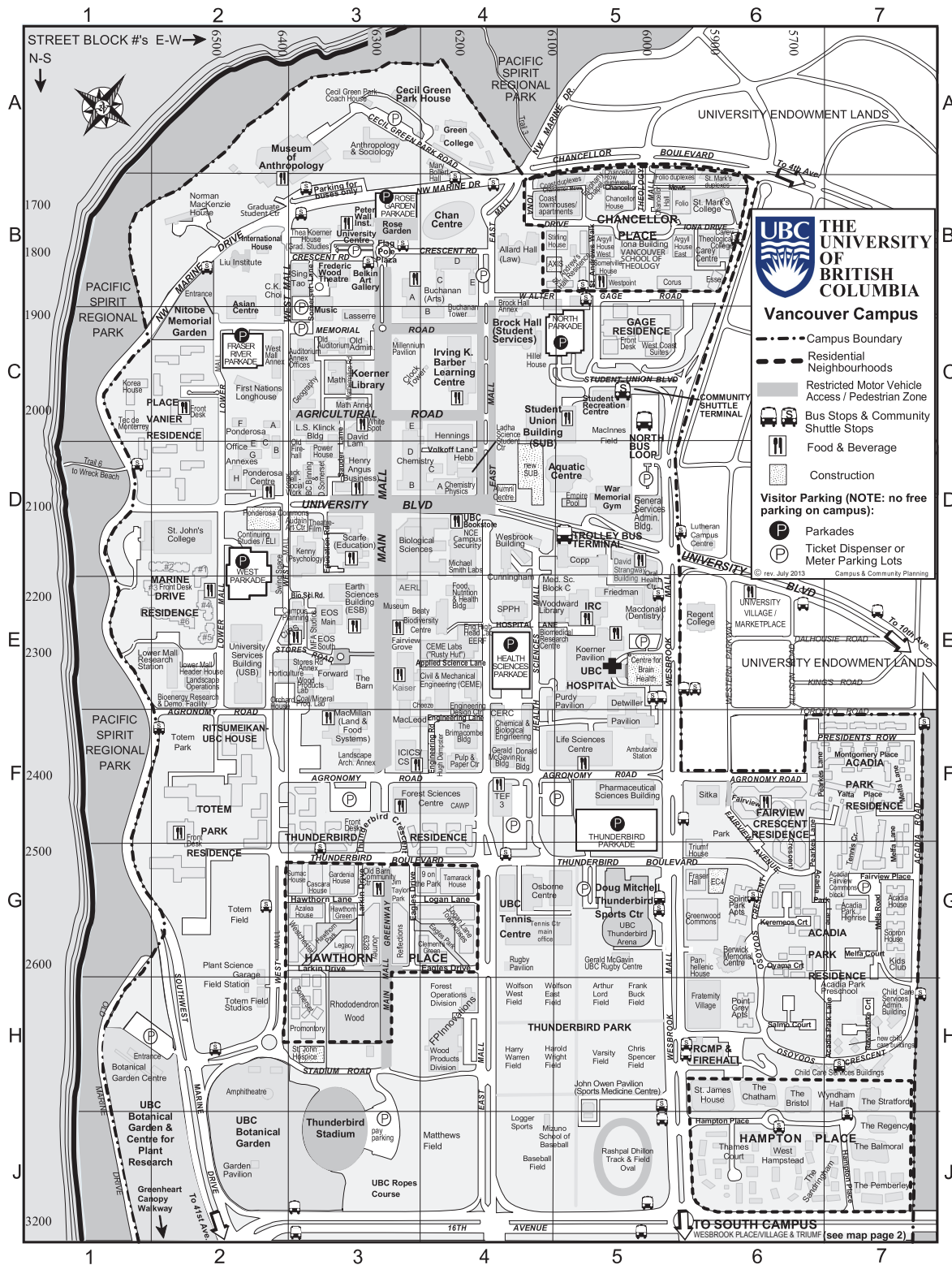


UBC  
Faculty of Applied Science

DEPARTMENT OF  
CHEMICAL AND  
BIOLOGICAL  
ENGINEERING (CHBE)

