Chem 300: Chemical Information Literacy for Analytical Chemistry (Part 2)

Chem 300 Course Guide: http://libguides.usc.edu/chem300

Introduction

Part 2 of this assignment will give you an opportunity to do an in-depth literature search in your field and discipline. You will use the resources outlined in part 1 of this assignment to explore literature that is available through the USC Libraries.

A. Finding an Article

First, pick a topic you are interested in that is related to your field of study. The topic can be broad, like “new and emerging nanotechnologies” or specific, like the “biological applications of carbon fiber nanotubes in humans.”

1. Write down your topic.

Next, go to Web of Science and search for your topic using the basic topic search. Read through the previews and abstracts to find an article that best fits your topic. You will need to find an article that is available in full-text here at USC and that has been cited more than 10 times. Do not choose a review, book review, conference proceeding, etc. You will want to find an entry designed as an article. Use the search refine tools on the left to help you find your article. Hint: sometimes it will take several years for articles to be cited in more recent work. Do not focus your search on recent articles. Start looking three to five years ago.

2. Write down the citation in ACS format. Refer to the Chem 300 course guide for information about the ACS style. In addition, download a PDF of your article to submit with your assignment.

3. Summarize the research in the article in a paragraph.

B. Discovering the Current Impact of this Article

Open up the article record in Web of Science. Go to the Citation Map feature. Using the Citation Map, try to track this article as it is cited in more recent work.

4. What is the most recent article you can find in Web of Science? Include the article citation.

5. Read this article. One of the strengths of following citations is that this more recent work should be built from or inspired by the previous work. Try your best to explain how the two articles are related.

C. Finding the Original Source

Just like being able to trace an article forward, you can trace the information backward as well. This can be extremely useful if you need to find additional information regarding a specific topic. Most likely a referenced article will have its own references to find more information.
6. Go back to the article you chose in question 2. Look at the references contained in the article and pick one. Write down the citation and find this article in Web of Science. If this article does not exist in Web of Science, try another reference.

7. What is connection between your article from question 2 and the reference you found? Try to explain the connection to the best of your ability.

8. What new information are you able to discover by finding this original source?