3.093 Secondary Sources Search Assignment
Due November 14

Using Secondary Sources to Find Facts and Answer Questions

This assignment requires you to use the types of secondary sources discussed in class to answer factual questions about a topic. YOU MUST USE THE RESOURCES REQUIRED IN EACH QUESTION, FOUND IN THE MIT LIBRARIES. If additional citations are asked for, you may use any resources at your disposal to provide the complete citation.

Please answer the following questions. Include the answer to the question, plus a complete citation (including all author names, titles, pages the information was found on) for the information source. Also include the library call number or indicate if this resource is found online.

Keep a research log to record your search process.

1. Using the Kirk-Othmer Encyclopedia of Chemical Technology:
    a. You want to learn more about measuring kinetics, more specifically the Rate Law. Is there a section in the Kirk-Othmer about this topic? What is the chapter title?
    b. Provide complete citations for 3 articles cited in this chapter.

2. Using the CRC Handbook of Chemistry and Physics (85^{th} edition or higher):
    a. What is the CAS Registry number for K_2O? Its melting point?
    b. What is the activation energy of GaAs with the diffusant Au? What method of measurement is used?

3. Using The Encyclopedia of the Elements:
    a. Who discovered Silicon?
    b. What is the mean content of Si in an adult human body?

4. Using The Merck Index (12^{th} edition or higher):
    a. Find Al_2O_3. This substance occurs in nature as which 6 minerals? What is the CAS Registry number?
    b. Find citric acid. What is the CAS Registry number? The molecular formula? Provide 2 complete citations for references found in this entry.

5. Using the ASM Handbook:
    a. Who is the author for the chapter on Zinc and Zinc Alloys?
    b. Find Commercial Rolled Zinc, Zn-0.3PB-0.03Cd. What are the applications for typical use of this alloy? Its melting point? Its annealing temperature?