

**Chemistry LST Meeting Minutes** APPROVED

Name of Team: Chemistry Local Safety Team

Chair(s): Derek Gates & Monica Clarkson

Date: January 16, 2025

Time: 11:01 am

Location: Online Zoom Meeting

AGENDA:

<ol style="list-style-type: none"> 1. Roll Call 2. Approval of Previous LST Meeting Minutes 3. Additional Agenda Items & Approval of Agenda 4. Review Central Accident/Incident Reporting System (CAIRS) report of Accidents/Incidents <ul style="list-style-type: none"> • Monthly Incident List & Statistical Summary Report 5. Review Workplace Safety Inspections (including any changes to equipment, machinery or work processes that may affect the health or safety of workers) 	<ol style="list-style-type: none"> 6. Review Education and Training 7. Ongoing Business – Status of Action Items, Review of Previous Minutes 8. New and Other Business 9. Next Meeting 10. Meeting Adjournment
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1. ROLL CALL

Worker Representatives	Work Location	Present	Regrets	Absent
Guillaume Bussiere	Chemistry - Teaching Faculty	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Karen Button	Chemistry – M&P, Stores Manager	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ken MacFarlane	Chemistry - M&P, Director, Finance and Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mohamad Rezaei	Chemistry - M&P, Director, Technical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tori Christianson	Chemistry – CUPE 2950, Outreach and Communications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jeremy Sedgwick	Chemistry – Shops and Services Tech	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ben Herring	Chemistry – Research Tech	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jacqueline Higgins	Chemistry – Graduate Student	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
William Ho	Chemistry – Graduate Student	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Employer Representatives	Work Location	Present	Regrets	Absent
Derek Gates	Chemistry – Faculty, Co-Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monica Clarkson	Chemistry - M&P, Co-Chair & Safety Program Officer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Resources/Guests	Work Location	Present	Regrets	Absent
Richard Wambolt	UBC Safety & Risk Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. APPROVAL OF PREVIOUS LST MEETING MINUTES

(Statement to indicate minutes of previous meeting have been read & acknowledged and to record any corrections to it)

Are the minutes approved?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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3. ADDITIONAL AGENDA ITEMS & APPROVAL OF AGENDA

Is the agenda adopted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:

See attached incident report:

- Monthly Incident List & Statistical Summary Report (*make note of trends etc. For any general CAIRS information that requires discussion or action, please record under "New Business". Any incident specific items and follow up requests are to be listed below*)

(* See Legend at End for Priority and Status Codes)

Item # (Use CAIRS Incident ID #)	Priority	Date	Action Plan (Actions Taken/Need to be taken)	Assigned To	Follow up: Date Pending	Status
129681/129682	C	Jul 22, 2022	<p>CHEM Glass Waste Previous discussions and notes can be found at https://chem.ubc.ca/safety/chemlst within the January 18, 2024 CHEM LST minutes. UBC Waste Management Services is in agreement with the department to allow for the metal glass waste pails to be labelled with spray paint. Labelling the pails will help UBC Waste Management workers to identify and deliver the marked "UBC CHEM" metal pails to CHEM. Several of the</p>	DG/MC	In Progress	IP



4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:						
			<p>metal pails have already been labelled and is still in progress.</p> <p>Mar 2024 - It was noted that the CHEM LST has had a lack of support from UBC Waste Management Services. This item has been flagged to be discussed at the FOS JOHSC.</p> <p>LST Comments: No updates at this time.</p>			
134771/134769	C	July 12, 2024	<p>Cart Struck Against NMR Magnet</p> <p>A worker was asked by another staff member to place ice cream (for department event) into a freezer located inside the NMR lab. The ice cream was brought to the lab using a borrowed cart from CHEM Stores, which contained materials with magnetic properties.</p> <p>A technician was using a cart around the magnet area (500MHz NMR magnet) without realizing there are some magnetic parts in the cart. The cart was pulled to the bottom of the magnet by the force of magnetic attraction. Our engineers have helped to detach the cart from the magnet afterwards. The cart hit the probe, shim stack and BST. We do not know if there are any damages yet. What we do know is one cable is damaged.</p> <p>I was using a cart (metallic, mostly aluminum but some iron probably) to transfer some items in a freezer located on the southeastern corner of the lab. The cart was placed at around 0.5-1 meter away from the spectrometer when I left it to retrieve the items from the freezer. While emptying the freezer I noticed the cart slowly glide toward the spectrometer and accelerated and eventually flew up and got stuck to the bottom of the instrument, near the probe, due to the strong magnetic field. I panicked for a moment and tried to dislodge the cart myself, but did not</p>	MR/MC/ JS/KM	In Progress	IP

