively to accept electronic versions from each UK publisher.



More about electronic Legal Deposit can be found here:

<http://www.bodleian.ox.ac.uk/bodley/about-us/legaldeposit/electronic-legal-deposit-non-print-publications>

1.3 Electronic resources

The range of electronic resources available to historians of all periods is increasing ever more. Though specialist subscription databases for History of Science, Technology and Mathematics are comparatively few and far between, there are major free internet resources and digitisation projects, e.g. Darwin Online, Einstein Archive Online. Researchers in the field of history of science can benefit from many general history online collections also. These provide historians with 24/7 remote access to research and teaching materials (unique or alternatives in print) and with a range of discovery tools. The use of full-text searchable text opens up new avenues of research for historians, who are traditionally text based. For instance, electronic resources increasingly embed additional useful information, such as textual comments or geo-spatial information.

Digital mapping facilities in the Map Department, Bodleian Library, enable historians to produce their own maps. As well using personal research data, users can use historic mapping data from electronic resources such as UKBorders and Digimap. These can be useful not just for geographical representation of areas but also to illustrate statistical information.

Electronic resources (databases and electronic journals) are accessed through OxLIP+, the interface for electronic resources, and OU E-Journals portal, which provides access to e-journals.

Examples of some important subscription resources are as follows:

Bibliographical databases

- Historical Abstracts; America: History & Life
- Bibliography of British and Irish History
- International Medieval Bibliography
- Scopus
- Medline
- Index Islamicus
- Catalogue of Scientific Papers, 1800-1863 (via <http://gallica.bnf.fr>)

Primary or Full-text databases

- Loeb Classical Library Online
- Past Masters: Boyle, Darwin, etc.
- Early English Books Online (EEBO)
- Early European Books (EEB), esp. Collection 4 which include digitised collections from The Wellcome Library
- Eighteenth Century Collections Online (ECCO)
- Electronic Enlightenment (EE)
- Making of the Modern World, 1450-1850 (MOMW)
- House of Commons Parliamentary Papers, 1801-2003/4
- JSTOR Global Plants (digitized herbarium specimen database)

Reference & Biographical databases

- The Cambridge history of science (via Cambridge Histories Online)
- Complete Dictionary of Scientific Biography
- World Biographical Information System (WBIS)
- Oxford Dictionary of National Biography (DNB)

Newspaper databases

- Times Digital Archive, 1785-1985

eJournals

- Philosophical Transactions of the Royal Society
- Annals of Science



British Journal for the History of Science
Isis
Nuncius
Revue d'Histoire des Sciences

1.4 Notes about particular formats or collections

Thanks largely to Legal Deposit, of particular note are collections of historical British newspapers (good national, regional and local coverage), historical statistics and Official Publications.

1.5 Languages

Dating back to the early 17th century, Sir Thomas Bodley's interest in the Continent established the Bodleian's tradition to purchase extensively in many languages.

Current selection criteria for this subject focus largely on German, French and Italian publications. Titles intended for research are usually bought in the original language.

Secondary material for teaching purposes is largely in the English language. However, most primary source material purchased for the HFL will be in the original language, which are mostly the principal Western European languages but also include Russian and Latin. Where authoritative translations of sources exist, they are actively selected for the teaching collections in both the Bodleian Library and HFL.

Occasionally, Faculty will provide their own translations of sources which are included in e.g. eSet Texts (c.f. 2.2.2).

1.6 Bodleian Libraries Collection Management

Bodleian Libraries has several Collection Management Policy Documents which refer to all subjects and collections. These are available on the web and deal with location, retention, disposal and transfer of library material: <http://www.bodleian.ox.ac.uk/about-us/policies/collection-management-policy>.

2. Teaching collections

The History Faculty Library (HFL) holds the great majority of the borrowable teaching collections for history of science, technology, mathematics and medicine, largely of the Western world. They are largely all available on open shelves and for lending to registered staff and students of the University.

Additionally, undergraduates make extensive use the Bodleian's collections, which are held to a smaller degree on the open shelves in the Upper Reading Room, Bodleian Library, the Gladstone Link and otherwise in the Bodleian's bookstack.

Only a small selection of post-1945 history of science titles are purchased with a focus on medieval, early modern and modern (upto c 1950s) being covered.

