

Preparing for Graduate Research: Using Scientific Literature

EMS-ECH-298: Library Assignment and Session Outline

Library Session Goals

- Understand the basics about library tools available to you
 - You get an idea of what is possible
 - You know how to get help
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OUTLINE: First Hour

- 1. INTRO** *Subject Guides: Library Resources for your discipline*
- List resources, instructions, and your assignment
 - Materials Science: <https://www.library.ucdavis.edu/guide/ems/>
 - Chemical Engineering: <https://www.library.ucdavis.edu/guide/ech/>
- You do NOT have to remember details about all tools covered
 - Focus on what is possible, how to get to Subject Guides, how to get help

<i>Topic</i>	<i>Link</i>
2. PROFESSIONAL IDENTITY	<i>In This Guide: Author ID/Profile</i>
<ul style="list-style-type: none">• Google Scholar• ORCID• Altmetrics	

	<i>Link</i>
3. ARTICLES	<i>In This Guide: Articles</i>
<ul style="list-style-type: none">• Databases: Web of Science, Compendex, SciFinder, Google Scholar• Citation Alerts	

	<i>Link</i>
4. LIBRARY 101	
<ul style="list-style-type: none">• VPN	<i>Every page at top: Access VPN</i> <i>Quick Links: Connect From Off Campus</i>
<ul style="list-style-type: none">• Books	<i>Books</i>
<ul style="list-style-type: none">• Journals	<i>Journals</i>
<ul style="list-style-type: none">• ILL	<i>Quick Links: ILL Request Forms</i>

	<i>Link</i>
5. MENDELEY	<i>In This Guide: Mendeley & Citing the Literature</i>
<ul style="list-style-type: none">• Quick Look	

Last 20 Minutes:

Library Assignment: Pick 3 of the tasks listed below and complete them.

1) FIND: REVIEW ARTICLE & Identify Journals and publication years for a topic

- For all 3 databases: Web of Science, SciFinder, Compendex and Google Scholar:
 - Create a search statement on a topic you choose. Do the same search in each resource.
 - How many hits do you get for each?
 - Why you get different results & what are the strengths of each database?
- From your results:
 - Identify the most cited review article (not possible with Compendex & Google Scholar)
 - What journals publish on this topic? (not possible with Google Scholar)
 - How long have articles been published on this topic? (not possible with Google Scholar)

2) Create A Citation Alert

- Pick 1 or more databases (Web of Science, SciFinder, Compendex).
- Create a search statement on a topic of your choice
- Create an Citation Alert
 - WOS: 3 kinds possible: topic (saved search), Journal Table of Contents, Cited Paper
 - SciFinder: topic
 - Compendex: topic

3) Locate a Standard and Patent

- Use the ASTM (American Society for Testing and Materials) database to locate standard(s) on a topic of interest
 - Examples: silicon nanowires, water based nanofluids, etc.
- Locate a patent on a topic relevant to you. Use Patents Guide.

4) ORCID: Create an ORCID iD for yourself

5) MENDELEY/Altmetrics: If you have your laptop

- Create a Mendeley account and install the desktop version on your computer
 - Install the Almetrics Bookmarklet
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