**User guide**

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# Map Directory

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Abdul Ladha Science Student Ctr, 2055 East Mall	D4
Acadia Fairview Commonsblock, 2707 Tennis Cres	G7
Acadia House, 2700-2720 Acadia Rd	G7
Acadia Park Residence	FIH-67
Acadia Park Highrise, 2725 Meila Rd	G7
Alford Hall [Faculty of Law], 1822 East Mall	B4
Anthropology & Sociology Bldg, 6303 NW Marine Dr	A3
Aquatic Centre, 6121 University Blvd	D5
Aquatic Ecosystems Research Lab (AERL), 2202 Main Mall	E3
Asian Centre, 1871 West Mall	B2
Audain Art Centre, 6398 University Blvd	D3
Auditorium Annex Offices, 1924 West Mall	C3
AXIS (faculty/staff rental), 6090 Iona Drive	B4/5
Barn (daycare), 2323 Main Mall	E3
B.C. Binning Studios (formerly Hut M-17), 6373 University Blvd	D3
Beatty Biodiversity Centre & Museum, 2212 Main Mall	E3/4
Belkin (Morris & Helen) Art Gallery, 1825 Main Mall	B3
Berwick Memorial Centre, 2765 Osoyoos Cres	G6
Bioenergy Research & Demonstration Facility, 2337 Lower Mall	E2
Biological Sciences Bldg [Science Faculty office], 6270 University Blvd	D3
Biomedical Research Ctr, 2222 Health Sciences Mall	E4
Biotechnology Laboratory, 2125 East Mall	D4
Bollett (Mary) Hall, 6253 NW Marine Dr	A4
Bookstore, 6200 University Blvd	D4
Botanical Garden Centre/Gatehouse, 6804 SW Marine Dr	H1
Botanical Garden Pavilion (enter at Gatehouse, 6804 SW Marine Dr)	J2
Botan. Gard. Greenhouses/Workshops, 6086 S. Campus Rd	South Campus
Brimacombe Building, 2355 East Mall	F4
<b>BROCK HALL: Student Services &amp; Welcome Centre, 1874 East Mall</b>	<b>C4</b>
Brock Hall Annex, 1874 East Mall	C4
Buchanan Building (Blocks A, B, C, D, & E) [Arts], 1866 Main Mall	B3/4
Buchanan Tower, 1873 East Mall	C4
C.K. Cho Building for the Institute of Asian Research, 1855 West Mall	B2
Campus & Community Planning, 2210 West Mall	E3
Campus Security, 2133 East Mall	D4
Carey Centre, 5920 Iona Drive	B6
Carey Theological College, 1815 Westbrook Mall	B6
CARP (Centre for Advanced Wood Processing), 2424 Main Mall	F4
Cecil Green Park Coach House, 6323 Cecil Green Park Rd	A3
Cecil Green Park House, 6251 Cecil Green Park Rd	A3
CEME — see <i>Civil &amp; Mechanical Engineering Building</i>	
Centre for Brain Health (Djavad Mowafaghian), 2215 Westbrook Mall	E5
Centre for Comparative Medicine, 4145 Westbrook Mall	South Campus
Centre for Interactive Research on Sustainability (CIRS), 2260 West Mall	E3
CERC (Clean Energy Research Ctr), 2360 East Mall	F4
Chan Centre for the Performing Arts, 6265 Crescent Rd	B4
Chemical & Biological Engineering Bldg, 2360 East Mall	F4
Chemistry A Block - Chemistry Physics Building, 6221 University Blvd	D4
Chemistry B.C.D. & E Blocks, 2036 Main Mall	D3
Child Care Services Administration Bldg, 2881 Acadia Rd	H7
Child Care Services Bldg, Osoyoos Cres and Revelstoke Ctr	H7
CIRS — see <i>Centre for Interactive Research on Sustainability</i>	
Civil & Mechanical Engineering Bldg (CEME), 6250 Applied Science Lane	E4
Civil & Mechanical Eng. Labs ("Rusty Hut"), 2275 East Mall	E4
Coal & Mineral Processing Lab, 2332 West Mall	E3
Continuing Studies Bldg [English Language Institute], 2121 West Mall	D5
Copp (D.H.) Building, 2146 Health Sciences Mall	D5
Cunningham (George) Building, 2146 East Mall	E4
David Lam Learning Centre, 6326 Agricultural Rd	C3
David Lam Management Research Ctr, 2033 Main Mall	C3
Donald Rix Building, 2389 Health Sciences Mall	F4
Doug Mitchell Thunderbird Sports Centre, 6066 Thunderbird Blvd	G5
Dorothy Somerset Studios (formerly Hut M-18), 6361 University Blvd	D3
Earth Sciences Building (ESB) [Science dean's office], 2207 Main Mall	E3
Earth & Ocean Sciences (EOS) - Main and South, 6339 Stores Rd	E3
Earthquake Engineering Research Facility (EERF), 2235 East Mall	E4
Engineering High Head Room Lab, 2225 East Mall	E4
English Language Institute (E.L.I.) — see <i>Continuing Studies Building</i>	
Environmental Services Facility, 6025 Nurseries Rd	South Campus
Fairview Crescent Residence, 2600-2804 Fairview Cres	F6
Fire Department, 2992 Westbrook Mall	H6
First Nations Longhouse, 1985 West Mall	C2
Flag Pole Plaza (Main Mall & Crescent Rd)	B3
Food, Nutrition and Health Bldg, 2205 East Mall	E4
Forest Sciences Centre [Faculty of Forestry], 2424 Main Mall	F4
Forward (Frank) Building, 6350 Stores Rd	E3
FPInnovations (Forest Operations & Wood Products), 2601/2665 E. Mall	H4
FPInnovations (Pulp & Paper Division), 3800 Westbrook Mall	South Campus
Fraser Hall (public rental housing), 2550 Westbrook Mall	G6
Fraternity Village, 2880 Westbrook Mall	H6
Frederic Wood Theatre, 6354 Crescent Rd	B3
Friedman Bldg, 2177 Westbrook Mall	E5
Gage Residence, 5959 Student Union Blvd	C5
General Services Administration Bldg (GSAB), 2075 Westbrook Mall	D5
Geography Building, 1984 West Mall	C3
Gerald McGavin Building, 2386 East Mall	F4
Gerald McGavin UBC Rugby Centre, 2765 Westbrook Mall	G5
Graduate Student Centre — see <i>Thea Koerner House</i>	
Green College, 6201 Cecil Green Park Rd	A4
Greenheart Canopy Walkway, Botanical Garden, 6804 SW Marine Dr	H1
Greenwood Commons (public rental housing), 2660 Westbrook Mall	G6
Hebb Building, 2045 East Mall	D4
Hennings Building, 6224 Agricultural Rd	C4
Henry Angus Building [Sauder School of Business], 2053 Main Mall	D3
Hillel House, 6145 Student Union Blvd	C4