**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

		<p>succeed. I then went to the mechanical shop to ask for the help of a colleague there, and two colleagues arrived and inspected the situation, pointing out that a cord was partially damaged by the pressure between the cart and the probe. They were hesitant to dislodge the cart since they did not wish to damage the magnet and spectrometer further. I texted my manager who was working remotely, and they got in contact with two other colleagues in electronic shop who collaborate with us often. the colleagues from electronic shop arrived and spoke to my manager on the phone, and they decided the damage of spectrometer was probably not the most severe, given the magnet did not quench upon the collision. They decided that they would try to dislodge the cart carefully with some aluminum bars which do not attract to magnets.</p> <p>Root cause: Procedures not followed; magnetic materials were used in the vicinity of an unshielded 500MHz NMR.</p> <p>Actions and Resolutions:</p> <ol style="list-style-type: none">(1) Provide non-magnetic cart available to the NMR labs and train all workers that magnetic carts cannot be used inside the Gauss exclusion zone.(2) Review and/or provide working alone procedures.(3) Review safety rules and emergency response for the NMR lab, with respect to magnet safety and emergency response for magnet quenches. Once procedures have been updated, train and provide procedures to everyone, including staff who service the NMR.(4) Remind all workers that chemical freezers and chemical fridge cannot be used for food storage, and to post "no food and/or drink storage" signage to freezer. It is also required to identify what type of hazardous materials			
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4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:						
			<p>(flammables, non-flammables, etc.) are being stored in the freezer, so please label appropriately.</p> <p>(5) Remind everyone that at minimum safety glasses, closed-toed shoes, and long pants are required when entering the NMR lab.</p> <p>(6) Audit existing equipment (step stools) and tools located in the NMR lab to ensure they contain NO magnetic materials/properties.</p> <p>(7) Remind and train workers not to stand on chairs and not to use chairs as step stools. Please provide an appropriate step stool for all workers.</p> <p>(8) All of the corrective actions above should be added to the NMR safety rules.</p> <p>(9) Safety staff to remind staff that all near misses must be reported to www.cairs.ubc.ca.</p> <p>(10) Assess if freezer needs to be in the space.</p> <p>Sept 2024: The freezer (- 20 deg C) is required in the space for the industrial clients.</p> <p>Nov 2024: all items except for item 3 have been completed. Procedures are available but need to be updated.</p> <p>LST Comments: No updates at this time.</p>			
136128/136126	C	Nov 21, 2024	<p>Needle poke Clean needle was being opened and the student (unpaid) stabbed themselves when the cap was being removed. Wound was rinsed and a small band aid was applied. Student is aware of UBC First Aid, they called to report but declined assistance.</p> <p>PPE: safety glasses, lab coat, closed-toed shoes and long pants were worn.</p>	JH/MC	Complete	C



4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:						
			<p>Resolutions:</p> <p>(1) Remind workers to exercise caution when removing protective caps from needles</p> <p>(2) The work being done did not require a sharp needle tip. A blunt-tipped needle could have been used instead. CHEM LST to notify the group that blunt needles are available for use and can be purchased from CHEM Stores.</p> <p>(3) FOS JOHSC: Request to review the SOP for the group and check to see if appropriate un-capping procedures are included.</p> <p>Dec Update: Items 1 and 2 have been completed.</p> <p>LST Comments:</p> <p>All items have been completed. The group does have an existing SOP for handling needles safely and used the two-hand method to un-cap needles. There is an additional method which involves using one-hand that was provided to the group to add to their SOP.</p>			
136187/136186	C	Nov 28, 2024	<p>Chloroform Spill</p> <p>While transferring a graduated cylinder of 200mL of chloroform from one fume hood to another, student dropped and spilled the chloroform on the ground. Student was wearing lab coat, goggles, closed-toed shoes, and gloves, and all spilled solvent landed on floor. Student put down spill pads, opened windows and fume hood sashes to ventilate the area, then evacuated with nearby students to adjacent lab for 1 hour.</p> <p>The student did not have adequate space to transfer the chloroform inside the of same fume hood as the column was located.</p>	MC/WH	Complete	C