2.1 Text books

In the selection of textbooks, the HFL is first and foremost guided by the Faculty's reading lists and degree programmes.

Generally speaking and subject to funding, the HFL aims to purchase as many titles as possible on reading lists, unless, particularly in the case of interdisciplinary topics or substantial reading lists, the books are completely unrelated to History. Reading lists can be over 50 pages long and a degree of informed selection is therefore necessary. Where



appropriate and necessary, staff will liaise with other libraries over selection and provision.

The Faculty also expects the HFL to remain alert to trends in historical scholarship and to keep abreast of shifts in the way the subject is being taught. Therefore the Library will actively buy newly published critical monographs, provided they are suitable for undergraduate and postgraduate level.

In the Bodleian Library, most textbook material arrives via Legal Deposit and any missing titles are bought separately.

2.1.1 Levels of provision (undergraduates)

If a textbook from a reading list is selected for purchase, then normally one lending copy will be bought in the first instance. If the title is for a highly subscribed course or should evidence from enquiries, circulation and reservation activities indicate high use, then additional copies will be bought, sometimes over time, to support the higher demand. Provisions and usage of titles in other Bodleian Libraries will also inform a decision about how many copies to purchase.

Every attempt is made to buy multiple copies of out-of-print titles if they are needed for a course. However, there may be delays in receipt as sourcing these is unpredictable.

Reading lists as well as book fetching statistics are used in the Upper Camera as a means of updating the open-shelf collection according to need and use.

2.1.2 Levels of provision (taught graduate)

Resources permitting, the HFL always hopes to make the same level of provision for taught course graduates as for undergraduates.

The Bodleian open shelf collections supporting taught Master courses are primarily in the Upper Reading Room and in the Lower Gladstone Link, received under either Legal Deposit or purchased.

2.2 Primary source materials

On the whole, the HFL does not purchase significant printed source materials in long-running series or more costly items. The expectation is that students and researchers use the Bodleian Library's collections.

Sources primarily for British history of science are occasionally purchased for the HFL.

Increasingly undergraduates requiring material for their dissertation make use of the Bodleian Library's vast collection of primary source material (printed or archival).

2.2.1 Set Texts

The HFL holds a Reserve Collection of Set Texts. These are selected primary source materials which students are required to study in detail for the Honour School of Modern History (Gobbet papers). Some of the texts are in foreign languages, esp. German, French, Spanish, with some in Russian and Latin. The texts are mostly available as monographs, though are often out-of-print titles.

As a policy but subject to financial constraints, one confined and two lending copies are purchased. Additional copies will be purchased over time if high demand is evident.



The Bodleian will additionally hold these more specialised titles in its bookstack.

2.2.2 eSet Texts, photocopies and Document Packs

As a policy but subject to financial constraints, one confined and two lending copies are purchased of Set Texts (sources). Additional copies will be purchased over time if high demand is evident. The preferred format for duplicate copies will be given to securing an electronic copy first.

If selections or excerpts from set texts (sources) can be legally digitised, the HFL endeavours to provide those to students via the HFL WebLearn space. These eSet Texts are previously known as Document Packs.

In rare instances, the HFL may only be able to provide photocopies, available for consultation, from the Upper Camera office.

2.3 Reference collection

A small quick reference collection for students is located in the Upper Camera and for researchers in the Upper Reading Room. The collections consist of language and historical dictionaries and biographical reference works.

Reference works are confined to the libraries. Increasingly they are also available electronically (e.g. *Oxford Reference Online*, *Cambridge History of Science*, *Blackwell Reference Online*).

2.4. Chemistry Part II Theses

Approximately 70 theses by Chemistry students from 1961 to 2010 on the History of Chemistry are held in the History Faculty Library collections. They are available for consultation in the Upper Camera Offices.

2.5 Maps

The HFL has a small but useful collection of historical wall maps which are used for teaching purposes. They are stored in the Book Storage Facility from where they can be ordered via the Upper Camera Office. The Library will consider the purchase of maps if requested by convenors and provided funding is available.

2.6 Multimedia materials

Occasionally tutors include multimedia materials, e.g. DVD, on reading lists. For set texts, as opposed to reading list material, the policy is purchase one confined copy and two lending copies. The confined copies are stored in the HFL library offices.