Site or Building Name & Address	Grid
Horticulture Building/Greenhouse, 6394 Stores Rd	E2/3
Hugh Dempster Pavilion, 6245 Agronomy Rd	F4
ICICS/ICS (Institute for Computing, Information & Cognitive Systems/Computer Science), 2366 Main Mall	F4
Instructional Resources Centre (IRC), 2194 Health Sciences Mall	E5
International House, 1783 West Mall	B2
In-Vessel Composting Facility, 6035 Nurseries Road	South Campus
Irving K. Barber Learning Centre, 1961 East Mall	C4
Jack Bell Building for the School of Social Work, 2080 West Mall	D3
John Owen Pavilion & Allan McGavin Sports Medicine Centre, 3055 Westbrook Mall	H5
Kaiser (Fred) Building [Faculty of Applied Science], 2332 Main Mall	E3
Kenny (Douglas T.) Building, 2136 West Mall	D3
Kids Club, 2855 Acadia Rd	F3
Kinck (Leonard S.) Bldg, 6356 Agricultural Rd	C3
Koerner (Walker C.) Library, 1958 Main Mall	C3
Landscape Architecture Annex, 2371 Main Mall	F3
Lasserre (Frederic) Building, 6333 Memorial Rd	C3
Law Building — see <i>Allard Hall</i>	
Leon and Thea Koerner University Centre, 6331 Crescent Rd	B3
Life Sciences Centre, 2350 Health Sciences Mall	F5
Liu Institute for Global Issues, 6476 NW Marine Dr	B2
Lower Mall Header House, 2269 Lower Mall	E2
Lower Mall Research Station, 2259 Lower Mall	D2
Macdonald (J.B.) Building [Dentistry], 2199 Westbrook Mall	E5
MacLeod (Hector) Building, 2356 Main Mall	F3
MacMillan (H.R.) Bldg [Faculty of Land & Food Systems], 2357 Main Mall	F3
Marine Drive Residence (Front Desk in Bldg #3), 2205 Lower Mall	E2
Material Recovery Facility, 6055 Nurseries Rd	South Campus
Mathematics Annex, 1986 Mathematics Rd	C3
Mathematics Building, 1984 Mathematics Rd	C3
Medical Sciences Block C, 2176 Health Sc. Mall	E4
M.F.A. Studios (formerly B.C. Binning MFA Studios), 6363 Stores Rd	E3
Michael Smith Laboratories, 2185 East Mall	D4
Museum of Anthropology (MOA), 6393 NW Marine Dr	A2/3
Music Building, 6361 Memorial Rd	B/C3
Networks of Ctrs of Excellence (NCE), 2125 East Mall	D4
Nitobe Memorial Garden, 1895 Lower Mall	B/C2
Notel Biocare Oral Health Centre (David Strangway Bldg), 2151 Westbrook Mall	E5
Norman MacKenzie House, 6565 NW Marine Dr	B2
NRC Institute for Fuel Cell Innovation, 4250 Westbrook Mall	South Campus
Old Administration Building, 6326 Memorial Rd	C3
Old Auditorium, 6344 Memorial Rd	C3
Old Barn Community Centre, 6308 Thunderbird Blvd	G3
Old Firehall, 2038 West Mall	E2
Orchard House, 2336 West Mall	D2
Osborne (Robert F.) Centre/Gym, 6108 Thunderbird Blvd	G4
Pantheonic House, 2770 Westbrook Mall	G6
Peter Wall Institute for Advanced Studies, 6331 Crescent Rd	B3
Pharmaceutical Sciences Building, 2405 Westbrook Mall	F5
Place Varrier Residence, 1935 Lower Mall	C/D2
Plant Ops Nursery/Greenhouses, 6029 Nurseries Rd	South Campus
Plant Science Field Station & Garage, 2613 West Mall	H2
Point Gray Apartments, 2875 Osoyoos Cresc	H6

