

Literature Poster Presentation Instructions

The focus of this assignment is for you to learn to use the scientific literature to investigate a topic, and then to consolidate that information into an efficient and edifying poster presentation. Your presentation should include a critical evaluation of the subject, and not just a summary of the work. Your poster should include references to the primary literature and your structures should be neatly drawn on ChemDraw. Do not simply cut and paste tables and structures from the PDF files into your poster.

If you choose a total synthesis for your project, your poster and presentation should focus on the assigned paper. Our recommendation would be to focus on the retrosynthetic analysis to discuss the key highlights of the synthesis, and then you can delve into the particulars of the individual reactions. If you have a complicated molecule, you may not be able to cover all of the routine steps on your poster such as introduction of a protecting group, or oxidation of an alcohol; but you should be able to discuss every transformation in your assigned synthesis. You should highlight the **key steps** in your synthesis for your poster. This might include reactions like a stereoselective intramolecular Diels-Alder reaction, or a Yamaguchi macrolactonization. For these key steps, you should cover the background of these particular steps and how this reaction was developed. Was this reaction developed specifically for this synthesis, or did the author borrow the method from the literature? In addition, you should include a short discussion of other syntheses where this strategy has been employed.

You should also provide some introductory information and a history of the molecule. Explain why it is important, and why people pursued synthesizing the structure. A quick background of the professors involved in synthesizing the structure would also be useful. Even if this information is not explicitly stated on your poster, you should be able to describe the primary authors. Some of these molecules have been made multiple times. Your literature review should include all of the total, formal, and partial syntheses of the structure. If the molecule has been made several times, it will be difficult to cover all of the syntheses in detail on your poster. However, you should summarize each synthesis and what was new and interesting about each attempt that differentiates it from the other syntheses. The retrosynthetic design and key steps should be covered explicitly, and the original methodology for those key steps should be investigated, discussed, and cited.

If you choose to discuss a Nobel Prize topic for your project, your poster and discussion should clearly cover the science covered under the prize. This should include background on how this science was

developed, and why it was transcendent. You should also include a biography and discussion of the authors awarded the prize. Are there any other key figures in this field that were not included in the award? Your presentation should also include examples of how the science included in the prize has been used in modern work. What important applications and advancements have been made in the field since the prize was awarded?

The evaluation of this project will be based on the quality of your poster and presentation. This will include a visual component and a content component. Your poster should be neat and easy to read, while containing all of the relevant information for your molecule. The organization, completeness, analysis, and references will be significant factors. In addition, your responses to the question posed by the organic faculty and fellow students will also be taken into account. We will ask for feedback from each of the organic faculty to help us assign a grade to presentation portion of your project. The earlier you get started with your literature searching, the better your poster project will be. You should have your poster printed in the Geography department. This typically takes a couple of days to turn around, so please submit your posters to be printed early.

Good luck with the project. We hope that you learn a lot about the topic and have a good presentation. Please see us if you have questions about the chemistry of the presentation of it.