4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:						
			<p>Resolutions:</p> <p>(1) Notify student, if preparing a column, one should dispense solvents inside the same fume hood as the column. This will significantly help prevent any spills outside of the fume hood. Also, notify student to plan ahead and make space for both the column and the solvents being used.</p> <p>(2) Remind everyone that chloroform should always be used inside a fume hood and if it needs to be moved from one fume hood to another, it needs to be transferred in a closed vessel.</p> <p>(3) Provide PI with emergency response procedures and request for them to review with their entire group.</p> <p>(4) FOS JOSHC: Notify group with a suggestion to use dichloromethane instead of chloroform.</p> <p>(5) Suggest to group to transfer smaller amounts of solvent and to use a twistable cap for the graduated cylinder.</p> <p>Dec Update: Items 1 and 3 have been completed.</p> <p>LST Comments:</p> <p>All items have been completed.</p>			
136322	C	Jan 6, 2025	<p>Improper Disposal of Mercury</p> <p>While dropping off electrical equipment into the e-waste cage a person noticed droplets of mercury (elemental) droplets spilled on some of the equipment. They immediately reported the issue to the CHEM Safety Officer.</p> <p>The safety officer inspected the e-waste cage and all of the nearby areas (hallways, entrance ways, stairwells, etc.) to check for any additional spill. The source of the mercury came from an old blood pressure monitor. The mercury spill was isolated to</p>	MC/MR/KM	Complete	C

**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

		<p>the e-waste cage. The e-waste cage was blocked off using a thick plastic sheet cover with tape, and appropriate signage was posted. Nucor Environmental were contacted to clean up, dispose of and treat the spilled mercury. The Building Operations Facilities Manager and SRS Chemical team were notified.</p> <p>Nucor Environmental attended to clean, dispose and treat the affected areas the next day. Approx. 1.5 mL of mercury was spilled.</p> <p>A final inspection was completed on Jan 8, where small amounts of mercury was found on some equipment. The contaminated equipment was bagged up and isolated for disposal.</p> <p>Resolutions:</p> <p>(1) Remind all lab personnel that mercury containing equipment cannot be disposed of in the electronics waste bin. All mercury containing equipment must be separated, submitted, and disposed of using the Hazardous Waste Inventory System.</p> <p>(2) Notify the facilities team to improve the existing signage by making it more visible (attach it directly to the cage) and suggest to add visual examples. The existing signage has a note that mercury and other hazardous waste materials cannot be disposed of on the e-waste cage.</p> <p>LST Comments:</p> <p>All items have been completed.</p> <p>A big thank you to Ken and Mohamad for helping with the inspections.</p>			
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4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:						
136353	C	Jan 10, 2025	<p>Student Fainting During a lecture a student told a person standing nearby that they were feeling weak. Moments later the student fainted and was caught by the person who was standing nearby. The person lowered the student to the floor. The student did not hit their head during the fall. The instructor called the CHEM safety officer who asked the instructor to call 911. The safety officer called UBC First Aid. The fire department was first to respond arriving within 7 minutes. UBC First Aid attended. Shortly after the ambulance arrived (within 15 minutes of the 911 call). The student was transported to the hospital via ambulance.</p> <p>Resolutions: (1) Provide instructor with emergency response procedures.</p> <p>LST Comments: This incident is closed.</p>	MC	C	Complete

**5. REVIEW OF WORKPLACE SAFETY INSPECTIONS (including any changes to equipment, machinery or work processes that may affect the health or safety of workers)***Attach inspection checklist(s) and report(s) to these meeting minutes and use this table to record discussion and new recommendation(s)*

Item # (Use Inspection #)	Priority	Discussion/Comments/Recommendations	Assigned To	Follow up: Date Pending	Status
Dec 2024	C	CHEM A There were three lab inspections that were missed this term. They were completed earlier this month. During these inspections it was noted that a lot of the CHEM A fire extinguishers have expired and need to be service. A service request was submitted immediately. Elite FX been notified and will contact us soon. LST Comments: In progress.	MC/TC	In Progress	IP

