



So you want to attend a COLTRIMS beamtime at the Advanced Light Source of the Lawrence Berkeley National Laboratory ?

Alright – here is a 6 step procedure that helps you to plan your stay. **Please read this regardless if you have attended previous (COLTRIMS) experiments at the ALS or LBNL.** If the links do not work directly please copy and paste them into your internet browser:

1st step:

- When should I come and what do I have to do before arriving at Berkeley ?

Think about how you would like to contribute:

- Help planning and designing (starts 3 to 4 months before the beamtime)
- Setting up and debugging (starts 3 weeks to 4 days before the beamtime and runs until 3 days after having first light)
- Help taking data (2 weeks during the beamtime) and/or help disassembling (1 to 2 days after the beamtime).
- Prepare yourself for the ALS beamtime: <http://amo-csd.lbl.gov/downloads/ALS%20Beamtime%20Preparation.pdf>
- In case you are a “COLTRIMS-Greenhorn” it is highly recommended to **dive into the following subjects before** you come to Berkeley:
 - Design and simulation of the spectrometer (use Excel, SIMION or MrSimulizer)
 - Detector setup, readout and optimization
 - NIM electronics (like fast amplifiers, constant fraction and logic modules)
 - Vacuum pumps (turbo, scroll, roots, welch, rotary vane, cryo, etc.) and flange norms (KF and CF)
 - COLTRIMS chamber (set-up, pumping down and venting, baking)
 - Supersonic gas jet (operating and diagnostics)
 - COBOLD: data acquisition and analysis program
 - Helmholtz coils and rainbow coils: function and operation

Please note that the hands on training here at LBNL will be very limited in this short and hectic time. However you can learn a lot if you are willing to shadow “the old goats”, help, and ask questions.

Then you should find out when the (two-bunch-mode) beamtime takes place:

<http://www-als.lbl.gov/index.php/beamlines/schedules/72-current-long-term-operating-schedule.html>

Get in contact with your coworkers from Frankfurt, Kansas, and Alabama and check out who is going to be at Berkeley at which time. Try to come when there are no or only very few people scheduled yet and when you feel you can contribute the best. Once you have figured that out and booked your flight and arranged housing (see 2nd step) please send Thorsten (TWeber@lbl.gov) an email telling him when and for how long you will be at the ALS.

In order to get around access problems and safety issues you should avoid arriving at LBNL on a Friday, Saturday or Sunday since your access authorization has to be processed and some safety classes have to be taken (especially in case you did not take the online training in advance; see below). Thus you should arrive in-between Monday and Thursday (8:00 a.m. to 3:00 p.m.).

2nd step:

- Where should I live and how do I arrange parking at LBNL?

Check the following links for housing:

<http://www.lbl.gov/LBL-Work/HR/html/irss/Housing.html>

<http://sfbay.craigslist.org/hhh/>

<http://amo-csd.lbl.gov/downloads/TEMPORARY%20LODGING%20IN%20BERKELEY.pdf>

Here are some favorites:

Professor (hotel):

Onsite hotel: <http://berkeleyscience.org/berkeleylabguesthouse/index.html>

Shattuck hotel: <http://www.hotelshattuckplaza.com/>

Everybody:

J's B & B, Single rooms, shared bath in brown shingle, 8 blocks from campus. One room with bath en suite available. Contact Jeri Cardoza at 2227 Carleton in Berkeley, Phone: (510) 845-7018, Fax: 510-549-9492.

or

The Golden Bear Inn on San-Pablo and University in Berkeley: <http://www.goldenbearinn.com/>

Student (summer housing):

http://www.housing.berkeley.edu/conference/summervis_index.html

<http://ihouse.berkeley.edu/>

<http://www.housing.berkeley.edu/housing/>

<http://internationaloffice.berkeley.edu/living>

Check out the public transportation to/from and in Berkeley and vicinity:

<http://www.actransit.org>

<http://www.bart.gov/stations/index.aspx>

More helpful links can be found on our webpage: <http://amo-csd.lbl.gov/tools.php#TO>

You might have a rental car and want to arrange parking. (Note that there is no bus service on the weekends and walking up and down the hill can be quite exhausting and time consuming – again: the hills are very steep here.) Reserving a parking spot is recommended since LBNL has only a few lots available to accommodate cars:

<http://www-als.lbl.gov/index.php/visitors/parking.html>

Note that the link above **reserves** you a parking spot at or near the ALS, but you still have to ask for a parking **permission** once you are here: This means a person with a PhD degree has to ask the officer in building 65A for a temporary parking permit, while bringing a valid driver license and the license plate number.

Please email to ALSParking@lbl.gov for **reserving** a parking spot at the ALS.

Note: DRIVE SAFELY AND OBSERVE TRAFFIC REGULATIONS AT ALL TIMES !!!

UC Berkeley Police is actively enforcing traffic regulations and giving out tickets at LBNL. The fines are very steep:

http://amo-csd.lbl.gov/downloads/TrafficFines_at_LBNL.pdf

There is a free shuttle bus service running from the Berkeley Campus and downtown to the laboratory. Please see <http://fac.lbl.gov/SiteSvcs/indexbus.htm/> for more information on the shuttle bus. Again, note that there is no LBNL transportation operation on the weekends and holidays.

3rd step:

- What do I have to do to get into LBNL and the ALS?