Site or Building Name & Address	Grid
Police (RCMP) & Fire Department, 2990/2992 Westbrook Mall	H6
Ponderosa Centre, 2071 West Mall	D2
Ponderosa Commons, 6398/6488 University Blvd, 2118 West Mall	D2/3
Ponderosa Office Annexes: A, B, & C, 2011-2023 West Mall	C/D2
Ponderosa Office Annexes: E to H, 2008-2074 Lower Mall	C/D2
Power House, 2040 West Mall	D3
Pulp and Paper Centre, 2385 East Mall	F4
Rtsumekan-UBC House, 6460 Agronomy Rd	F2
Rose Garden	B3
Roy Barnett Recital Hall - see Music Building	
Rugby Pavilion, 2584 East Mall	G4
Scarfe (Neville) Building [Education], 2125 Main Mall	D3
School of Population & Public Health (SPPH), 2206 East Mall	E4
SERC - see Staging Environmental Research Centre	
Simon K.Y. Lee HKU-UBC House - Bldg #1, Marine Drive Residence	E2
Sing Tao Building, 6388 Crescent Rd	B3
Sopron House, 2730 Acadia Rd	G7
South Campus Warehouse, 6116 Nurseries Rd	South Campus
Spirit Park Apartments, 2705-2725 Osoyoos Cresc	G8
St. Andrew's Hall/Residence, 6040 Iona Dr	B5
St. John's College, 2111 Lower Mall	D2
St. Mark's College, 5935 Iona Dr	B6
Staging Environmental Research Centre, 6045 Nurseries Rd	South Campus
Stores Road Annex, 6368 Stores Rd	E3
Student Recreation Ctr, 6000 Student Union Blvd	C5
Student Union Bldg (SUB), 6138 Student Union Blvd	C4
Student Union Bldg - new under construction, 6133 University Blvd	D4
TEF3 (Technology Enterprise Facility 3), 6190 Agronomy Rd	F4
Thea Koerner House [Faculty of Graduate Studies], 6371 Crescent Rd	B3
Theatre-Film Production Bldg, 6358 University Blvd	D3
Thunderbird Residence, 6335 Thunderbird Cresc	F3/4
Thunderbird Stadium, 6288 Stadium Rd	J3
Totem Field Studios, 2613 West Mall	H2
Totem Park Residence, 2525 West Mall	F/G2
TRIUMF, 4004 Westbrook Mall	South Campus
Triumf House (TRIUMF Visitor's Residence), 5835 Thunderbird Blvd	G6
UBC Bookstore, 6200 University Blvd	D4
UBC Farm, 6182 Westbrook Mall	South Campus
UBC Hospital, 2211 Westbrook Mall	E5
UBC Tennis Centre, 6160 Thunderbird Blvd	G4
UBC Thunderbird Arena (in Doug Mitchell Centre), 2555 Westbrook Mall	G5
University Centre (Leon & Thea Koerner), 6331 Crescent Rd	B3
University Neighbourhoods Association, 5923 Berton Ave	South Campus
University Services Building (USB), 2329 West Mall	E2
Vancouver School of Theology, 6000 Iona Drive	B5
Walter H. Gage Residence, 5959 Student Union Blvd	C5
War Memorial Gymnasium, 6081 University Blvd	D5
Wayne & William White Engineering Design Ctr, 2345 East Mall	E4
Westbrook Bldg, 6174 University Blvd	D4
Westbrook Village shopping centre	South Campus
West Mall Annex, 1933 West Mall	C2
West Mall Swing Space Bldg, 2175 West Mall	D2
Wood Products Laboratory, 2324 West Mall	E3
Woodward IRC, 2194 Health Sciences Mall	E4/5
Woodward Library, 2198 Health Sciences Mall	E4/5

