Graduate Student Presentations

The presentations will begin November 15th, and will run through December 13th. We will have up to 2 presentations per class period. You will sign up for presentation times with Dr. Evans in his office, on a first-come, first-served basis. However, in order to claim a time slot, you must demonstrate that you have chosen a topic and begun to find the necessary references for your research. You should plan to have chosen your topic and begin sign-up by October 3rd.

You should aim for a 30 minute presentation. That leaves plenty of time for questions and analysis. We recommend practicing your talk at least once before you present, to be sure you're on the right track in terms of time.

While participation by the audience is not mandatory, students should be aware that asking thoughtful questions during the presentations will be considered as participation in the literature analysis portion of the course.

Topics should be chosen to reflect an understanding of chemistry which affects our environment, and whenever possible, should be linked to at least one of the 12 Principles of Green Chemistry. But the topics available are broad and not strictly defined. Below is a list of sample topics: this is NOT a comprehensive list, nor is it intended to be! Certainly, you should feel free to select one of these broad topics, but you should also feel free to choose something not on the list if the topic is of interest to you. If you are unsure whether the topic you wish to research is appropriate, feel free to run your idea past one of the three professors before you invest too much time. We do not expect comprehensive coverage of a topic in a 30 minute presentation, but you should demonstrate that you are aware of the contemporary literature on the subject, and that your presentation draws from more than one source. Again, this is a summary presentation of a topic or a field, not of a single research paper.

Representative topics include:

- case studies of known environmental disasters (whether manmade or natural)
- the development of specific green synthetic routes or industrial processes
- the environmental impact of an energy source, pollutant, or industrial process
- the state of affairs for a given alternative energy source
- the development of novel batteries
- an analysis of the character of urban air in a specific megacity
- recent developments and future predictions for climate change or environment pollution

The next page presents the list of topics presented last time this course was offered. This is not intended to *exclude* those topics from this year's presentations, merely to offer more specific examples than the big picture topics above.

Presentation Topics From 2009:

CH_3I
Nuclear fission
Mercury in coal
Black carbon aerosol
Bromine and ozone
The Lake Apopka disaster
Enzyme electrodes
Enzymes as catalysts for polymer synthesis
The electric car
Microwave-assisted multicomponent synthesis
The global methane cycle
Ionic liquids as solvents
Ball milling in organic synthesis
Cellulose as biofuel
Greening the use of platinum nanoparticles