A.) Outside Users attending an ALS beamtime only (registration with the ALS only):

Safety training is required. A generic so called Job Hazard Analysis (JHA) informs you about the hazards and their controls here at the lab (lab 2-102 and ALS). You are only allowed to do the work stated in the JHA – nothing beyond. This requires that you attend the online safety courses listed in the JHA prior to your arrival at the ALS. Please follow these steps:

- First time users AND returning users have to register online with the ALS via the following web link about 4 weeks in advance:
<http://alshub.als.lbl.gov>
- You are asked to take the training classes ALS1001 and EHS0470 right away.
- Everybody (i.e. first time and returning users) has to send the user office an email and inform them about your coming 2 weeks to 10 days before your actual arrival: alsuser@lbl.gov. They will issue (or reactivate) your personal Employee Identification Number. This number is important to get credit for the safety courses you have to take (see below). The number is written on your LBNL badge.
- Download the generic JHA for COLTRIMS guests:
http://amo-csd.lbl.gov/downloads/JHA_COLTRIMS_Guest.pdf
- Please print out your JHA and study it. It will inform you about the possible hazards and the working procedures as well as the required protective equipment you need to wear (safety glasses, lab coats and gloves etc. are provided). Please note: Safety Glasses and close-toed shoes are required in the labs. Do not wear flip-flops, sandals or similar. Do not bring food or drinks in the labs...

- As stated in the JHA you have to take the following safety courses: (SEC0201 and SEC0203 upon special request – only for people with an LDAP account; if you don't know what this please skip this course), BLI0919, ENG1001, EHS0103, EHS0056, EHS0170, EHS0171, EHS0278, EHS0348, EHS0260, EHS0243, ALS1001, EHS0470 (by now you should have already taken the last three classes and there is no need to take them again). These are all online courses which you can access here:

<http://training.lbl.gov/bltCourses.html>

in order to take the BLI0919 training course please go here:

<http://www.lbl.gov/Workplace/Training/TVP/index.html>.

Scroll down and find the training courses which are stated in the JHA. Click on the link for the web courses and log in using the “Non-LDAP login” and your Employee Identification Number issued by Giselle. Note: Some courses let you sign in at the end rather than at the beginning. Most completed training classes are valid for 2 years. Returning guests only have to retake the training classes which have expired. You can check out the status of your training profile after Giselle (re)activated your account. Use the “Employee ID login” going here: <https://ehswprod.lbl.gov/ehstraining/jha>. Once you logged in please go to “Retrieve JHA/Training Profiles”, choose “Me”, and then click on “View Training” in the table (2nd column). If you run into any problems or want to know about your current training status any time sooner please send Thorsten an email.

Note: If you don't take the training prior to your arrival you will have to take it at the first day of your stay here at LBNL, which can easily prevent you from working at that day and the day after.

In addition the following links are essential to work safe in lab 2-102 and at the ALS. Please read them:

- User Advisory at the ALS

<http://www.als.lbl.gov/als/user-advis/21-personalProtection.html>

<http://www.als.lbl.gov/als/user-advis/index.html> (ALS Safety Guidelines and FAQ's)

- Possible safety hazards in the COLTRIMS lab 2-102; read prior to your entry

<http://amo-csd.lbl.gov/downloads/LabHazards102.pdf>

- Possible safety hazards of the COLTRIMS Endstation setup; read prior to first use

http://amo-csd.lbl.gov/downloads/IHAD_COLTRIMS.pdf

<http://amo-csd.lbl.gov/downloads/Upload%20Files.zip> (upload files needed to understand the IHAD)

- Integrated Safety Management (ISM) plan; the core of the safe work practice

<http://amo-csd.lbl.gov/downloads/Perform%20Integrated%20Safety%20Management%20ISM.pdf>

<http://www.lbl.gov/ehs/training/webdev/ISMvideo/>

- Safety Watch List: Remember these basics

<http://amo-csd.lbl.gov/downloads/SafetyWatchList.pdf>

- In case you are still lacking the motivation for safety: read about tragic accidents and convince yourself to work safely

<http://amo-csd.lbl.gov/downloads/Accidents%20at%20Research%20Labs.pdf>

Please note: It is your responsibility to work safe. You have the right and the obligation to stop any unsafe work at LBNL. You should be able to reach the right person to address any problem and communicate your concerns. Before the work can proceed you have to be satisfied with the mitigations.

In case you bring a laptop computer please make sure you have installed the latest security patches before you come to LBNL. Your virus protection program should be up to date as well. Note that your computer is likely to get scanned by the LBNL Computer Protection Program. Find more information here:

<http://www.lbl.gov/IT/Security/>

Make sure your computer is able to operate with 110VAC/60Hz. Please bring a functioning and licensed electric power adapter (cable) – no self-made adapters are allowed.

B.) Affiliates of the Chemical Sciences Division (registration with CSD and the ALS):

This is for people who are official short or long term guests of the Chemical Sciences Division. These people usually stay beyond the beamtime period, need a visa or they receive some kind of financial support (stipend etc.). All other short term guests who are just coming for an ALS experiment (up to 3 to 4 weeks) should register with the ALS directly following procedure A.) above.

Write Thorsten an email and ask him to start the “Affiliate Registration Form (ARF) process”. Give him the following information: Name, Email, Dates of appointment (from and to).

You will receive an email from affiliate@lbl.gov with instructions. A so called LDAP account and an email address will be issued to you. You will receive a link to fill out an online registration form (ARF). **Note:** You will need your passport number and in case you are a non-US citizen you are required to upload your CV. You can save your work and continue at a later point in time if you wish.

Certain non-US citizens will get a letter of invitation, which can also be used as a letter of support at the US embassy to retrieve a VISA (if needed). Citizen of terrorist sponsoring countries (T4) have to contact Thorsten as soon as possible to arrange for LBNL & DOE approval (this can take up to 3 months easily).

