**CIVE 480B, Summer 2019**

**Individual Assignment: Chemical Hazard Query Log**

*Due Thurs 27 June*

If you haven’t already, please register for an account with the Chemical Hazard DataCommons here: https://commons.healthymaterials.net/

Chemical hazard data will come from a range of sources, and may require you to search in different ways to find comprehensive information. The query log is a tool to help you keep track of information that you find in your searches, and of **where** you found that information, which is critical for citation, and for comparing notes with colleagues. In addition, a query log helps you to keep track of searches that were fruitless so you do not waste energy repeating yourself. Keeping a good query log takes extra time up front, but once you are good at it, it saves time in the long run (the bigger the project, the more it can help). A well-managed query log will save you from doing the same search multiple times.

In this query log you will keep track of your goal, hypothesis, and questions related to chemical hazard of the metal your team is studying. Use your framing hypothesis to brainstorm guiding questions. The guiding questions should then be used to guide your searches and find information that support (or not) your hypothesis. The goal, framing hypothesis, and guiding questions should all fit together on both an individual and team level.

You will log the name of the database you used, your query, the format of the information you found, what information you found, any comments/details, and any new search terms suggested by your learnings. Ideally, the query log represents a record of information that supports (or not) your hypothesis and where you found it. Include enough information for each query such that you don’t have to repeat the query! If another column of information is useful, add it and make the query log your own! You will be evaluated for your individual effort – the process and care in information gathering as demonstrated by your entries. **It is useful to be strategic with your teammates and either have each person look up a different compound from your speciation web on several databases, or have each person take a different database and look up several compounds.** There can be variation in goals and hypotheses and guiding questions within a team, but it should be clear how the individual research is complementary, non-redundant, and contributing towards the team’s bigger-picture research goal. Record your negative results to save you and your teammates from redundant work.

Some starting points:

1. Find chemical identifiers that will help you to locate information about the various species you identified in your speciation assignment (e.g., common name, trade name, CASRN).
2. You may find that for a given trade name or common name there are a number of unique chemical names or CAS numbers, please include each one in a separate row. You can evaluate the relevance of the information later as you fill in the details.
3. Look up basic chemical and physical properties of the chemicals and materials including: chemical structure, reactive/essential functional groups, molecular weight, solubility in water, density, vapor pressure, boiling point and melting point.
4. Use the databases discussed in class to look hazard endpoints.

This assignment is coupled to the group Hazard Profile Assignment, which will be a written submission. You and your teammates will learn complementary information through searching separately, comparing notes, and then rounding out gaps in your knowledge by working together.