3. Research collections

The vast majority of the research collections relating to the History of Science, Technology and Mathematics for the Western world are held in the **Bodleian Library's book stack** with a **core collection** of c 4,000 titles on the open shelves in the **Upper Reading Room, Old Bodleian Library**.

The **Radcliffe Science Library** has particularly strong collections covering 1810-1840 when many lavishly illustrated works in subjects such as biology and botany were acquired. From 1860 material was purchased to support teaching and research in the new science departments at Oxford University. Much of this is still in the library's collection; older material is almost all stored offsite and can be requested to many Bodleian Libraries sites and reading rooms, while some of the earliest has been transferred to the care of Bodleian Special Collections. In 2007 the Radcliffe Science



Library absorbed the collections of the Hooke Lending and Geography libraries (subsequently adding material from the Experimental Psychology, Plant Sciences and Zoology libraries) to become a combined lending and reference library for current science.

The **Sackler Library** purchases largely collections on astronomy for pre-Islamic Egypt and the ancient Near East. For those interested in visual resources will find the Sackler Library's exhibition catalogues invaluable³.

The **Vere Harmsworth Library** selectively acquires publications relating to the history of science and technology in the United States, particularly those concerning social or political aspects. Examples would be works dealing with the history of NASA and the Space Race or the development of the atomic bomb during the 20th century in social or political context. The Library also purchases selectively on US environmental history, including natural disasters and government policy relating to the environment, such as the history of National Parks or water management in the South West.

The **Bodleian K B Chen China Centre Library** only very selective acquires materials in the areas of natural science in Chinese Language. They mainly acquire works of documentary importance, especially those which have a bearing on humanistic scholarship, such as flora and fauna, atlases of various types, records of earthquakes etc. The Library will try to acquire reprints of rare books on traditional Chinese medicine and pharmacology.

The **Alexander Library of Ornithology**, located in the Department of Zoology, holds extensive collections of 19th and 20th century books, pamphlets and periodicals, and an archive of ornithological notebooks and diaries. It is an international resource with the collections covering ornithology, natural history, conservation, ecology and behaviour.

The core library collection of the **Museum of the History of Science (MHS) Library**. It now numbers some 20,000 items (printed books, pamphlets, and periodicals), dating from 1476 to the present. It has just over 5,000 early printed and antiquarian collections and just over 6,800 modern monographs. The strengths of this library lie in scientific instruments, antique scientific books on astronomy, chemistry, applied mathematics, and other cultural materials relevant for history of science.

The library and archival holdings of the **Oxford University Museum of Natural History** are a rich source for the research of geology and zoology. Its Hope Library is the third largest entomological library in the United Kingdom, and contains some 15,000 books and journals, and more than 60,000 offprints. In addition to its expanding modern collection, it is also a leading collection of older classic works in Natural History, and of taxonomic entomology books and journals. Its Arkell Library is based on the bequest of the Jurassic geology and palaeontology books of W. J. Arkell. Together with other geological collections material, it comprises about 4,500 titles, including 14 current journals. The Museum also has a small collection of modern books and journals on Mineralogy and Petrology. A collection of historic texts on Mineralogy, Crystallography and Petrology are also available. Finally, the Museum maintains a small holding of reference material that relates to the zoological collections. This consists of approximately 600 books and 400 offprints, mainly relating to taxonomic zoology.

The **Sherardian Library of Plant Taxonomy**, located in the Department of Plant Sciences, covers research in plant taxonomy, systematics, floristics and plant evolution, in addition to special collections and historical material.

³ See also *Art and Architecture Collection Development Policy*.



3.1 Research books

In recognition of the Bodleian Library's aims to be a "national and international scholarly resource", the policy is to select research material for History of Science and Technology as broadly and deeply as appropriate (in terms of period, geographical and thematic coverage) for the local research community in the first instance and the international research community, where funds permit it.

Most material will be scholarly monographs or modern printed primary source material. Books on science and/or for scientists are not normally purchased. Historians will also benefit from historical publications of the sciences, e.g. archival issues of journals, society publications and reports, contemporary monographs / conference proceedings / textbooks, which are largely received under the Legal Deposit Act or may be purchased by the Radcliffe Science Library.

The emphasis is largely on the history of science in the Western world covering medieval to mid-20th century history. Particular strengths are the Long Eighteenth Century and cover is best for astronomy and its instruments, the physical and biological sciences, chemistry and industrial technologies. There is some coverage of the Islamic and Far Eastern cultures.

