

### Email log for Fall 2025

Whenever I send an email to everyone in the class, I will post a copy here. Sometimes emails seem to go astray or to the wrong email address, so having a record here will allow you to track anything that may have been missed.

Dave

### 5 September 2025

Hi All in Chem 362

I hope things have started well for you and that you are already feeling a little less apprehensive in the lab. We do recognize that it is a steep learning curve at the start of the term.

After the second session of A6, you will be sent a copy of all the IR spectra collected on the crude products in your section. Please use that to compare/contrast the pattern of peaks with the symmetry expected in the molecule. You will acquire IR and NMR spectra on your own product. All the IR processing is done in the lab at the time of acquisition. The NMR will need to be processed by the same method that you have just practiced for  $[\text{Mo}(\text{CO})_6]$ . Expansion, peak picking and integration (the latter just for protons) will be needed. NMR spectra that run overnight can be picked up from the folder outside of the undergrad NMR room (Ell346).

In session #3 on Thursday or Friday of next week, you will be starting your next A experiment. Please refer to the coloured schedule that I gave you, or the schedule sheet outside the north door of Ell331 or on the website (under Course Information for this Term). Before you can start your next experiment, you will need to do some pre-lab work, using the literature provided. There are two ways to access the literature, but by far the best method is to click on the first pink/purple box on the protected [web page](#) .

Once you have completed your pre-experiment prep, email a copy to your two TAs no later than 12 hours before you plan to start the experiment. This should include preparing your notebook, a tabulation of relevant data from the literature and balanced equations for the syntheses. Don't forget that there is a Reagents Excel file on the web site for your use. It also has links to relevant nmr spectra of starting materials (but not IR spectra).

The first written report (A6) is due by the start of class on Thursday 11th /Friday 12th September. It is a T style report. The group interviews will be conducted by Rebecca during class the following Monday/Tuesday, 15/16th . You must have submitted a report in order to participate in the group interview.

Your report should include (among other things) your raw spectra as printed from the spectrometer (IR and NMR) and your processed spectra (NMR). Please hand in any remaining solid samples to your instructor.

Your report requires balanced equations, % yields, structures and tables of data for both products

and starting materials. Recall that nmr data of starting materials (with processed spectra) can be found in the Excel Reagents file. You can quote this as a reference source. If you want to quote spectroscopic data from the literature, generally only use the papers referenced in the manual. We do not give credit to you for spending time looking up other papers, so do not waste your time on Google.

A summary of the Stiddard paper is also required in your A6 report. Keep it concise and focused on the theme of our experiment. The complete details of the report requirements are given in the Course Notes on the web site.

Please submit your report by email to me ([berryde@uvic.ca](mailto:berryde@uvic.ca)) no later than the start of your class on the due date. Please convert it to pdf format, as it is less likely to be corrupted. Please try to present everything in one file, if you can. Early submissions are also welcome, of course. Put your name on the report but don't use your V number. It is wise to keep it (somewhat) confidential.

You can see a blank copy of the marking guide by going to <https://web.uvic.ca/~berryde/chem362/general/term%20full%20course.html> and clicking on *Course Notes* and then the relevant report style.

The report and interview will earn you a maximum of 20 marks, which represents 10% of the course grade.

If you have any questions, please do not hesitate to ask. If you haven't asked them by the time the interview happens, ask them then.

Have a good weekend

cheers  
Dave

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**26 August 2025**

Hello Chem362 Students,

Welcome back to classes. I hope you all had a change of pace over the summer and are ready for the coming academic year. We have the labs all ready to go, so we are looking forward to seeing you.

The course web site <https://web.uvic.ca/~berryde/chem362/index.html> is up to date and to access the protected parts of it, you will need to put in your netlink id and password. If you get an error message, clear your history and re-boot your computer. That usually solves the majority of issues.

You should be able to access everything, but if you continue to run into problems, please let me know, and tell me your netlink id (but **not** your password!). I have to enter the netlink ids individually, so typos are always possible. The course web site is your main resource, so I do recommend that you spend some time looking through it now.

You should find most of what you need on the web site. The printed manual is available for purchase from the Bookstore. I have also posted the manual on-line, as there are some distinct advantages for you to also have access to an electronic version.