If you are an affiliate of the Chemical Sciences Division who now needs access to the ALS please follow this right now (please keep the order of the steps you take):

First register at the ALS filling out this form:

http://alsusweb.lbl.gov/4DCGI/WEB_GetForm/PGIFormEntry.shtml/Initialize/ALSFlag=S

You are asked to take the training classes ALS1001 and EHS0470 right away.

After this please email the users office (alsuser@lbl.gov) for getting access to the ALS floor with your badge (cut, paste, and complete the following message):

"I have registered online as a user from another division and have taken the ALS1001 and EHS0470 training courses to gain access to the accelerator floor. My name is.... and my employee ID number is... Thanks a lot for all your efforts in advance."

You will receive an email that asks you to complete the Job Hazardous Analysis (JHA) and take some more training. Please go to: <https://ehswprod.lbl.gov/EHSTraining/Jha/Login.aspx> and log in using the LDAP account or the “Employee ID” option with your Lab ID # (see the Appendix for guidance). Select “LBNL “as your work location and “COLTRIMS - guest” as your work group. Once the questionnaire comes up you can go with the default answers and just push the “continue questionnaire” button at the bottom till you are done (get in contact with Thorsten if you run into any problems). In the end the JHA requires that you will complete the following training classes in advance: SEC0201 (and SEC0203 upon special request via email), BLI0919, ENG1001, EHS0103, EHS0056, EHS0170, EHS0171, EHS0278, EHS0348, EHS0260, EHS0243, ALS1001, EHS0470 (by now you should have already taken the last three classes and there is no need to take them again). These are all online courses which you can access here:

http://www.lbl.gov/ehs/training/courses_online/index.shtml

in order to take the BLI0919 training course please go here:

<http://www.lbl.gov/Workplace/Training/TVP/index.html>.

Scroll down and find the training courses which are stated above. Click on the link for the web courses and log in using the “LDAP login” and your Employee Identification Number. Note: Some courses let you sign in at the end rather than at the beginning. Most completed training classes are valid for 2 years. Returning guests only have to retake the training classes which have expired. You can check out the status of your training profile after your LDAP account has been (re)activated. Use the “LDAP login” going here: <https://ehswprod.lbl.gov/ehstraining/jha>. Once you logged in please go to “Retrieve JHA/Training Profiles”, choose “Me”, and then click on “View Training” in the table (2nd column). If you run into any problems or want to know about your current training status any time sooner please send Thorsten an email.

In addition the following links are essential to work safe in lab 2-102 and at the ALS. Please browse them:

- User Advisory at the ALS

<http://www.als.lbl.gov/als/user-advis/21-personalProtection.html>

<http://www.als.lbl.gov/als/user-advis/index.html> (ALS Safety Guidelines and FAQ’s)

- Possible safety hazards in the COLTRIMS lab 2-102; read prior to your entry

<http://amo-csd.lbl.gov/downloads/LabHazards102.pdf>

- Possible safety hazards of the COLTRIMS Endstation setup; read prior to first use

http://amo-csd.lbl.gov/downloads/IHAD_COLTRIMS.pdf

<http://amo-csd.lbl.gov/downloads/Upload%20Files.zip> (upload files needed to understand the IHAD)

- Integrated Safety Management (ISM) plan; the core of the safe work practice

<http://amo-csd.lbl.gov/downloads/Perform%20Integrated%20Safety%20Management%20ISM.pdf>

<http://www.lbl.gov/ehs/training/webdev/ISMvideo/>

- Safety Watch List: Remember these basics
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Please note: It is your responsibility to work safe. You have the right and the obligation to stop any unsafe work at LBNL. You should be able to reach the right person to address any problem and communicate your concerns. Before the work can proceed you have to be satisfied with the mitigations.

In case you bring a laptop computer please make sure you have installed the latest security patches before you come to LBNL. Your virus protection program should be up to date as well. Note that your computer is likely to get scanned by the LBNL Computer Protection Program. Find more information here:
<http://www.lbl.gov/IT/Security/>

Make sure your computer is able to operate with 110VAC/60Hz. Please bring a functioning and licensed electric power adapter (cable) – no self-made adapters are allowed.

4th step:

- How do I get into the lab and where do I have to go?

If you don't have a badge and come in by car you either should have sent an email to Giselle Jiles, Ali Belkacem, or Thorsten Weber informing them about your coming. They have to call the gate two days before your arrival. Your arrival and departure time (as exact as possible) and the names of all passengers are needed.

If you take the Shuttle bus (which is free) you need a (valid) badge (see bus plan routes and schedules below). In case you don't have a badge the bus driver will kick you out at the gate. It then is a good idea to have the telephone numbers of people you want to visit on hand in order to ask for help and further assistance (see <http://amo-csd.lbl.gov/downloads/telephone%20numbers.pdf>; please print that out).

To get a badge people who have followed step 3.A.) have to go to the ALS user office at the ALS, building 6, second floor (take the stairs right at the entrance) and introduce yourself to Giselle Jiles. You then will have to fill out forms and watch videos regarding work related safety issues. People who followed step 3.B.) need to see the badge office in 65A per invitation via email.

→ Please do not forget to bring your Passport and your I-94 or VISA in case you are non US citizen:
<http://www-als.lbl.gov/index.php/user-information/user-guide/356-documents-for-foreign-nationals.html>

After that (and your safety training) you finally can proceed to the beamline or building 2, first floor, lab 102. You will find maps here:

Maps: <http://www.lbl.gov/Workplace/Transportation.html>
<http://isswprod.lbl.gov/labmap/labmap.asp>
<http://www.lbl.gov/Workplace/lab-site-map-flash.html>
<http://amo-csd.lbl.gov/downloads/LAB-UCB-map.pdf>

Bus: <http://fac.lbl.gov/SiteSvcs/indexbus.htm/>

ALS floorplan: <http://www-als.lbl.gov/index.php/beamlines/beamlines-directory.html>

5th step:

- Once I am at LBNL what is there to take care of and respect?