Purchases for history of mathematics are very selective and largely driven by reader demand.

See **6. Coverage for individual scientific disciplines** (p11) for more detailed selection criteria.

A degree of duplication between the Bodleian Library and the HFL is deliberately but selectively practised in order to support students and members of the Faculty in their work.

Monographs received in the last three years, and not placed in the Upper Camera Reading Room, are usually shelved in the Lower Gladstone Link.

3.2 Monograph serials / standing orders

The Bodleian Library has standing orders for some important series, including Brill's *Studies in intellectual history*, *Studies in Ancient Medicine*, *Medieval and Early Modern Science*, *Scientific and Learned Cultures and Their Institutions*, *Scientific Instruments and Collections* and *Biblioteca di storia della scienza*, to name but a few.

4. Journals

In addition to journals received under Legal Deposit, the Bodleian Library subscribes to important English and foreign language history of science and technology journals. Unless there are exceptional circumstances, it is Bodleian Libraries policy to pay for only one subscription, though there may be an additional Legal Deposit set. The paid subscription may support electronic access or secure it at some point in the future. Use of, and subscriptions to, electronic journals is actively encouraged by library and Faculty staff.

Where there is full secure electronic access, history journals are normally stored in the Book Storage Facility. In the case of a eleven high-profile titles, the print copy is shelved in the Lower Gladstone Link's Humanities Journal section (*Archives internationales*



d'histoire des sciences, British Journal for the History of Science, Historical studies in the physical and biological sciences, History of Science, Nuncius, Revue d'Histoire des Sciences). Print runs from the early nineteenth century onwards of scientific and medical journals, such as the *Isis*, are available on the open shelves in the Radcliffe Science Library.

A display of the most recently received core history of science journals is located in the Upper Reading Room. These will include issues of titles which are otherwise located in the Book Storage Facility.

5. Special collections

5.1. Special collections in the Bodleian Library

The diverse resources among the Bodleian Library's Special Collections for these subjects encompass books, manuscripts and papers from the medieval period to the present day. Many of these came to the Library as part of significant collections of books and manuscripts, from the foundation collection of Thomas Bodley in 1602 to the extensive Marconi Archives acquired in 2004.

5.1.1 Early manuscript and printed book collections

The foundation collection of **Thomas Bodley** (1545-1613) includes many works on mathematics, astronomy, physics and medicine, reflecting the scientific interests of many of those in Bodley's circle. There are further items of considerable importance in the manuscripts of the natural philosopher and courtier **Sir Kenelm Digby** (1603-1665) which have been described as a unique record of medieval science. Many of the volumes originated in a bequest to Digby by his tutor Thomas Allen (1540?-1632), mathematician and antiquary, and were given to the Bodleian in 1634.

The books and manuscripts transferred to the Bodleian from the Ashmolean Museum in 1860 include the extensive range of books and manuscripts on alchemy and astrology of **Elias Ashmole** (1617-1692) himself, as well as a considerable number of works originating from the zoologist **Martin Lister** (1639-1712).

The **Savilian Library** of the professors of mathematics, astronomy and geometry, founded by Sir Henry Savile (1549-1622) and added to by many of the incumbent professors before being transferred to the Bodleian in 1884, is particularly strong in coverage of these fields for the 16th and 17th centuries.

Other manuscript and book collections of significance in the scientific field for this period are the acquisitions from **Archbishop William Laud**, strong in mathematics and astronomy; **John Selden**, whose great collection includes many scientific works; **Richard Rawlinson**, which includes many medieval and later medical manuscripts; and **Matteo Luigi Canonici**, covering medicine, astronomy and alchemy.

5.1.2 Early modern scientists' papers

For the early modern period the Library holds papers of many individuals of note in the fields of science and medicine. Holdings for the 17th and first half of the 18th centuries are particularly strong, and several came to the Library as part of the Ashmolean collections. These encompass papers of **Ashmole** himself, together with those of **John Dee** (1527-1608), mathematician and astrologer; **Simon Forman** (1552-1611), astrologer; **Edward Lhuys** (1660-1709), naturalist and antiquary; **Martin Lister** (1638?-1712), zoologist; **John Aubrey**, (1626-1697), antiquary and topographer; and **William Musgrave** (1655?-1721), physician and antiquary.



