CHM1390Y Seminar Series 2022-2023

Welcome to the seminar series! All graduate students at UofT presents seminars as part of their degrees. CHM1390 is a seminar course that includes a wide range of disciplines including, but not limited to, polymer chemistry, materials chemistry, nanomaterials, physical chemistry, analytical chemistry, biomaterials, and so on. The series comprises the largest number of research groups of all departmental seminars since we have the largest number of cross appointed faculty within our community. This fact presents several opportunities and challenges that are important with regard to how you present your talks.

Learning objective. Your audience does not represent a particular traditional subdiscipline of chemistry. They may not even be chemists at all! We have materials science, engineering and biotechnology students and faculty in this program. you will present your work in a totally unique environment. This is unlike a group meeting, where you are speaking to your peers that know your work well. This is unlike a conference, where speakers are placed in specialized symposia and the audience is familiar with your topic.

The way that I would imagine this is as if you were to go to company, government agency, or academic department for an interview. You might be asked to give a public seminar, and then meet with various folks throughout the day. In these cases, you would have to talk to a wide range of people. Some have expertise in polymer chemistry, some in solid-state chemistry, some in bioengineering, others in organic chemistry, etc. Some might have very little knowledge of chemistry and might be experts in science policy, business development, sales, manufacturing, etc. The CHM 1390 seminar program will allow you to hone your skills at presenting your work to a very broad audience. We want you to try to engage everyone. That is a great challenge, but an even better opportunity!

Format. There will be three seminars and one tutorial. We want to ensure that there are no conflicts with courses and that graduate students present at the same times as the graduate students in their cohort simply out of fairness.

We hope that you want to come and learn from the talks. The requirements are that you present your seminar in the 1st ,2nd , and 4th years **AND everyone fills out an evaluation form for the class at the end of the year**. **NEW THIS YEAR** - 3rd and 5th years students can volunteer as discussion leaders for the presentations. You can do this on the Quercus or by sending a note to CHM1390coordinator.

Here is a rough schedule in the order of presentation (subject to change):

Fall 2022: Second years – Research talk and/or project proposal (15-20 min. 15 slides, discussion 5-10 min as needed). Sorry second years you will go first! We want you to give us a vision of your project. Motivate it with literature examples. Think about where the gap in knowledge is, and how you might fill that gap. We appreciate preliminary data, since it shows that the project is feasible. Preliminary data doesn't necessarily have to be your own. It can come

from the literature, from other group members, etc. But it has to be a from a source that you trust. This talk should contain proposed ideas. The learning objective is for students to present their project, explain the goals and tell us how they intend to achieve those goals.

The discussion leaders will:
Ask a lead question and follow up question based on what was presented. Manage the break-out rooms at the conclusion of day.

The discussion leaders and audience will:
Ask questions related to the project from your perspective. Point out opportunities i.e. measurements that can be made, connections, collaborations to enhance the project, techniques, etc. Can we help you identify groups whose research you should be following? A conference that you might want to go to? We want to get you going in the right direction. We also want to use the broad knowledgebase in the audience to give you some outside of box ideas.

Jan 2023: Tutorial. I will give a talk on how I give a talk. Most go pretty well, but I do bomb from time to time! I am going to tell you all the lessons I've learned along the way. We'll deal with all the nuts and bolts things like putting together clear slides, fonts, figures, etc. We'll discuss more complicated things like managing the crowd, reading the audience, answering questions, and how to deal with aggressive audience members during Q&A. I will also discuss tips and strategies for selecting a good paper to present, as well as dissecting the components of a paper.

Feb 2023: First years - Literature talk. (**15 min max! 12-15 slides, 5 min Q &A as needed**). We want you to pick a paper and present it in an objective way. It can be related to your research or not. But I'd suggest the first option. Presenting a single paper at a conference will likely be your first public speaking opportunity outside of our department. This is an activity to replicate that experience. You can pick whatever paper you want, from any journal. A good practice is to pick a paper that you believe is high in novelty, impact, general interest, and scholarly presentation. You need lots of background to present these talks to your audience. In your talk we want you to provide context for the work, present the results, and the conclusions. Point out anything that you think could have been done better. Finally, tell us what more can be done based on the results presented in the work. An additional learning objective in this activity is to teach you how to give a 15 min talk – so we may time you!

May 2023: Fourth years – Research talk (25 min, 20-25 slides, discussion 5-10 min as needed). This is your time to shine! Your thesis will be shaping up at this point and you will be able to give us a glimpse of what your final defense will look like. Of course, you will still have more work to do. But this is a good point to ask yourself what else do I need to do to defend the overall goal of my dissertation. We of course want to see the background, the results, and the future plans. The learning objective is to have you present your thesis as it stands today, and show us what is left for you to do.

The discussion leaders will:

Ask a lead question and follow up question based on what was presented. Manage the break-out rooms at the conclusion of day.

The discussion leaders and audience will:
Ask in depth questions about the results that are presented. If there is something they don't know, don't worry they still have time to learn it! Discuss future work. Are the goals realistic? Sometimes people try to do too much at the end.

Evaluation: All students enrolled in the class will be required to fill out a course evaluation. This should be a thoughtful effort, aimed at identifying strengths and weaknesses with the class, and suggesting ways that it can be improved for the next generation. This should be approximately ½ page in length and submitted on Quercus. Details will be provided in early 2023.

Code of conduct:
The goal of this series is to provide a forum for the presentation and discussion of research in chemistry, broadly defined. We encourage open and honest intellectual debate as part of a welcoming and inclusive atmosphere at every seminar. We condemn inappropriate or suggestive acts or comments that demean another person by reason of his or her gender, gender identity or expression, race, religion, ethnicity, age or disability or that are unwelcome or offensive to other members of the audience.

For more information please see UofT's Civility Guideline:

https://governingcouncil.utoronto.ca/secretariat/policies/workplace-harassment-policy-respect-april-03-2020 or https://hrandequity.utoronto.ca/policies/