SER CCCC - Labs and shared equipment in the EIC building - Last updated 4/30/2024

SER's Center for Carbon Capture and Conversion (CCCC) may provide access to labs and equipment for students and researchers. Please understand that we cannot always guarantee access and that we do not always have resources for instant training. At present, most usage is free. We might impose charges in the future.

For any questions, access requests and organization of instrument training please contact Stefan Holberg (sholber2@uwyo.edu, office EIC 376 D).

- **Instrument access.** Equipment/instruments may only be used after oral or written consent from Stefan Holberg for the specific equipment. Stefan will provide training or identify somebody else who can do training for the respective instrument. You need to go through this procedure even if you or a colleague of you already know how to use the instrument. Thereafter, your colleague may of course train you for specific measurements.
- **Keycard lab or building access.** If you need keycard access for the first time, Stefan will email you a questionary to fill out and will possibly confirm your request with your supervisor.
- **Sharepoint folder.** The following share point folder, accessible with any UW login, provides lab resources such as manuals and instrument calendars for some of our equipment: https://uwy.sharepoint.com/sites/SER/cccclabs/
- **Instrument calendars.** If there is an online calendar for an instrument, please use it to book time. Please check and respect other people's reservations. Stefan needs to grant you write access to the calendars before you can use them.

Laboratory practice

Please comply with laws and recommendations outlined in UW's safety series. The safety series training is mandatory before working in any UW lab and must be repeated every 3 years. Below we like to remind you of some of these recommendations.

1. Safety googles: Anybody anytime while in the labs! (Available at the doors.)
2. No food/drinks in the labs.
3. When working with hazardous materials, use any necessary further personal protection equipment (lab coats, gloves, etc.)
4. Try to find the closest fire extinguisher, so you know where it is. If you cannot find one, please ask us!
5. Please try to organize your work so that there is a second person in the lab with you. That second person may do something else (homework, computer games etc.) as long as she/he hears and eventually sees you. Only in exceptional cases, SER staff may serve as second person.
6. The following is only relevant for those who store hazardous materials (chemicals, gas cylinders) over night or longer, please follow below recommendations. We appreciate that and we know that this may take significant time away from your actual research. If you have questions on how to do it, feel free to ask Stefan.
    - Please notify Stefan about any gas cylinder you place in the labs or take away. If you just replace an empty cylinder, no notification is needed.
    - Label bottles and containers correctly! Especially self-filled or self-blended bottles.

a) Please put a label/tape with the name of the research group (PI) on any gas cylinder or any other chemical stored in the labs (f. ex. "Johnson" or "SER-CCCC"). Anybody in the lab must be able to see to which group each bottle belongs.
b) Full chemical name (not just shortcuts like "HCl").
c) Hazardous symbols (either buy labels for these, or copy them from the internet and print them together with the rest of your label)
d) Labels may be printed with a laser printer (inkjet not recommended), cut, and fixed with transparent tape. You may f. ex. use the printer/copier in EIC 348 which has instruction on it on how to access it. When handwritten, write clearly.
Solvent labels should be printed or protected by tape. Just writing "acetone" on a bottle with a marker will likely not last long. One drop of acetone can wash it off.
When bottles for chemicals are reused for another chemical, all old labels must be removed, taped over or painted overs with a permanent marker, so there is no doubt what is inside the bottle.
e) We will not check any small test vial, but we expect correct labelling for any larger bottles.

- Safety Data Sheets (SDS). Each lab has a designated place for safety data sheets, as stated by the sign on the lab door. Each research group should have their own SDS folder, labelled with the group name. All SDS folders should be stored at the same place. Each research group is responsible for keeping their own SDS folder up to date. SDS need to be ordered, f. ex. alphabetically, so that anybody (f. ex. a firemen) can find them. SDS are required for all hazardous materials, also those in self-filled bottles. If you want to store your SDS in electronic form rather then printing them out, please contact Stefan.

- Correct storage.

a) Anything which is classified as flammable, including flammable waste, should be stored in a cabinet for flammables. These are marked with a flammables symbol and are under the fume hoods. Larger cabinets are in satellite rooms of EIC 177 and 377. For example, any Acetone, Ethanol or DMF bottles should not be stored overnight in a fume hood, but instead brought to a flammables cabinet.

b)  This symbol designates a material classified as flammable.

c)  This symbol designates an oxidizer. See the "O" as oxidizer under the flame. Unfortunately, the symbols look similar. However, this is something COMPLETELY different. Oxidizers react with flammable materials. They must be kept apart from flammables substances and shall never be stored in cabinets for flammables substances.