## SOUTH CAMPUS MAP

© rev. July 2013  
Campus & Community Planning  
[www.planning.ubc.ca](http://www.planning.ubc.ca)

### Note:

- Local traffic only
- along Westbrook Mall
- on South Campus

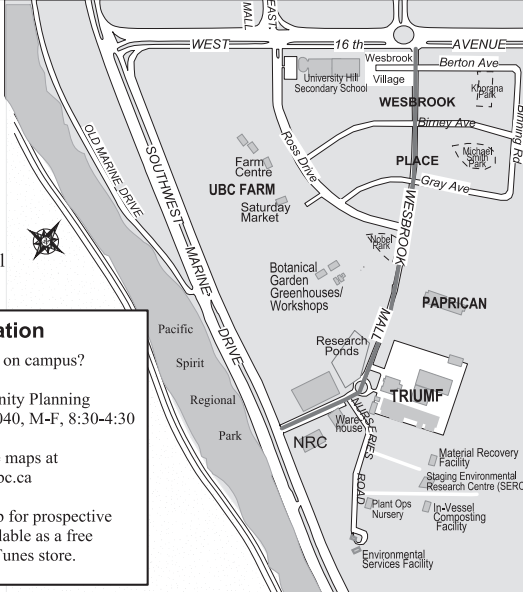
### Map Information

Need help finding your way on campus?

Call the Campus & Community Planning  
MapInfo Line at 604-827-5040, M-F, 8:30-4:30

Or use the interactive online maps at  
[www.maps.ubc.ca](http://www.maps.ubc.ca); OR [m.ubc.ca](http://m.ubc.ca)

UBC also has an official app for prospective undergraduate students available as a free download from the Apple iTunes store.



## Welcome To CHBE

Chemical and Biological Engineering (CHBE) is one of the six departments of UBC Engineering, Faculty of Applied Science (APSC).

Chemical Engineering was established at UBC in 1915, as the first Canadian chemical engineering program west of Ontario, and a separate Department of Chemical Engineering was established in 1954. The Department of Chemical and Biological Engineering was established in 1999, and reflects the growing need for engineers in the fields of biotechnology, biomedical and bio-resource engineering.

Biological Engineering evolved from Agricultural Engineering and Agricultural Mechanics established at UBC in 1945. In 1975, the name and degree were changed to Bio-Resource Engineering. In 1996, the Department of Chemical and Bio-Resource Engineering was formed from the merger of these two separate departments. In 1999, the name was changed to the Department of Chemical and Biological Engineering.

The Department of Chemical and Biological Engineering at UBC has an established worldwide reputation for its accredited undergraduate programs, innovative research and the quality of its graduates and faculty. At present there are 24 full-time faculty in the Department of Chemical and Biological Engineering, together with a support staff of 17.