* *GI- General Inspection*
LI - Lab Inspection
S&SI Shops & Services Inspections

6. EDUCATION AND TRAINING*(General discussion, RMS Courses, external training opportunities etc. For all actionable items please list below)*

Item #	Priority	Discussion/Comments/Recommendations	Assigned To	Follow up: Date Pending	Status
N/A	E	UBC CHEM Fire Extinguisher Training Please contact safety@chem.ubc.ca to sign up.	MC	N/A	N/A



7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)					
Original Item #	Priority	Action Plan (Actions Taken/Need to be taken)	Assigned To	Follow up: Date Pending	Status
E	E	CHEM LST Safety Minutes Prepare meeting minutes, post approved minutes to the Chemistry website, and upload a copy to the FOS JOHSC SharePoint site.	MC	Ongoing	N/A
2020	C	Development of Departmental SWPs Previous discussions and notes can be found at https://chem.ubc.ca/safety/chemlst within the January 18, 2024 CHEM LST minutes. LST Comments: Referred Forward.	DG	Referred Forward	N/A
Dec 2021	C	Earthquake Securing Straps for Large Dewars and Compressed Gas Cylinders Previous discussions and notes can be found at https://chem.ubc.ca/safety/chemlst within the January 18, 2024 CHEM LST minutes. <ul style="list-style-type: none"> Nov 2023 Update - The scope of the project has been re-defined and is in progress. The Mech Shop will continue to work with Building Operations to complete this project. Feb 2024 Update - Proposal was drafted for CHEM C, and was sent to Building Operations as a service request for carpenters. March 2024 Update – In progress. April 2024 Update – CHEM C upgrades have been completed. May 2024 Update - A four-cylinder rack was missed during the upgrades. However, it has since been identified and is on a list to be secured. July 2024 Update - Carpenters have been scheduled secure equipment and compressed gas cylinders in CHEM A224, A220, & A216 during the last week of July. August 2024 Update - Audit for CHEM A will start next term. A request to secure some of the CHEM A 4th floor labs are in progress. September 2024 Update - Ryan labs on the fourth floor have been completed. December 2024 Half sized compressed gas cylinders were secured in A120. LST Comments: No updates at this time.	MR/KM	In Progress	IP



7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)					
Feb 2021	C	Dispensing LN2 Safely - Training It would be useful to have an informational course and quiz available to the department as a training tool for dispensing liquid nitrogen. LST Comments: This item has been referred forward.	MR	Referred Forward	RF
N/A	E	Needle SWP Rich will work with CHEM to help provide a SWP for working safety with needles. LST Comments: No updates	MC/RW	N/A	IP
N/A	N/A	Safety Education and Training Assistance Some groups would like assistance in enforcing safety regulations and would like to see a formal department procedure to help document challenges and encourage improvement in safety culture. LST Comments: No updates at this time.	N/A	N/A	IP

8. NEW & OTHER BUSINESS					
<ul style="list-style-type: none"> General discussion items (list actionable items below) 					
Item #	Priority	Discussion and/or Action Items	Assigned To	Date to be Completed	Status
N/A	E	CHEM LST Member Updates and Concerns – Round Table Are there any safety concerns or updates that were not discussed? LST Comments: Monica – At the January FOS JOHSC meeting, SRS that CHEM did a great job by reporting the n-BuLi incident. This type of reporting will help bring awareness to other units who do not have procedures and proper training in place. Will – The GGSS would like to help improve communication to students regarding safety issues within the department, and would like to learn more about how safety issues and concerns are resolved by the CHEM LST. Monica, Jacqueline and William to discuss this further.	N/A	N/A	N/A