Once you are here you will need to attend a short briefing (on-the-job-training) in order to get accustomed to the working environment and procedures here at LBNL. This briefing is done by an AMO group member and is necessary because of the high safety standards and in order to protect our equipment (it takes about 30 minutes to 1 hour).

Using the on the job training (http://amo-csd.lbl.gov/downloads/COLTRIMS_OJT.pdf) you will be introduced to:

- possible safety hazards

<http://amo-csd.lbl.gov/downloads/LabHazards102.pdf>

- safety equipment and controls
- the Integrated Safety Management (ISM) plan (see your JHA)
- the setup (controllers, bypasses, gas manifold, pumps, crane, feedthroughs, phosphors...)
- warning and information signs

You will be asked to read all the information, labels and signs and respect the safety standards and the way the equipment is set up. We are always open for ideas and improvements, but we would appreciate if you put the things back the way you found them after you used them.

Please note that it is crucial that you are familiar with the concept of Integrated Safety Management (see step three and your JHA respectively). It is the fundamental tool here at LBNL to perform our work safely and we take it very seriously.

It is essential that you

- **know who is responsible for safety and a safe work environment**
- **know what kind of work you are allowed to do and what not**
- **know who to contact in case of any (safety) queries**
- **apply Integrated Safety Management at all times**
- **read the information and warning signs at the lab doors before entry**
- **read the information and warning signs on the equipment before first use**
- **are able to find the information about the required Personal Protective Equipment and wear it**
- **can stop any unsafe work at LBNL**
- **are familiar with the Emergency Response Guide**

During the set up and operation of the COLTRIMS apparatus and its related equipment please make sure you:

- transport and operate sensitive and unique (precision) equipment with care (like controllers, telescope, electronics, detectors, pumps, crane etc.)
- make use of pallet jacks transporting the forepumps; use lab jacks while mounting turbo pumps or vacuum spools
- transport the right equipment to the beamline when it is needed (there is very limited space at the beamline)
- are careful not to break the wheels and support feet of pumps and the chamber during transportation on the different kinds of flooring on the way to the ALS
- are careful not to break the hand wheel of the crane while storing it
- connect the exhausts of the forepumps the right way using the appropriate hoses (watch out for the labels)
- connect the vacuum gauges and convectrons correctly with the appropriate controllers (see labels)
- know how to operate our “ancient” ion gauge controllers (please ask for help and instructions first)
- do not block the air inlets of the Helmholtz power supply
- dismount the steel crane before we start taking data
- do not bump into the telescope or destroy any alignment (this can result in a 6 hours setback)
- do not over tighten screws on flanges or the earthquake brackets/bars
- never disconnect the toxic gas line at the manifold (instead, disconnect it at the regulator IN the gas cabinet)
- are not wearing flip-flops, Birkenstocks, sandals, slippers etc. (please note that this is a big NoNo throughout the entire LBNL)
- ...

Once the experiment is running and we can work in shifts you will be asked to “babysit” the setup. This requires that you are able to:

- Take data with the (COBOLD) acquisition computer (start and stop files, switch from automatic to manual mode)
- Browse and interpret the (COBOLD) spectra
- Refill and empty the right nitrogen trap (safely)
- Change the photon energy and slit sizes (while watching rate meters) as well as the gratings of the monochromator
- Change the gas of the supersonic jet and operate the gas manifold (safely)
- Check detector and trigger rates
- Check detector, spectrometer and Helmholtz coils voltages/currents (power supplies)
- Transfer data to the data analysis computer if necessary
- ...

This requires some basic (COLTRIMS) knowledge which we ask you to obtain in your home institution prior to the arrival at LBNL (see 1st step).

Here are some links to show you what is going on in the different phases of the experiment:

Preparation: <http://amo-csd.lbl.gov/downloads/Checklist%20for%20Beamtime.pdf>

Move to beamline 10 and setting up: <http://amo-csd.lbl.gov/downloads/COLTRIMS%20Plan%20BL10.pdf>

Watch a video about setting up at beamline 10: <http://www.youtube.com/watch?v=lvzn00jYwRo&feature=youtu.be>

Move to beamline 11 and setting up: <http://amo-csd.lbl.gov/downloads/COLTRIMS%20Plan%20BL11.pdf>

Preparation before and after the break: <http://amo-csd.lbl.gov/downloads/COLTRIMS%20BREAK.pdf>

Disassembly of the setup: <http://amo-csd.lbl.gov/downloads/COLTRIMS%20BREAK.pdf>

Please note that the beamtime comes with long working hours (usually from 9:00 to 23:00 in the setting up phase and 24/7 during data taking). Be ready to work late and in shifts. Your contribution is crucial. Please schedule any planned vacation accordingly (consult your coworkers if your absence during the beamtime would cause a problem). Please bring money to pay your rent. Please arrange transportation so that you are mobile here in Berkeley: Note that the restaurants and your housing are likely NOT in walking distance.

Note that the setting-up phase (~4 days) at the ALS and the first 1 to 2 days of data taking as well as the disassembling likely don't come with shifts just yet but rather long hours. There will be not guaranteed free time.

Attending an ALS beamtime is your chance to learn, gain experience, teach others, take responsibility of projects or subtask, organize and work and teams, recommend yourself for a longer stay with the AMO group at LBNL or with the other collaboration partners. Note that the "old goats" will notice quickly if you show up unprepared or if you are not willing to tackle a problem and get busy. It's important that you don't shy away from shadowing the old goats, i.e. accompany them when they get parts and equipment or help from other people; being unable to get equipment or help beyond the direct vicinity of the experiment and being glued to your laptop will not leave a good impression.