The Radcliffe Trust manuscripts (which became the property of the Bodleian in 1932) contain papers of the botanist **Richard Richardson** (1663-1741) and the astronomer **Thomas Hornsby** (1733-1810). Individuals represented in other collections include **Jacob Bobart** (1641-1719), botanist; the astronomers **Edward Bernard** (1638-1696) and James Bradley (1692-1762); the mathematicians Samuel Foster (d.1652) and John Wallis (1616-1703); Thomas Lydiat (1572-1646), chronologer; Sir Henry Savile (1549-1622), mathematician; John Bainbridge (1582-1643), physician and astronomer; and Thomas Sydenham (1624-1689), physician.

5.1.3 Late eighteenth and nineteenth century scientists' papers

Papers of scientists and physicians of this period include those for several individuals who held positions at Oxford University, notably **Stephen Peter Rigaud** (1774-1839), Savilian Professor of Astronomy; **Sir Henry Wentworth Acland** (1815-1900), Regius Professor of Medicine (and Radcliffe Librarian, in which capacity he made a considerable contribution to the development of the scientific collections of the Radcliffe Library); and **Sir Henry Alexander Miers** (1858-1942), Waynflete Professor of Mineralogy.

Also of note for the nineteenth century are the papers of the chemist **William Venables Vernon Harcourt** (1789-1871), who founded the British Association for the Advancement of Science; the naturalist **Brian Houghton Hodgson** (1800-1894); the geologist **George Wareing Ormerod** (1810-1891); the physiologist **Frederick Augustus Dixey** (1856-1934); and the science writer and mathematics expositor **Mary Somerville** (1780-1872), whose name is commemorated in Somerville College.

5.1.3 Modern manuscript collections

Modern papers of relevance to science, technology and mathematics fall into four categories: papers of contemporary scientists, archives of scientific organisations, the Marconi Archives and the Oxfam Archive.

Papers of a number of contemporary (20th century) scientists are held in Western manuscripts, most having a strong connection with Oxford University. They include the papers of **Sir Walter Bodmer** (b. 1936) and **Lady Julia Bodmer** (1934-2001), geneticists; Nobel Prize winners **Dorothy Mary Crowfoot Hodgkin** (1910-1994), chemist; **Sir John Cowdery Kendrew** (1917-1997), molecular biologist; **Rodney Robert Porter** (1917-1985), biochemist; **Frederick Soddy** (1877-1956), chemist; and **Nikolaas Tinbergen** (1907-1988), ethologist. Collections relating to Africa include papers of agriculturalists, soil scientists, botanists, entomologists and biologists, many collected by the Oxford Development Records Project.

Two major archives of organisations of relevance to the history of science, technology and medicine are held: **The British Association for the Advancement of Science** and **The Society for the Protection of Science and Learning**.

The Marconi Collection of archives and historic equipment was given to the University of Oxford in 2004. The Archives are under the care of the Bodleian, while the equipment is housed at the Museum of the History of Science nearby. The extensive Archives encompass records of a number of electrical companies covering the late nineteenth to early twenty-first centuries. They provide key documentary resources for the history of the electrical industry in the UK and elsewhere. A particular strength is the history of wireless telegraphy and its applications from its earliest days, and especially Guglielmo Marconi's personal contribution.



The Oxfam Archive, given to the University in 2012, contains extensive material on the development of agriculture and farming in Africa, Asia, Eastern Europe and Latin America in the second half of the 20th century and early 21st century.

The Bodleian Library holds one of the world’s principal cartographic collections. Historians will therefore find the extensive map collections (historical & contemporary maps, maps representing statistical, social and economic information) valuable for their work as well as worthy a study in their own right.

5.2 Special collections in other Oxford libraries

The Arkell Library (Museum of Natural History) holds geological archives which include correspondence, manuscripts and a wealth of illustrative material relating to some of the most important figures in geology in the 19th century. The papers of William Smith, William Buckland, and John Phillips are among the most important geological archives in the English language. Later holdings include the papers of L.R. Wager, W.J. Arkell, and J.M. Edmonds.

The Forestry Collection located in the Radcliffe Science Library holds forestry literature (pamphlets, reports, bulletins, journals, microfilms) and historical catalogues of forestry materials from circa 1850 onwards.