8. NEW & OTHER BUSINESS					
N/A	E	<p>SRS Updates</p> <p>Recommended items to discuss at JOHSC/LST Meeting</p> <p>Engineering Control Survey Safety & Risk Services is gathering information on the range and apparent condition of engineering controls available within research and teaching spaces on Point Grey campus. Starting in January, SRS Assistants will be touring lab spaces to record the location, condition and type of vented equipment – including (but not limited to) fume hoods, solvent cabinets, custom enclosures and Nederman arms connected into ducting. This will be done by visual observation and photos – there will be no interruptions to experimental work nor questions to answer. What we learn will be used to establish a record of engineering controls requiring HVAC connection, inform the triage of building level upgrades and repairs to HVAC systems supporting fume hoods and local area ventilation, and revise HVAC shutdown procedures to maximize occupant and operational safety.</p> <p>We anticipate very brief (~10 min) laboratory visits. Prior to the visit, department personnel will be contacted to confirm scheduling and indicate any rooms with relevant equipment that might be overlooked. We are also asking that clear signage be posted on entry doors to any space where entry is likely to compromise the experiment due to light sensitivity.</p> <p>For any questions regarding this survey, contact research.safety@ubc.ca.</p> <p>UBC Alert testing on January 17 – are you in the loop? UBC Alert will be sending out a test notification to UBC Vancouver students, faculty, and staff via a phone call and text message on Friday, January 17, 2025.</p> <p>UBC Alert is the university's mass notification system used to send alerts in urgent situations that pose an immediate safety or security risk to the community.</p>	N/A	N/A	N/A

**8. NEW & OTHER BUSINESS**

To ensure you are receiving notifications, make sure your mobile number is [up to date on Workday](#).

The UBC Alert system works in tandem with [UBC Safe App](#) in Vancouver, and a push notification will also be sent through the app during the test. [Download the app](#) and turn on push notifications to receive important updates for safety and security risks.

Learn more about [UBC Alert](#) and [UBC Safe App](#).

Bell Let's Talk – Mental Health

January 22, 2025 is Bell Let's Talk Day which raises funds for mental health initiatives and aims to reduce the stigma around mental illness. You can find more about this day and how you can contribute at [Bell Let's Talk](#).

Each year, 1 in 5 Canadians faces a personal mental health challenge. At UBC, we're dedicated to providing support. Faculty and staff can access a range of mental health resources at [UBC Health and Wellbeing](#). For additional educational opportunities, explore our mental health-related courses at [UBC Workplace Learning](#). Together, we can foster a healthier, more supportive community.

Informational Items

LST Training

You can register LST training [here](#).

WorkSafeBC Inspection Reports (IR)

There was one inspection reports received since the last co-chair email.

1) [DECEMBER 13, 2024 – IR #202416709097A](#)

Description:

- This Inspection Report documents the receipt and acceptance of the employer's full incident investigation report (EIIR) relating to an incident



8. NEW & OTHER BUSINESS					
		<p>which occurred on November 12, when a worker fell from a ladder while addressing a ceiling water leak.</p> <ul style="list-style-type: none">• There were zero (0) orders issued to the University. <p>JOHSC/LST General Learnings/Discussion Points:</p> <ul style="list-style-type: none">• Employers must ensure that all ladders used in the workplace are regularly inspected and maintained to prevent equipment failures. Damaged or faulty ladders must be removed from service immediately. In addition, confirm the height of the ladder is appropriate for the task.• As a reminder, any workplace incident that has caused a serious or life-threatening injury, had the potential for serious injury, plus all other immediately reportable incidents, must be reported to Campus Security at 604-822-2222 (after calling 911 emergency services) as part of the incident response.• Encourage everyone to report incidents and near misses into CAIRS within 48 hours of the occurrence so that a preliminary investigation can be completed within 48 hours as required by section 71 of the Workers Compensation Act• Reminder that incident investigations require a site visit that must be completed within 30 days, and include a detailed description of incident, unsafe conditions, contributors, causes, corrective actions, and the name of the participating worker representative.			



9. NEXT MEETING	
Date:	Feb 20, 2025
Time:	11:00 am
Location:	Online Zoom Meeting

10. MEETING ADJOURNED	
Time:	11:25 am

LEGEND

PRIORITY:		STATUS:	
A	High Risk, Immediate Response within 1-2 days: Potential for causing loss of life, body part and/or extensive loss of structure, equipment or material.	N	New
B	Moderate Risk, response as soon as possible within 1 week: Potential for causing a serious injury, illness or property damage.	R	Repeat
C	Low Risk, response as soon as possible; Next regular inspection or further investigation required: Probable potential for causing a non-disabling injury or non-disruptive property damage.	C	Complete
D	Reminders	IP	In Progress
E	Information	RF	Referred forward

Send a copy of the meeting minutes to the JOHSC. Highlight important items that must be reviewed/discussed at next JOHSC meeting.

Monthly Distribution and Posting of Approved Meeting Minutes (Required):

- All LST members
- Appropriate JOHSC