For your convenience: Ring Status Notification to the Cell Phone

You can receive text message notifications to your cell phone of the ALS ring status. Send a text message from your phone to alsringstatus@gmail.com containing the letters "als" in the body of the text. You will get a response with the current status and, if the beam is down, it will send a follow-up text as soon as the beam is back.

Please follow the ALS Protective Equipment Polices:

The ALS has a three-part approach that designates certain technical areas and/or activities for which various forms of Personal Protective Equipment are required.

Red Floor: The first technical area consists of all parts of the ALS experiment hall where the floor is painted red. This encompasses essentially all space under the dome in the facility, including the beamlines, accelerator tunnels, and pit areas. The PPE requirements for this area are closed-toe shoes and long pants or equivalent. Note that the non-painted perimeter walkway and the designated pedestrian walkway used for tours are not covered by this requirement.

Yellow Border: In addition to the above requirement, within the experiment hall, certain smaller, limited areas exist where chemical and/or biological materials are used or stored. This also includes areas where open containers of liquid nitrogen may be found. These areas are identified by floor mats with a yellow border. All individuals who enter these areas (i.e., step on the floor mats) must wear proper eye protection (typically safety glasses) in addition to the closed-toe shoes and long pants.

Liquid Nitrogen: Finally, when pressurized liquid nitrogen cylinders are being manipulated, an environmental hazard to the eyes exists. Regardless of where this work occurs, anyone within a radius of 3 ft must wear safety glasses. This is reinforced with signage at the cylinders. Note that this environmental hazard does not exist when the cylinders are not being manipulated, and safety glasses are not required just to walk past a stored gas cylinder (such as exists at many loading docks, etc.).

6th step:

- ...and after the Beamtime:



Return Employee/Guest Badges

Berkeley Lab ID badges must be returned when an employee terminates employment or a guest appointment ends. Employees must return their badge, parking permit, keys, dosimetry badges, etc., at their exit interview. Guests must submit their badges and parking permits to their supervisor or host, divisional or HR contact, the Site Access Office (Bldg. 65A) or a return box, located near the Bldg. 65 bus stop, the ALS reception area, or Bldg. 62/66. Guests who have already left the Lab can mail their badges. Failure to return badges jeopardizes future access. Call x4855 for more information.

For more helpful information please take a look on our website:

- Tools and helpful links for COLTRIMS guests <http://amo-csd.lbl.gov/tools.php#TO>
- AMO related and general LBNL safety links <http://amo-csd.lbl.gov/safety.php>

Appendix – Take A COLTRIMS GUEST JHA

This section only applies to collaborators in the COLTRIMS project who are coming to LBNL for the special operational mode of operation at the Advance Light Source (ALS) and for preparatory setup work on experiments to be performed during this special “two-bunch” ALS operation.

Take A JHA – Login

Go to <https://ehswprod.lbl.gov/ehstraining/jha/login.aspx>



BERKELEY LAB
LAWRENCE BERKELEY NATIONAL LABORATORY

U.S. DEPARTMENT OF **ENERGY**

| PHONE BOOK | JOBS | SEARCH |

EH&S Training - Job Hazards Analysis

<input checked="" type="radio"/> LDAP Login	LDAP Username:	<input type="text" value="Your LBNL assigned Login name"/>	= LDAP Login
<input type="radio"/> Employee ID Login	LDAP Password:	<input type="text" value="Your new Password"/>	
<input type="radio"/> No Employee ID Login		<input type="button" value="Login"/>	

To access the JHA Help Center, please [click here](#)

*Login using your LBNL employee id or your LDAP user name and password
[Click here](#) if you want to request or to change your LDAP password.*

Please contact the [Help Desk](#), X4357, for questions regarding authentication or gaining access to the system.

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[Questions & Comments](#) · [Privacy & Security Notice](#)

Create New JHA

- First Step -



Version 4.2.1

A screenshot of a web application menu. The main menu is a vertical list of items, each with an icon and a right-pointing arrow. The 'Take JHA' item is highlighted in blue. A sub-menu is open to the right of 'Take JHA', containing three items: 'Create New JHA' (with a green plus icon), 'Modify Existing JHA' (with a pencil icon), and 'View My Questions' (with a question mark icon). A large red arrow points from the right towards the 'Create New JHA' option in the sub-menu. The main menu items include: Home, Take JHA, Retrieve JHA/Training Profiles, JHA Compliance, Required Training, Search Completion, Expired Training, GERT Completion, GERT Completion (non-LDAP), Terminated Employee, Campus/Off-site Locations, Work Groups, My Work Groups, Search Work Groups, Feedback, Get Help, and Logout.



Logged in as

- Establish Workplace Location -

Preparing the JHA

Please indicate below all locations where you perform LBNL-related work

"Work" in this case includes hands-on activities that are an active and essential part of what you produce. This includes but is not limited to laboratory experimentation, machining, writing, reviewing reports, making telephone calls, typing, etc. For purposes of the JHA work authorization, periodically attending classes, seminars or meetings is NOT considered "work."

- LBNL main site (Hill), and local sites noted immediately below. 
- Berkeley West Biocenter (717 Potter Street)
- Joint BioEnergy Institute (JBEI)
- Joint Center for Artificial Photosynthesis (JCAP)
- Advanced Biofuels Process Demonstration Unit (ABPDU)
- Advanced Light Source (click here if your work requires unescorted access to ALS) 
- The Molecular Foundry
- National Center for Electron Microscopy (NCEM)
- Joint Genome Institute (Walnut Creek)
- Building 971 (OCFO offices in Emeryville)
- IFRC (Rifle, CO)

Opting out of the JHA

Selection of one or more of the following may allow for opting out of the hazards analysis portion of the JHA process.

