

Advanced Portland Cement Concrete Engineering Literature Searching

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Step 1: Know Your Librarian

I am your department's subject liaison at the library. [Contact me](#) with any questions about doing research. I am happy to meet with you individually.

Today you will each receive my business card, with my phone and e-mail information.

Step 2: Write a Research Statement

- Planning and writing down a research statement before hitting the library web site saves time and frustration later.
- ***Be specific.*** Use the most specific technical language applicable. Also think of terms used to refer to the topic in construction, etc.
- Questions? Talk with your professor, GAs, and [your librarian!](#) Librarians know where to find ***thesauri*** - resources on the “controlled vocabulary” of a discipline’s literature.

Step 3: Choose Databases to Find Articles/Papers

- Databases search a discipline's working literature: peer-reviewed journal articles, conference presentations and papers, trade journals (sometimes). In general, databases do not search for books.
- Most of the items found in databases are:
 - Accurate
 - Authoritative
 - Academically focused
- Check sources individually for peer review! Use [Ulrich's](#) to help determine if necessary.

Step 3, continued

A few recommended databases for your research topics:

- [ProQuest Technology Collection](#)
- [Scopus](#)
- [ASCE Library](#)

These databases do have overlap, but it is recommended to search multiple databases to get a better sense of all the research reported on a topic.

Step 3, continued...again!

- Read the “About”-type information in the database link provided before searching. This will help you know what type of information the search will return.
- Play constructively with the database search interface: learn how to broaden and narrow searches before selecting resources!

Google is great, Google is terrible!

- Google “portland composite cement”
 - Get **429,000 results**, .orgs, .coms, YouTubes, etc. - sorted and prioritized by an algorithm no one outside Google understands. There will be some great stuff here, but you need to sift through the results.
- Use ProQuest Technology database
 - Search for term “portland composite cement” [INCLUDE QUOTES] within article abstracts (option AB)
 - Retrieve **15 articles** - on-topic, authoritative, and online-accessible through UMKC Libraries. Like this [one](#), or this [one](#)!
- What helps you more?
- If you use Google, try our proxied [Google Scholar](#)!

Step 4: Don't believe everything you read!

Examine citations using *critical thinking skills*

- What [type of resource](#) is this?
- Who is the author or authors?
- Is this a “mainstream” result or “fringe science”?
- Is the author trying to sell me (or persuade me of) something? Does the author have an agenda?

Read abstracts first, before deciding to read the whole article!

Select those citations that enable you to best analyze the problem and address your Research Statement.

Questions? [Ask your librarian!](#)

Step 5: You want books?

Libraries have books!

UMKC Libraries has access to many engineering books - mostly in eBook format.

- Accessible anywhere, anytime
- Multiple users can access a title
- Viewer facilitates rapid search/find within text

Start by searching our catalog (named [MERLIN](#)), but also search within [SpringerLink](#).

Step 6: Use Information Ethically!

- [Plagiarism](#)
 - See “Avoiding Plagiarism” within this UMKC [Graduate Writing](#) research guide
- [Copyright](#) - a research guide from UMKC’s Copyright Support Team.
 - Here’s a [fun interactive tutorial](#) from Acadia University (Canada)
- Intellectual Property (e.g. [Patents](#))
- Questions? [Ask your librarian!](#)

How's your information literacy?

Test yourself....

1. Can you determine the nature and scope of your search need?
2. Do you access information effectively and efficiently?
3. Can you evaluate information sources critically?
4. Can you use information effectively in your project?
5. Do you use information with ethical responsibility to other authors and copyright holders?

If you can say “yes” to all 5, congratulations!

*(source – American College & Research Libraries
Standards for Information Literacy)*

Questions?

([I bet you know what's behind this link...](#))