The Sherardian Library of Plant Taxonomy, located in the Department of Plant Sciences, holds early botanical archives which includes correspondence, manuscripts and a wealth of illustrative material relating to early taxonomic work and botanists. The most significant are grouped in the Sherard Collection (1659-1728) who endowed the Chair of Botany of Oxford. Noted botanists include J. Bobart the Elder (1599-1680), J. Bobart the Younger (1641-1719), R. Morison (1620-83), J.J. Dillenius (1684-1747), J. Sibthorp (1758-1796) and C.G. Daubeny (1795-1867). More recent requests have been received from S.H. Vines (1849-1934) and G.C. Druce (1850-1931).

The Zoology Archive located in the Radcliffe Science Library contains letters, research notes and other materials by Oxford zoologists from the late 19th to early 20th century, and photograph albums from the Challenger Expedition, 1872-1876.

The Elton Archive located in the Radcliffe Science Library contains research materials produced by the Bureau of Animal Populations.

6. Coverage for individual scientific disciplines

In addition to the legal deposit intake and general works, Bodleian Libraries will purchase material in the following specific subjects:

Primary and secondary material for History of Science, Technology & Mathematics – current selecting priorities	
Subject	Scope
Astronomy	Covered reasonably well for all periods from late Antiquity for largely the Western world but with some coverage for the Islamic world. Particular strengths in early modern period. Includes aspects on observational studies and instruments. Doesn't cover pre-historic periods, 20 th century astrophysics and cosmology.
Biology	Covered selectively in context of medical history, all periods from late Antiquity to mid-20 th century, covering Western world. Particular strengths in Renaissance period (anatomy) and 18 th and 19 th centuries (botany, evolution). Limited cover of ancient Chinese and Indian traditions. Don't cover molecular biology, cell theory, biotechnology, genomics.



Chemistry	Covered selectively, also in context of material sciences, all periods from late Antiquity (selectively) to mid-20 th century. Particular strengths in medieval period (alchemy), Enlightenment period (Boyle, Lavoisier) and 19 th century (periodic table) and chemical instruments and scientific methods. Minimal coverage of electrochemistry, nuclear physics, quantum mechanics, industrial application. Don't cover pre-historic metallurgy.
Computing Science	Covered very selectively but will buy key monographs on history of computing (early computation systems, analog computers) and cover aspects of encryption, esp. in context of other related topics (WWII).
Earth Sciences	Covered selectively but will buy key monographs on history of geology, geography and meteorology. Don't cover oceanography, palaeontology mineralogy, and geophysics. [Museum of Natural History provides better coverage.]
Engineering	Covered selectively but will buy key monographs for all periods in the context of military engineering (e.g. catapults, naval and air warfare), civil and mechanical engineering (esp. in relation to the industrial revolution). Limited coverage of electrical engineering. Don't cover pre-history, robotics, automotive or space engineering.
Mathematics	Covered very selectively but will buy key monographs on history of theoretical and applied mathematics, esp. in the context of other key scientific disciplines such as astronomy, mapping. Covers very selectively works on numeral systems, algebra, logic, geometry, trigonometry, logarithms, probability, general relativity. Don't cover pre-history, number theory,
Plant Sciences	Not being actively selected in the Bodleian Library. Cover selectively historical works on plant taxonomy, systematics, floristics and plant evolution in the Sherardian Library.
Physics	Covered reasonably well for all periods from late Antiquity for largely the Western world but with some coverage for the Islamic world. Particular strengths in early modern period covering optics, mechanics, gravity, dynamics and later periods on electricity & magnetism. More selectively coverage on radioactivity, quantum mechanics, general relativity. Don't cover pre-historic periods and 20 th century aspects on particle physics, acoustics, aerodynamics.
Technology (see also Engineering)	Covered selectively for all periods for the Western and Islamic worlds for technologies of scientific disciplines. Don't cover pre-history.
Zoology	Not actively selected in the Bodleian Library. [Alexander Library of Ornithology covers historical works on ornithology and animal behaviour.]

Auxiliaries	
Specialised bibliographies & reference works	Inventories of relevant archives
Biographical or critical works of important historians	Oral history
Historiography, historical methods, scientific methods	History and Computing
Epistemology, Scholarly communication	Visual resources, Cultural materials

7. Contacts

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Written 14 May 2015 rev. 13 July 2015