- UC Berkeley campus locations (other than Donner Laboratory)
- Non-local, off-site location other than UC Berkeley
- I do not perform "Work" (as defined above)

If you are performing LBNL-related work at UC Berkeley, please consult your LBNL work lead as well as the individual who directs your work activities on campus.

Continue

- Work Group Selection -

Job Hazards Analysis

LAWRENCE BERKELEY NATIONAL LABORATORY

Laboratory-wide JHA

Employee ID: Your LBNL Badge Number	Employee Name: Your LBNL Name (as appears on your badge)	Date Taken:
Work Lead ID: Your Work Lead (Supervisor) Employee Number	Work Lead Name: Work Lead (usually your supervisor, initially) Name	Division: Chemical Sciences

STEP 1: Selecting Work Groups:

The first step is to select the Work Groups that you belong to. A Work Group is a set of Tasks, Hazards and Controls shared by one or more individuals or that is common to a location. Please select "ALS User" and "COLTRIMS GUEST" on the left side and push the "Add" button.

Select your JHA Work Group(s):

Available JHA Groups		Selected JHA Groups
Chem Sci High Harmonics Laser Lab (Belkacem)	Add >>	ALS User
ALS USERS Machine Shop JHA controls		COLTRIMS GUEST
ALS User	<< Remove	
Authorization of Working Alone		
Belkacem Theory		
Biological evaluation of iron, lanthanide and actinide decorporation agents		
CSD ALS Chemical Dynamics Beamline 9.0.2 Staff		
CSD ALS-MES 11.0.2 Beamline Staff		
CSD Actinide Chemistry - Laser Laboratory		
CSD Actinide Chemistry - Rad Worker		

STEP 2: Review Work Groups:

For this step you need to review the Description of Work in each of the Work Groups to which you belong (below). The included descriptions have already been provided. You will not need to change these Work Group descriptions. If you have questions please address them to your work lead/supervisor: Thorsten Weber at TWeber@lbl.gov .

Group 1: [ALS User](#) (Click title for Work Group details)

Owner Info: (Owner SUSAN BAILEY 004797, Co-owner JAMES G FLOYD 254901)

Updated 07/06/2011 by JAMES G FLOYD

Description of Work

[View - Hide](#)

ALS Users work under ESS, which are an approved alternate work group. The purpose of this work group is to identify on-site staff who might also be users.

Group 2: [COLTRIMS GUEST](#) (Click title for Work Group details)

Owner Info: (Owner THORSTEN WEBER 800360, Co-owner JEROME J BUCHER 115200)

Updated 09/28/2011 by JEROME J BUCHER

Description of Work

[View - Hide](#)

Preparing and setting up the COLd Target Recoil Ion Momentum Spectroscopy apparatus located in 2-102 in order to conduct experiments at the ALS.

Work locations: building 2, lab 102, and Advanced Light Source

Details: Preparation of gas phase momentum imaging experiments. Setting up as well as maintaining reaction microscopes including the following: soldering electronic components such as voltage dividers and decoupling boxes, cleaning parts and flanges with alcoholic solvents, working with pressurized systems (gas manifold) and cryogens (LN cold traps) as well as electrical equipment (heating tapes, ion gauges etc.), lifting heavy objects (crane work), construction of vacuum chambers and other ultrahigh vacuum equipment (using hand and portable tools such as drill and heat gun), use of scientific instruments such as oscilloscopes and computers as well as NIM electronics.

Expected output: Ready for use and optimized endstation. Incorporation of new components and prototypes. Successfully performed experiment at the ALS and gain of knowledge in the field of AMO sciences.

STEP 3: Add Individual Description of Work

For this step you need to add a description of the Work you perform. Since all of the Work you perform is (adequately) described by the Work Group description(s) please just insert the statement **"All Work is described by the Work Groups above."** in the box below. Edit out the existing text before inserting the statement.

Individual Description of Work [Work not described by the above Work Group(s)]:

Replace this text with a description of the Work that you perform and to which this analysis applies. Please include:

- Work Summary - a concise narrative summary of what the work entails, why it is being performed, and what you hope to accomplish with it
- Work locations - generally, list the building or rooms, or describe the physical location(s) in which this work is performed
- Materials you use
- The processes you employ
- Equipment you use.

This Description must be of sufficient detail that the tasks can be determined by a trained individual. If some of the Work is already described by Work Group description(s) you may include only those portions that are not already described. If all the Work is described by the Work Group description(s), you may delete this text and replace it with "All Work is described by the Work Groups above" or similar.

STEP 4: Answer the Questions Below (Yes or No)

For this step you need to just accept the questions below (Yes or No). Some questions may be grayed-out and locked to a "YES" response. You cannot change these answers. They have been pre-answered as part of the COLTRIMS GUEST Work Group that you belong to. If you feel that a pre-answered question is wrong, discuss this with your Work Lead: Thorsten Weber at TWeber@lbl.gov

Be sure to click on "Create Hazards Profile" at the end of the JHA Questionnaire. If you don't then your JHA Questionnaire will not be saved.

STEP 5: Signing Off th JHA

At this stage in the JHA process your hazard profile has been created and it is possible to view what training classes you will need to complete, subject to review by your work lead/supervisor. If no training classes changes are made by your work lead/supervisor and the JHA is given signature approval by your work lead, then the courses indicated in your JHA duplicate what courses will eventually appear in a list labeled: training profile. Your training profile will not contain accurate information concerning your training requirements until both your work lead and you have indicated JHA approval by both parties making electronic signatures to the online JHA document. Remind your work lead/supervisor to send you an email when he signed off so that you can login again and sign off too.