### **Safety and preparation for the first class**

1. The course Brightspace page has been activated. I plan to only use Brightspace for showing longer videos which will not run directly off the web site. There are two videos I would like you to watch before your first class. One is of a fire that we had in the senior inorganic lab in 1997. It should provoke some thoughts and questions about good housekeeping practice around the lab. The other video is an overview of how to run the undergraduate NMR. It is a useful introduction to this instrument if you have not used the one in E11346 before. We will, of course, give you more detailed guidance when you put your first sample on in the second class.
2. In addition to the above, please look at two modules within a lab safety course that is on-line. This is a course that all workers in the research labs are expected to take, but for our purposes in Chem362, modules 1 and 5 are all that is needed. The full course would take 2 hours, but the two modules will be about 40 and 15 minutes respectively and they are mostly videos. In order to access this *Lab Safety for Lab Workers* course, please go to <https://www.uvic.ca/ohse/training/research-safety/laboratory-safety/index.php> and click on the on-line version of the *Lab Safety for Lab Workers* course. Then hit *Click to Register via Learning Central*. Once you are there, enter your netlink id and password. It will ask you for a department (*Science* is the answer) and *Dave Berry* is the supervisor. This will then place the course into your Brightspace site and you can proceed whenever you wish. (To get to module 5, you can just quickly click through the other modules, without reading.) Once you have looked at modules 1 and 5, please begin the quiz that is attached to this email (no marks allocated but this is essential information to absorb).

If you know that you will soon be working in one of the research labs (taking Chem 298, 398, 399, 498, 499) and want to take the full version of the safety course now, please go ahead (the certificate will not expire), but it is not necessary for Chem362. Similarly, WHMIS is a mandatory certification course not needed for Chem362 but needed for use in the research labs. It has a 3-year expiry. Check out <https://www.uvic.ca/ohse/training/research-safety/index.php>

3. In addition to the above videos, I want you to look at a short article on plagiarism (attached and also found at <https://web.uvic.ca/~berryde/chem362/plagiarism%20example.pdf>). Once you have done this, you will be in a position to complete the quiz to give to your instructor in-person at the first class.

4. Please be aware that the University may limit the use of software that edits or interprets any text other than for correcting spelling or grammatical errors. Permission is **NOT GRANTED** for you to use AI-enhanced software for submitting your work in this particular course, Chem 362. To learn more in this fast-changing environment, you might want to look at the link <https://teachanywhere.uvic.ca/academic-integrity/the-use-of-artificial-intelligence-tools-and-implications-for-academic-integrity/>

There is no pre-lab literature work for your first experiment, A6. Your list of assigned experiments (and the order in which you will do them) is posted on the web site as *students' experiments* on the page accessed from the pale-blue box marked *course information for this term*. Please be sure to refer to this schedule frequently, just in case it should change.

Lab reports must be submitted as email **attachments** directly to me by the posted deadline. It is best if you can submit everything in a single pdf file. This will minimize the chance of file corruption or content loss.

**Labs will be starting on Thursday September 4<sup>th</sup>.** You will be doing lab work for your first experiment, A6, on that day, so please bring your labcoat and safety glasses (everyone needs a pair). Wear clothing that fully covers your legs and feet, and shoes that cover your feet entirely (including the tops) and are not slip-on/off. The room (Ell331) will be open ~ 15 minutes before class time.

Each person will be doing experiment A6 individually, using the assigned ligand as below.

B02

2,2'-bipyridyl: Jack Conroy, Jeremy Ellis

4,4'-ditertbutyl-2,2'bipyridyl: Lauren Falconer

1,10-phenanthroline: Sydney Fong, Waylon McCarthy

bis(diphenylphosphino)methane: Zoe McGhan, James Rideout

bis(diphenylphosphino)ethane: Fred Schuld, Michelle Sewell Eguigure

B03

2,2'-bipyridyl: Alex Benson, Sydney Kinderwater

4,4'-ditertbutyl-2,2'bipyridyl: Luca Landfried

1,10-phenanthroline: Evan Mitchell, Isaac Reichstein

bis(diphenylphosphino)methane: Katie Simonds, Kate Spicer

bis(diphenylphosphino)ethane: Luca Swainson, Teresa Tran

If you have a preferred name or email address which I should use, please let me know. I am using the information that was designated as preferred on your registration when I last downloaded the list. The web site contains a log of emails sent to the class, so that you can check to see if a message has gone astray.

I hope you enjoy the coming term and that this course turns out to be one of your best learning experiences. Feel free to contact me at any time with questions or concerns. I look forward to seeing you next week.

cheers

Dave

on behalf of the 362 team of instructors Rebecca, Jesse and Kelli.