Green Chemistry (Chemistry 393-0), Spring 2003
Facilitated Online Discussions and Literature Summaries

Some of the most valuable skills for a scientist are to be able to read scientific articles quickly, to discern what the important contributions of that work are, and to be able to convey that information clearly and concisely to another person. The literature assignments and summaries in this course are geared towards helping you acquire these skills.

We will all participate in an online discussion of the literature outside of the classroom, using the Blackboard environment as a tool to facilitate discussion. The class will be divided into four groups. The following is an outline on how the discussion will be organized. Each part of the facilitated online discussion needs to be completed by midnight of the day indicated in parenthesis for any given week.

Part 1 (Tuesday by 9am): Members of Group #1, In a new thread in the DISCUSSION BOARD under COMMUNICATIONS in the Blackboard environment, please provide a summary of one of the articles from that week’s Literature Assignment. If there is more than one journal article assigned for a particular day, you may choose to write a summary on whichever article you prefer. Please try not to duplicate another member in your group. Alternatively, conduct an online search to find a recent publication that provides an example of one of the issues discussed in this week's reading, and attach the publication to your summary. You may pose a question that you have about the reading, or a comment to initiate discussion. Here are some guidelines to assist you:

• What are the important issues or questions that this work addresses or attempts to address? (Be sure to explain why the issues or questions are important.) Specifically, how does this paper relate to the field of green chemistry? What are they trying to accomplish?
• What experimental results are presented in the article? What techniques were used? (If the paper is a review article, then you should summarize the scope of the review – what is the focus and what topics are covered?)
• What are the conclusions that the authors draw from these results?
• What industrial process or chemical is being targeted for improvement?
• What is the current or traditional way, in which the process is carried out? What is the chemical used for? Why is it generated or used in the first place?
• What are the hazards associated with the current industrial process or usage of the chemical? (Consider the chemicals production, storage, transportation and disposal.)
• Did the authors justify that an improvement is needed?
• In what way do the authors attempt to ‘green’ the chemical process or preparation?
• Why is the process important? Do we need to continue to make the process better, or eliminate it altogether?
• Have the authors produced an effective alternative? Or does the new process have inherent flaws or potentially worse dangers?

Part 2 (Wednesday by 9am): Group #2, 3, 4: Read one of your classmate's summaries (and publications) and reply under his/her own discussion thread. Your response should discuss the major issue(s) the publication related to from this week's reading. Support your argument with references to the reading. Reply to a message that has not yet had a response (if possible) so that everyone has at least one response.
Part 3 (Thursday by 9am): Group #1: Read through the threads that have been posted and ask issue and publication related questions for all replies to your original posting.

Part 4 (Friday by 9am): Group #2, 3, & 4: Return to the places you posted during step 2 and answer the questions posed to you by Group #1.

Part 5 (Monday at 9am): Group #1 will summarize the discussion. A one page typed summary is due at the beginning of class, on Monday. What did you learn from the paper? Did you find it useful and informative, or a waste of time? You should address all the questions that were discussed and all information from the discussion that pertains to the paper that you chose to review.

Please note: Everyone is expected to thoroughly read all the papers in the Literature Assignment for that week. The online discussion only facilitates better understanding of the material and encourages everyone to read papers with the intent to relay the information to others. Everyone can contribute unique information and assist in others learning of the material because of the varied backgrounds of everyone in the class.