You should access the online JHA as follow after you have received the email and logged in again via <https://ehswprod.lbl.gov/ehstraining/jha/login.aspx>

Please select the "Retrieve JHA/Training Profiles"

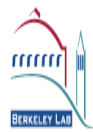


Version 4.2.1

A navigation menu with a light gray background and a blue border. The menu items are listed vertically, each with a small icon to its left. The item "Retrieve JHA/Training Profiles" is highlighted with a blue background. To its right, a sub-menu is open, showing a single item "Me" with a small icon to its left. A large red arrow points from the right towards the "Me" item. Other menu items include "Home", "Take JHA", "JHA Compliance", "Required Training", "Search Completion", "Expired Training", "GERT Completion", "GERT Completion (non-LDAP)", "Terminated Employee", "Campus/Off-site Locations", "Work Groups", "My Work Groups", "Search Work Groups", "Feedback", "Get Help", and "Logout".

- Home
- Take JHA
- Retrieve JHA/Training Profiles
 - Me
- JHA Compliance
- Required Training
- Search Completion
- Expired Training
- GERT Completion
- GERT Completion (non-LDAP)
- Terminated Employee
- Campus/Off-site Locations
- Work Groups
- My Work Groups
- Search Work Groups
- Feedback
- Get Help
- Logout

Check the column "Approval Status". It should say "awaiting employee's signature". Double click this field and sign off using your LDAP account.



Version 4.2.1

- Home
- Take JHA
- Retrieve JHA/Training Profiles
- JHA Compliance
- Required Training
- Search Completion
- Expired Training
- GERT Completion
- GERT Completion (non-LDAP)
- Terminated Employee
- Campus/Off-site Locations
- Work Groups
- My Work Groups
- Search Work Groups
- Feedback
- Get Help
- Logout

Logged in as



Search JHA Profiles

LAWRENCE BERKELEY NATIONAL LABORATORY

Your JHA profiles are listed below. You may click on the view button to view a particular JHA profile.

- Refresh
- Export to Excel
- Export to PDF
- Send Email

Drag a column header here to group by that column. To sort data against multiple columns, click column headers with the SHIFT key pressed down.

View JHA	View Training	View Questions	Change VWL	Employee Name	Work Lead	Supervisor	Division	Org Code	Opt-Out	Opt-Out Reason	Status	Approval Status	Alternate Group(s)	Created Date	Active Date	Expiration Date
				"A"	"B"	"C"	CH	CHCP	"D"		Active	Final				

Create Filter



Now Select the box labeled "View JHA" to see your final JHA profile.



Version 4.2.1

- Home
- Take JHA
- Retrieve JHA/Training Profiles
- JHA Compliance
- Required Training
- Search Completion
- Expired Training
- GERT Completion
- GERT Completion (non-LDAP)
- Terminated Employee
- Campus/Off-site Locations
- Work Groups
- My Work Groups
- Search Work Groups
- Feedback
- Get Help
- Logout



Search JHA Profiles

LAWRENCE BERKELEY NATIONAL LABORATORY

Your JHA profiles are listed below. You may click on the view button to view a particular JHA profile.

Refresh Export to Excel Export to PDF Send Email

Drag a column header here to group by that column. To sort data against multiple columns, click column headers with the SHIFT key pressed down.

View JHA	View Training	View Questions	Change WL	Employee Name	Work Lead	Supervisor	Division	Org Code	Opt-Out	Opt-Out Reason	Status	Approval Status	Alternate Group(s)	Created Date	Active Date	Expiration Date
				"A"	"B"	"C"	CH	CHCP	"D"		Active	Final				



Logged in as

Partial example of the Job Hazard Analysis (JHA) profile.

LAWRENCE BERKELEY NATIONAL LABORATORY					
JOB HAZARDS ANALYSIS					
Printed 1/18/2012 7:12:42 PM					
UNOFFICIAL COPY - The only official copy of this Job Hazards Analysis is the one online at https://ehswprod.lbl.gov/ehstraining/jha/login.aspx					
Worker:	Weber,Thorsten (800360) 11/17/2011	Work Lead:	Belkacem,Ali (222451) 11/16/2011	Status:	Active
				Approval Status:	Final
				Active Date:	11/17/2011
Division:	Chemical Sciences	Supervisor:	Belkacem,Ali (222451)	Expiration Date:	11/17/2012
Office:	002-0118	Employment Date:	10/23/2006	JHA Number:	48134
Phone:	510/486-5588	Job Title:	Chemist Staff Sci/Engr		
Email:	TWeber@lbl.gov				
Work Location(s):	LBNL Main Site; Advanced Light Source				

Formal and Other Authorizations:

This individual is a participant in the following Formal Authorizations which are incorporated into this Job Hazards Analysis by reference:

Type	Authorization No.	Title	Role	Status
AHD	3273	Experimental Endstation in High Harmonic Generation Laser Laboratory	Authorized User	Active
SSA	214	Sealed Sources for Multi Channel Plate Detector Testing	Radiation Worker I	Renewal

✓ Indicates course requirement fulfilled

✗ Indicates course requirement not fulfilled - Additional training required

Group 1: Chem Sci 2-102 Lab (Belkacem)

(Owner THORSTEN WEBER 800360, Co-owner JEROME J BUCHER 115200)

Last Updated 08/31/2011 by JEROME J BUCHER

Description of Work: Atomic and Molecular Sciences Physics

Work locations: building 2, lab 102, and Advanced Light Source

Details: Preparation of gas phase momentum imaging experiments. Setting up as well as maintaining reaction microscopes including the following: soldering electronic components such as voltage dividers and decoupling boxes, cleaning parts and flanges with alcoholic solvents, working with pressurized systems (gas manifold) and cryogenics (LN cold traps) as well as electrical equipment (heating tapes, ion gauges etc.), lifting heavy objects (crane work), construction of vacuum chambers and other ultrahigh vacuum equipment (using hand and portable tools such as drill and heat gun), use of scientific instruments such as oscilloscopes and computers as well as NIM electronics.

