

## Cornell University Library

### Engineering Library - ChemE 792: Graduate Research

#### Research Strategies for ChemE 792

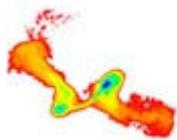
Leading researchers may know what's going to be published before it appears in a journal. But it's important to know how to access information in related disciplinary areas, and historical literature, especially before writing a grant proposal, research paper, or dissertation. You also need to know your options regarding copyright, and where to go for help. We'll also discuss the differences between Google, Google Scholar, and library-subscribed databases.

Outline:

- [Cornell Libraries](#)
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**[Cornell Libraries](#)** - There are 20 libraries at Cornell, see library gateway (at [www.library.cornell.edu/individual libraries](http://www.library.cornell.edu/individual-libraries)). With 7 million volumes and 26,000 electronic journals, Cornell is ranked among the top 10 research libraries in the country.

**[Digital Collections](#)** - The Library has **digital collections** as well as print collections. See examples below.



**[ArXiv.org](http://arxiv.org)** - research papers in physics, computer science, mathematics, and other scientific communities.

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**[eCommons](#)** is Cornell University's open access collection of scholarly information by faculty, staff, and students. See Cornell Engineering Quarterly and BEE 453 Computer Aided Engineering student projects. Consider as an archive for your papers. Consult [Romeo](#) guidelines on the [Sherpa](#) website for journals and publisher policies regarding copyright permissions.



The [Kinematic Models for Design Digital Library](#) (K-MODDL) is a resource for learning and teaching the principles of kinematics. Includes moving mechanical models.



[VIVO](#) overcomes campus, college and department divides to provide an organized view of the life sciences at Cornell. VIVO has been extended to engineering, physical sciences, and mathematics as well. Find collaborators, advisors, research opportunities, subject experts, and facilities.

## Information Competencies

1. **Find the book** by Zimmerman on microfluidics in the online catalog (<http://catalog.library.cornell.edu>). Display long view to see subject headings.
2. **Find the journal** IEEE Transactions on Biomedical Engineering in the online catalog and/or e-Journal Titles list (link from URL above). Drill down to an individual article.  
Show the Google - Google Scholar - Find It - Databases by Discipline progression.
3. **Determine which online database** to use for a topic after consulting [Databases by Discipline](#). **Locate the full text of an article** found from a technical database. Use an online database (such as Compendex) to find appropriate articles on a subject (microfluidics). Note how this differs from [Find It](#) on the [Library Gateway](#).
4. **Locate a patent.** Use [Google Patents](#) or [MicroPatent](#) Cornell inventors include Wilson Greatbatch, Willis Carrier, Robert Langer, and Leroy Grumman. For help patenting an invention at Cornell, see [Cornell Center for Technology, Enterprise, and Commercialization](#). Example: locate US patent 1859624. What did Ezra Cornell invent in 1844?
5. **Locate a standard.** Use [ILI Standards Database \(ASTM E1733, ASTM SI 10\)](#)
6. **Locate a thesis.** Use [Proquest Digital Dissertations](#)
7. **Refworks** - Use [RefWorks](#) or Endnote to store, sort, and format your bibliographic citations. <http://refworks.cornell.edu>

## Recommended ChemE Resources

See the [Engineering Research Guide](#) page, in particular the ones for:

- Chemical and Biomolecular Engineering
- Dissertations
- Patents
- Standards
- Technical Reports

## Recommended Databases

- [Compendex \(Engineering Village 2\)](#) - engineering
- [Medline](#) - like PubMed, but includes link to Cornell holdings
- [PubMed](#) - medicine
- [SciFinder Scholar](#) - chemistry, regulations, commercial sources
- [Web of Science](#) - cited reference searching
- [Woldcat](#) - contains thousands of libraries holdings

[E-Journal Titles](#) may also be found searching in the [Library Catalog](#)

**High Impact Journals** (cited by [Eigenfactor.org](#)) Other journal ranking sites include [Journal Citation Reports](#), [Google Scholar](#), and Scopus.

- [Progress in Energy and Combustion Science](#)
- [Journal of Aerosol Science](#)
- [AIChE Journal](#)
- [Combustion and Flame](#)
- [Journal of Membrane Science](#)

**E-Book Titles** may be searched individually in the [Cornell Library Catalog](#) or browse publishers:

- [Comprehensive Composite Materials](#) - 6 volumes
- [Kirk-Othmer Encyclopedia of Chemical Technology](#)
- [Knovel](#) - technical handbooks, esp. chemical engineering
- [Materials Safety Database Sheets](#)
- [Perry's Chemical Engineers Handbook](#)
- [Safari Books Online](#) - information technologies
- Ullmann's Encyclopedia of Industrial Chemistry - TP9 .U42 1985

**Copyright Help** - [www.copyright.cornell.edu](http://www.copyright.cornell.edu), has fair use checklist

**Future** - Cornell is digitizing large parts of their collection with Google and MicroSoft along with 37 other libraries.

--Jill Powell, jhp1, Reference and Instruction Coordinator