The Dartmouth College Scientific Instruments Collection contains fascinating objects used in scientific experiments and expeditions from the 18th through the 20th centuries. Studying those objects closely, you can learn more about the challenges of studying meteorology, astronomy, surveying, and acoustics over time. This collection is curated by Professor Richard Kremer of the History Department at Dartmouth College.

The collection has been used by Dartmouth students in Professor Richard Kremer’s classes on the “Material Culture of Science” and as part of exhibitions, such as on the history of science at Dartmouth and the study of light. In the “Polar Connections” exhibitions, it was used to study “Ways of Knowing.”

You can learn about the collection through these sites:
- http://projectsx.dartmouth.edu/DartSICO/about.html
- http://hoodmuseum.dartmouth.edu/collections/overview/other/scientific/

Working with the Collection:
You can draw inspiration from browsing the instrument collection at:
http://projectsx.dartmouth.edu/DartSICO/index.html

For research using the scientific instruments collections, you may find it easiest to start with a brief overview of a topic – such as an encyclopedia article, moving on to in-depth books and gathering more specialized information and examining the actual objects as the work progresses.

This in-depth research guide was used by Dartmouth students in a class during the Winter ’08 term: http://www.dartmouth.edu/~library/kresge/help/phys7_wi08.html

Your research no doubt will require multiple approaches, and new information gained may raise new questions that cause you to revisit and reframe your topic.

Visiting the Library
As working with the scientific instruments will most likely involve research in the library you may find it useful to study the Gateway guide to the Dartmouth Libraries. Just follow this link: LINK to the Library Gateway Guide?

History of Science materials can be found across the entire library system.
- **Baker-Berry Library** contains the primary history collection.
- **Kresge Physical Sciences Library** houses the physical sciences collections and includes materials history of science and scientific exploration.
- **Rauner Special Collections Library** houses the College Archives, rare book and manuscript collections, and includes the **Stefansson Collection on Polar Exploration** - based on the private research collection of Arctic explorer Vilhjalmur Stefansson (1879-1962). Rauner Library is a rich source of primary document material, perhaps best appreciated once your initial background research has been completed.

Starting Your Research
• **Overview information**
  To get started, use the print and online reference collections and the very helpful reference staff! Our reference collections include specialized dictionaries and encyclopedias such as *Scientific Instruments 1500-1900 an Introduction*. For further exploration, the library catalog contains records for books, periodicals, and research databases across the Dartmouth College Library system, and allows keyword searching across catalog records or browsing author, title, or subject headings.

• **Research articles**
  Find research journal articles about history of science on expeditions, scientific instruments and their maker by using subject-specific search engines such as *History of Science, Medicine and Technology* and *Arctic & Antarctic Regions*, which covers topics from Anthropology to Zoology from 1800-present. Other excellent sources of research articles are *GeoBase* and *Web of Science*, which has sections for Arts, Humanities and Social Sciences as well as Sciences.

Many libraries offer access to general purpose article search engines, which cover research journals as well as popular-press magazines such as *Newsweek*. At Dartmouth you have access to a few general search engines, including *Academic Search Premier*.

Be aware that many of these databases do not link directly to the full-text of the article and instead serve as searchable indexes, providing only the article’s author, title and journal information (issue date and paging), and perhaps a summary. These databases’ primary role is to reveal – not deliver – existing research. Dartmouth does not subscribe to all the journals covered, so you’ll need to search our library catalog to see if we own the one you need. We don’t list individual articles in the Library catalog, but you will find journal, magazine and newspaper titles with the years available in print or electronic form there. Request items not owned at Dartmouth via our interlibrary loan services, *BorrowDirect* and *DartDoc*.

• **Primary document resources for research on the Dartmouth**
  Most primary sources such as archival and manuscript materials can be found at the Rauner Special Collections Library, one of whose key polar collections is the *Stefansson Collection on Polar Exploration*. Rauner’s staff has created a large number of *detailed finding aids* for individual components of the Stefansson collection.

• **Need additional help?**
  Don’t hesitate to telephone, email, or visit a reference librarian for help with your research. In addition to helping to find relevant materials and navigate our library databases, we can also help you work through your topic. For more information, see our *Reference Help* page.