Performing detector tests with sealed alpha sources.

Related responsibilities: Hazardous waste management, maintenance of fume hood, exhaust system, eyewash, emergency shower, gas cabinet (for toxic gases) crane

Expected output: Ready for use and optimized endstation. Incorporation of new components and prototypes. Successfully performed experiment at the ALS and gain of knowledge in the field of AMO sciences.

Task #	Description	Hazard(s)	Control(s)
1	Intensive use of desktop and/or laptop computers or terminals	Musculoskeletal discomfort or injury	✓ EHS 0059 Ergo Self-Assessment for Computer Users (Remedy Interactive - online) ✓ EHS0058 Ergo Self Assessment-Refresher Take periodic breaks to stretch or walk (e.g., 5 minute breaks each hour, or more often if fatigue is felt). Use neutral postures: straight wrist, arms/elbows at sides, and head/neck balanced over shoulders. Use keyboard shortcuts, alternate hands, and/or use alternate pointing devices to minimize mouse repetition. Adjust chair, keyboard/mouse and monitor settings to avoid awkward postures. Arrange tools for easy reach.
2	Work with or around hazardous chemicals, including generating	Exposure (inhalation, skin or eye contact) or other hazards due to use	✓ EHS 0348 Chemical Hygiene and Safety ✓ EHS0353 Chem Hygiene & Safety Refresher

The above partial JHA example illustrates which work you agreed to perform and which hazards you will face and which training classes are required prior to start working and whether they have been completed or not.

✓ Indicates course requirement fulfilled

✗ Indicates course requirement not fulfilled, i.e. training is required

You can view your personal Training Profile by returning to the screen in step two (above) and hitting the “View Training” button just to the right of the “View JHA” button. Most, if not all, training courses can be taken online prior to your arrival at LBNL. You can find the courses on the following webpage: <http://www.lbl.gov/ehs/training/courses.shtml>. You may also begin the online training process by hitting the blue colored button in the “LINK” column for any particular course that you need to take online. This button should provide the suitable link to the online course. After hitting the button follow the instructions to login, or to begin completing the training course.

On the next page is an example of a TRAINING PROFILE. If you were interested in taking the training course: EHS0260 – BASIC ELEC HAZARDS & MITIGATIONS then by hitting the LINK button (indicated by the red arrow) the training software login will appear as shown below in the electrical safety training graphic.



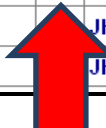
LAWRENCE BERKELEY NATIONAL LABORATORY TRAINING PROFILE



Employee:	Weber,Thorsten (800360)	Status: Active	Work Lead:	Belkacem,Ali (222451)
Division:	Chemical Sciences		Job Title:	Chemist Staff Sci/Engr
JHA Date:	11/17/2011		Hire Date:	10/23/2006
Work Location(s):	LBNL Main Site; Advanced Light Source			

■ Training Requirements that have NOT been fulfilled.
 ■ Training Requirements that have been fulfilled.

Req. Type	Course ID	Course Title	Link	Source	Method	Credit	Date Taken	Date Expires	Enrolled (Class Date)
Required:	ALS1001	Safety at the ALS		Qual	Web Based Course	Y	05/02/11	05/01/13	
	BLI0919	Trafficking Persons Protection		Qual	Web Based Course	Y	06/19/08		
	EHS0010	Overview of EH&S at LBNL		Qual	Class	Y	10/24/06		
	EHS0042	Safety Impl Wklds/Spvrs		Qual	Web Based Course	Y	02/03/10		
	EHS0058	Ergo Self Assessment-Refresher		JHA	Web Based Course	Y	01/03/12	01/02/13	
	EHS0059	Ergo Self Assessment-Comp User		JHA	Web Based Course	Y	04/30/08	04/30/09	
	EHS0062	WorkSmart Ergonomics		JHA	Class	Y	11/30/06		
	EHS0116	First Aid Safety		Qual	Class	Y	08/23/11	08/22/14	
	EHS0154	Emergency Team Training		Qual	Class	Y	09/09/08		
	EHS0170	Cryogen Safety		JHA	Equivalence from EHS0231 (Inactive)	Y	01/09/07		
	EHS0171	Pressure Safety		JHA	Equivalence from EHS0231 (Inactive)	Y	01/09/07		
	EHS0210	Crane/Hoist Oper-2tons or less		JHA	Class	Y	11/01/06		
	EHS0225	Powered Ind Truck Operator		JHA	Class	Y	11/15/11	11/14/14	
	EHS0243	Soldering Awareness Training		JHA	Class	Y	07/20/07		
	EHS0260	Basic Elec Hazards&Mitigations		JHA	Class	Y	11/06/06		
	EHS0278	Ladder Safety Training		JHA	Class	Y	11/10/08		
	EHS0281	Laser Safety Retraining		JHA	Web Based Course	Y	04/01/10	03/31/13	



View and select the training course you need to take here: <http://www.lbl.gov/ehs/training/courses.shtml>

You will receive a login screen.



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U.S. DEPARTMENT OF
ENERGY

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EHS0260 - Basic Elec Hazards&Mitigations

LDAP Username

LDAP Password

Don't have an LDAP account? [Click here to proceed](#)

*Login using your LBNL employee id or your LDAP user name and password
[Click here](#) If you want to request or to change your LDAP password.*