LIBRARY ASSIGNMENT

This assignment is to be completed in the Chemistry Library at the University of Illinois in 170 Noyes Lab. Information about the chemistry library (including hours) can be found on its web page: http://www.library.uiuc.edu/chx. There will be a sheet for you to sign-in when you enter the library and sign-out when you leave. Please ask for the Parkland College sign-in sheet at the circulation desk. If you have any questions about how to perform a search, please ask one of the librarians at the library. They will be able to help you.

Reference format: When writing citations, use the ACS format (found in the ACS Style Guide). For journal articles, a citation should have the following format: Author, L. M. Journal, Year, volume, pages. The journal should be abbreviated; a list of abbreviations can be found on the Web of Science homepage or in the ACS Style Guide.

Don’t forget to sign-in! If you forget, you will receive a zero on this assignment.

Part I: Web of Science (Science Citation Index) (3 points)

Directions: Once on the web site, select “All year” for the Timespan. Under “More Settings, select all the Science Indexes – unselect all Social Science & Humanities Indexes.

A. Topic Search (Make sure “Topic” is selected when you search.)

1.) Find the number of articles written about NSAIDS. _______ (Use “NSAIDS” as your topic)

   a. Write the citation for the article by Takara, et. al. on the inhibition of ketoprofen photodegradation.

      i. ____________________________________________________________

      ____________________________________________________________

   b. How many times is this article cited? _____________ (See “Times Cited”)

   c. Find the number of related articles. ________________ (Click on the article title, then on “view related records”)

   d. Find the number of articles that cite the article by Bosca, Marin & Miranda: ________ (See “Times Cited”)  

   e. What is the title of the article by Mandic, Mlinaric-Majerski, et.al. that cites the article by Bosca, Marin & Miranda? (Click on the number of “Times Cited”)

      i. ____________________________________________________________

      ____________________________________________________________

2.) Find the number of articles written about anti-malarial drugs: ______________ 
(Perform a new search, use “malaria drugs” as your topic)
Part II: Scopus (1 point)

Directions: Once on the web site, select “All year” for the Date Range, and “All” for Document Type.

A. Document Search (Make sure you search in the “Article Title, Abstract, Keyword” database.)

1. Find the number of articles written about NSAIDS. ________
   (Use “NSAIDS” as your topic)
   a. How many times is the article by Seetharaman, et. al. on pH-responsive prodrug micelles cited? ________
      (Find the article – the rightmost column gives times cited)
   b. Find the number of related articles for the article by Takara, et. al. on the inhibition of ketoprofen photodegradation. ________
      (Hover mouse over article title to see more options pop up, then click on “related documents”. You will likely need to go to the second page of results to find the article.)

Part III: SciFinder Web Version (Chemical Abstracts Online) (4.5 points)

See the SciFinder Access Document in Cobra for directions on how to access SciFinder. (Logon ID & password list can also be found at the Circulation desk.)

A. Research Topic Search (Click on Explore, then select Research Topic)

1. Find the number of articles that are about NSAIDS. (Use “NSAIDS” as your topic.)
   a. Containing “NSAIDS”: __________
   b. Containing the concept of “NSAIDS”: __________

2. Refine your results to only those articles that also refer to arthritis by selecting the containing “NSAIDS” and containing the concept of “NSAIDS” results and clicking on “get references”. Click on the refine tab, then select “research topic.” Enter arthritis and click on “Refine”.

   How many articles are returned? ________

3. Now, do the same search for articles about arthritis and NSAIDS by starting over as a new task (click on “Explore”, then select “Research Topic” in the References column) and use “using NSAIDS for arthritis” as your research topic. Find the number of articles that are about using NSAIDS for arthritis.
   a. Articles with the two concepts closely associated: ________
   b. Articles containing both concepts: ________

4. Select the closely associated articles and those containing both concepts and click on “get references.” Refine your results to only those articles in English by clicking on the refine tab, selecting language and then selecting English. Click on “Refine”.

   How many articles are returned? ________
B. Structure & Reaction Search (Click on Explore and select “Reaction Structure”)

1.) How many articles are there on reactions producing an acid chloride? 
(Build the following structure in the build view (click on image box or “click to edit” to get here), select “reaction” in the side bar, then click on the box in the tools menu (second column). Now, select your structure and select “product”. “Product” should now be under your structure. Select “substructures of more complex structures” and click “OK”. Make sure that “substructure” is selected as the search type, then click on “search”.)

2.) How many of the above reactions start from a carboxylic acid? 
(Click on “refine”, then select “reaction structure”. Click on the image to access the build view, then build the following in front of your structure above. Add the reaction arrow. You should now see the word “reactant” under the carboxylic acid and “product” under the acid halide. Make sure that “substructures of more complex structures” is selected. Click on “OK”, then “refine”.)

3.) What is the structure for Lunesta? Draw it below: (“Explore”, then select “substance identifier” in the Substances column) Type “Lunesta” in the box and click “search”.)

4.) How many articles are there on Lunesta? 
(Select the structure, click on “get references”, then “get”.)

5.) How many articles are there on the synthesis of Lunesta? 
(Click on “Substances(1)” to get back to the structure of Lunesta. Now, select the structure, then click on “get reactions” and select “product.”)

6.) How many of these articles are journal articles and how many are from patents? Click on the analyze tab, then select “document type.”
   a. Journals: 
   b. Patents: 

7.) For more information about the journal articles, click on “journal.” Now find the article written in *Chirality, 2013*, 25, 952-956. Click on the article title to get more information about the article.

Who is the first author of this article?
Part IV: Exploratory Search (3 points)

A. Perform one search on a possible research topic for your paper. You may use SciFinder Scholar, Scopus or the Web of Science to perform the search.

1.) What search engine did you use? _______________________

2.) What type of search did you perform? _______________________

3.) What key words did you use for your search? _______________________

4.) How many articles did you return? _____________

5.) Cite one article that you may possibly use in your research paper.
   a. _______________________
      _______________________
      _______________________

Part V: Evaluation (3.5 points)

A. Comparison of Search Engines:

1.) How did the numbers compare for the number of articles found in section A, question 1 of Parts I, II and III? _______________________

2.) How did the numbers compare for the number of articles found in Part I, section A, question 1c and Part II, section A, question 1b? _______________________

3.) If either answer above is not “the same”, give two possible reasons for this discrepancy.
   a. _______________________
   b. _______________________

B. What kind of search would be best suited to Web of Science? _______________________

C. What kind of search would be best suited to Scopus? _______________________

D. What kind of search would be best suited to SciFinder? _______________________

E. Which database did you prefer? _____________ Why? _______________________
   _______________________
   _______________________
   _______________________

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