

## Chemistry 391: Writing in Chemistry

### Project #4: Summary of a Scientific Article

FALL 2008

Mid-process draft due: October 16

Final draft due: November 4

You have successfully completed two "Molecules that Matter" assignments, communicating science to non-scientists. Now you are commencing three Proposal assignments, communicating science to other scientists:

#4 Summary of a scientific article (can be related to proposal area)

#5 Proposal for a teaching or undergraduate research project - written

#6 Proposal for a teaching or undergraduate research project - oral presentation

It is critical for scientists to communicate the results of their experiments to the scientific community, which is done principally by publishing articles in specialized journals. These articles must be clear and complete because they serve as a permanent record of the data, and because other scientists need to be able to understand and repeat the experiments to further advance the field. These articles must be interesting so that other scientists will choose to read them. Research results that are not read or understood by other scientists are of little value.

To give you some practice in communicating science to other scientists, your next major writing assignment is to write a summary of an article. You may choose an article to summarize that is important for you to understand as you develop your research proposal. You can get help from your research group in choosing this article. You should NOT choose the same article as any other students in this class in your research group. We will not read your article so it is your responsibility to summarize it clearly for us. Imagine that we are members of a research team who need to keep up with the field but don't have time to read all of the articles: the purpose of your summary is to communicate the essence of an article to others on the research team.

The target length for the summary is *500 words or a maximum of two double-spaced typewritten pages*. You will also turn in a copy of the published article with your summary. Be careful that your summary NOT be similar to the published abstract of the paper. It's probably best NOT to choose a review article to summarize, as these are already summaries of current publications in a field and therefore may be difficult for you to summarize.

We suggest that you begin by reading the article with a pen or highlighter in hand, underlining important assertions or passages and annotating in the margin. To help prepare to write the actual summary, consider the following questions as you read:

- What is the central claim of the article?
- What problem or issues does this claim address?
- What specific question or questions does the article address?
- How does the scientist address the questions you've listed?
  - theoretical, experimental, both?
- What premises are they based upon?

Keep in mind that the goal of a summary is to explain what the article says as concisely as possible without omitting important information. Your summary should include all the key points and be fully comprehensible to someone who has not read the original paper. For those doing a research proposal, understanding this article enough to write a good summary should serve as an important step in your learning about your chosen research area, in preparation for developing your proposal.

practical guidelines:

- do pay attention to what seems important to the author
- look up the meaning of any words or terms that are unfamiliar to you
- do refer to the author of the article by name
- use the third person (he, she, they) rather than the first person (I);
- avoid using the word "you"
- paraphrase *in your own words* what is said in the article (more than three words appearing in the same sequence as in the original article constitutes plagiarism)
- do not quote from the article
- do include a cover sheet with your name, the course number etc
- do not include any pictures or table, but rely instead on words to represent what the article conveyed