

Writing assignment

Recall that I drop your lowest quiz grade. If you are happy with your first five quizzes, you do not need to do this assignment, but otherwise, you may find this will help your overall grade. Recall too that the five quizzes count as much as one exam.

Write a brief (1 page) paper describing some aspect of organic chemistry, ideally as it relates to our broader society or the environment. I would like you to write it as an intra-company memo, describing how the chemistry might affect the business in some way.

A few suggested topics include:

- 1) Chemistry and the price of gasoline.
- 2) Natural or anthropogenic contributions to global warming.
- 3) Dietary consequences of saturated and trans fats.
- 4) Dietary role of antioxidants.
- 5) Marketing and chemistry of single enantiomer drugs.
- 6) Chiral catalysis in pharmaceutical manufacturing.
- 7) Development of antibiotic resistance and chemistry of antibiotics.
- 8) Chemistry of genetically engineered herbicide resistance in plants (e.g. Roundup Ready), or insect resistance in Bt crops.
- 9) Chemical mechanisms of carcinogenesis.
- 10) Nanostructures: carbon tubes and related structures.
- 11) An aspect of forensic chemistry.
- 12) A summary of "What's that stuff?" from C&E News.
- 13) Chemistry of synthesis or degradation of herbicides, pesticides, fertilizers.
- 14) Chlorofluorocarbons and the ozone hole.
- 15) Persistence of arsenic in the environment, e.g. in rice in south Texas.

You might look at Chemical and Engineering News (<http://pubs.acs.org/cen/index.html>) or Scientific American for additional ideas. I would be happy to discuss the selection of topics with you.

For full credit, you should include a reaction or some other clear aspect of chemistry beyond a molecular structure. You should use proper spelling and grammar. I will give no credit for a paper without proper citations.