The Department offers a BASc degree in Chemical Engineering (accredited since 1965) and a BASc degree in Chemical and Biological Engineering (accredited since 2003). There are approximately 310 students in the final three years of the undergraduate programs, including the Co-op program. Graduates are eligible, after appropriate industrial experience, for registration as Professional Engineers. In addition, roughly 175 students are studying in graduate programs. The Department offers programs leading to the Master of Engineering (M.Eng.), Master of Science (M.Sc.), Master of Applied Science (M.A.Sc.) and Doctor of Philosophy (Ph.D.) degrees in a number of areas of specialization within chemical and biological engineering. The Department is actively engaged in applied research in chemical and biological engineering, supported in part by external funding of about \$6 million a year.

## Introduction to the Department

CHBE has administrative and Technical staff to support and assist you during your term with us.

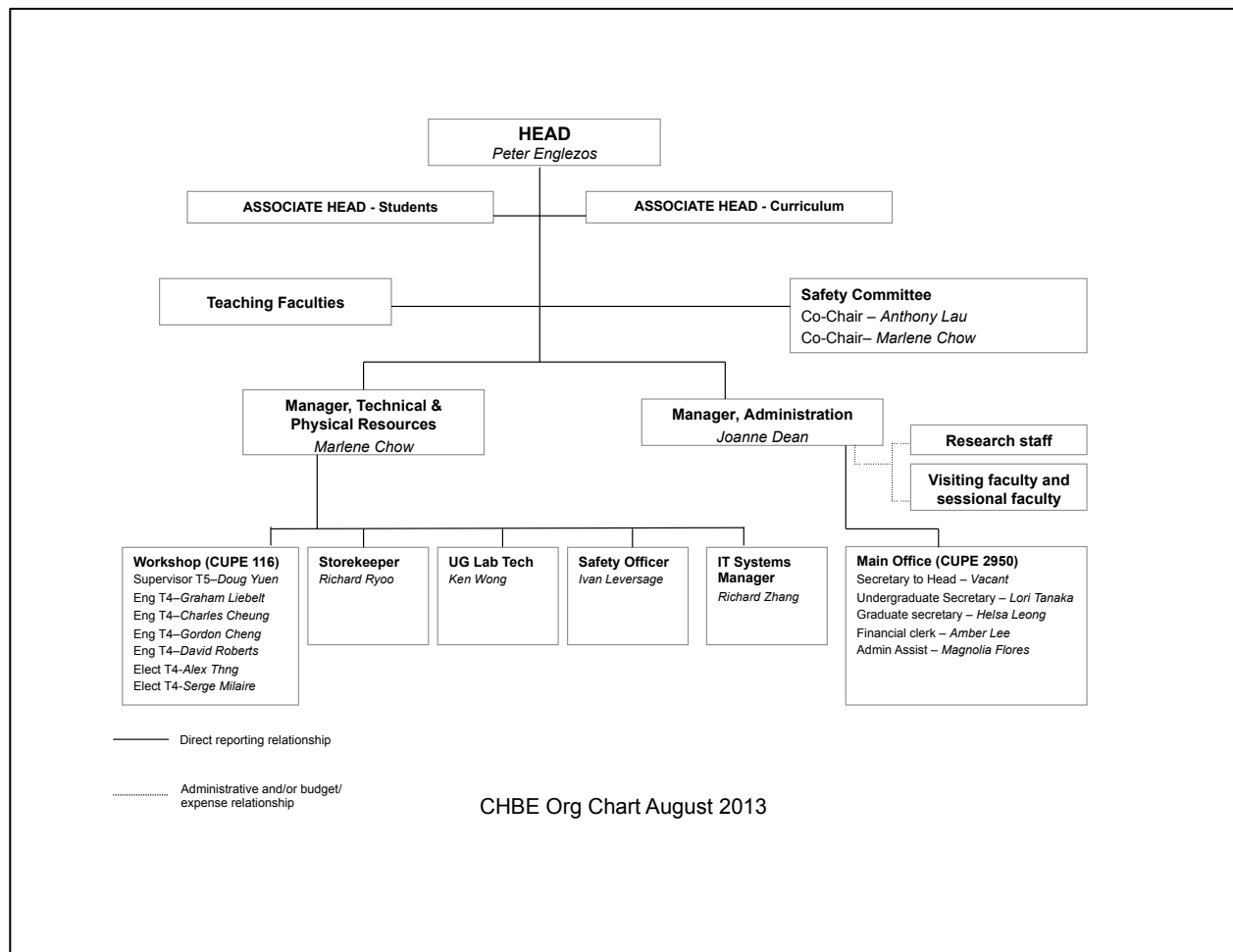
### Staff Administration

Position	Incumbent	Responsibilities
Department Head & Professor	Dr. Peter Englezos	
Associate Head & Professor	Dr. James Piret	Curriculum
Associate Head and Associate Professor	Dr. Bhushan Gopaluni	Student Matters
Manager, Administration	Joanne Dean	<ul style="list-style-type: none"><li>• Departmental Human Resources</li><li>• Finance/Budget</li><li>• Students Services</li><li>• Course scheduling</li></ul>
<b>Main Office:</b>		
Executive Assistant to the Head	Vacant	<ul style="list-style-type: none"><li>• Executive Assistant to the Head</li><li>• Newsletter and website</li></ul>
Financial Clerk	Amber Lee	<ul style="list-style-type: none"><li>• Print credits</li><li>• Photocopy codes</li><li>• Any financial issues (reimbursements, travel claims,</li></ul>

		petty cash, etc.)
Graduate Secretary	Helsa Leong	<ul style="list-style-type: none"> <li>Graduate application/admission</li> <li>TA assignment</li> <li>All graduate student queries from admission to thesis submission</li> </ul>
Undergraduate Secretary	Lori Tanaka	Services undergraduate students' queries
Administrative Assistant	Magnolia Flores	<ul style="list-style-type: none"> <li>Assists with graduate student application/admission</li> <li>Office Allocation for Grad students and visitors</li> <li>Access (Keys and electronic) for Grad students and visitors</li> </ul>

## TECHNICAL STAFF

Position	Incumbent	Responsibilities
