

**CHEM 545 Physical Chemistry Seminar**  
Physical Chemistry Literature Seminar  
**Fall 2023**

Room: CLSL B102 & NL 355A & NL 355F  
 Period: August 21 – December 6, W 4:00 – 5:20 PM  
 Instructor: So Hirata  
 Email: [sohirata@illinois.edu](mailto:sohirata@illinois.edu)  
 Office: NL 355F

Recommended text: <http://www.scs.illinois.edu/suslick/seminars.html>  
 (Courtesy of Professor Ken Suslick).

Objectives: An ability to deliver lucid, engaging, well-prepared and well-rehearsed presentations on your work (including handling Q&A part well) in conferences, university seminars, job interviews, etc. can play a decisive role in your career, be it in academia, industry, or elsewhere. This course supplements individual laboratories' efforts to improve and perfect graduate students' presentation skills, while at the same time have them learn relatively recently published research made in fields related, but distinct from their own.

Attendance: Attending all meetings, submitting requested presentation materials and feedbacks, and presenting practice and final talks are mandatory.

Grades: Letter grades given on the basis of the seminar performance and class participation.

Date	Lecture Topics	Time & Location
August 23	Initial Meeting	4 PM, NL 355A
September 14	"Seminar on Seminars" by Professor Ken Suslick	3:30 PM – 4:30 PM, CA 1024
Weeks of September 4 and September 11	Discuss potential topics <sup>1</sup> with the instructor	NL 355F
By September 22	Choose a topic and email a brief outline of the presentation to the instructor to be approved by the instructor	5 PM
October 18	Email the title of your talk to the IMP office; Email the abstract to the instructor	5 PM
October 25	Give a practice talk <sup>2</sup> (25 min + Q&A) and email the feedbacks <sup>3</sup> of other speakers to the instructor by the end of the week	4 PM, NL 355A
November 1	Give a practice talk <sup>4</sup> (25 min + Q&A) and email the feedbacks <sup>5</sup> of other speakers to the instructor by the end of the week	4 PM, NL 355A
November 8	Give a final talk (25 min + Q&A)	2 PM, CLSL B102
November 15	Give a final talk (25 min + Q&A)	2 PM, CLSL B102

<sup>1</sup> The student should schedule a one-on-one meeting with the instructor and bring 1–2 potential topics with 1–2 relevant papers for discussions in that meeting. Email inquiries about potential topics prior to this meeting are welcomed. The topic must be physico-chemical, well defined, and not too close to your research (but can be relevant to it). It will be based on a set of recent (< 3 years old) papers. For example, a topic such as "mass spectroscopy" is not acceptable, while a topic such as "time-of-flight mass spectroscopy in genome analysis" is sufficiently well defined for a 25 min overview and suitable for anyone except a student in a mass-spec-genome group. The talk can compare techniques, criticize a technique, or analyze a recent advance in physical chemistry. The student may pick a topic from which he/she and the audience can learn something new and interesting.

<sup>2</sup> The presentation typically consists of the title slide, introduction/overview slide(s), logical sequence of subtopics, final conclusions slide(s), and acknowledgements as well as backup slides for Q&A. An advanced undergraduate student should be able to follow the talk, not just experts in the field. Use the time between this date and the date of the practice talk for many rehearsals at home.

<sup>3</sup> The student must give written feedback to the instructor by email on every talk (except his/her own) listing both positives and suggestions for improvement. The instructor will collate these and send them out as anonymous referee reports. No more than 2–4 sentences per review are needed.

<sup>4</sup> The presentation typically consists of the title slide, introduction/overview slide(s), logical sequence of subtopics, final conclusions slide(s), and acknowledgements as well as backup slides for Q&A. An advanced undergraduate student should be able to follow the talk, not just experts in the field. Use the time between this date and the date of the practice talk for many rehearsals at home.

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