Manager, Technical & Physical Resources Co-Chair CHBE Safety Committee	Marlene Chow	<ul style="list-style-type: none"> <li>Stores</li> <li>Workshop</li> <li>Lab maintenance</li> <li>Safety</li> <li>IT</li> </ul>
Systems Administrator	Richard Zhang	<ul style="list-style-type: none"> <li>Account and server administration</li> <li>Computer lab maintenance and upgrade</li> <li>Course webpage maintenance and updates</li> <li>Research consultation (as time permits)</li> </ul>
Safety Officer	Ivan Leversage	<ul style="list-style-type: none"> <li>Safety Contact &amp; Training</li> <li>First Aid</li> <li>Facilities contact</li> </ul>
Storekeeper	Richard Ryoo	<ul style="list-style-type: none"> <li>Prepares purchase orders and accepts deliveries</li> <li>Processes orders submitted through the CHBE Online Stores Database</li> </ul>
Workshop Supervisor	Doug Yuen	<ul style="list-style-type: none"> <li>Your point of contact for the workshop</li> </ul>
Electronics Technician	Alex Thng Serge Milaire	
Machinist	Graham Liebelt Charles Cheung David Roberts	
Engineering Technician (Chemical Engineer)	Gordon Cheng	
Laboratory Technician	Ken Wong	<ul style="list-style-type: none"> <li>Manages and maintains U/G lab equipment</li> </ul>



## From another land?

### Obtaining your Social Insurance Number (SIN)

If you arrived with a work permit and will be paid by your supervisor, you are required to obtain a social insurance number (SIN).

This should be one of the first things you do upon your arrival. You will need to bring your passport, work permit, offer letter, a fee of \$10.00 and know your residential address. To obtain an SIN:

- 1) Go to a Government of Canada Employment Office. The closest one to campus is located at, 1263 West Broadway, Vancouver, BC (telephone 604 872.7431).

By bus from UBC Point Grey Campus: take the 99 B-Line or #14 to Broadway and Granville. Walk two blocks east on Broadway to 1263 West Broadway (north side of street).

The opening hours are Monday to Friday 8:30 am – 4:00 pm. TIP: the best hours to show up are at 10am or 2pm.

- 2) Tell the receptionist that you need to obtain an SIN number and you will be given a number to meet a clerk.
- 3) The clerk will go through the process with you and on completing the process you will be provided a paper receipt and an SIN. Your card will be mailed to you within 10 business days.

## ***Getting a UBC employee number, CWL and UBCcard***

Bring your SIN number (receipt or card) to our office and give a copy of it to the Graduate Secretary (for grad students) or Manager, Administration (all others) and we can issue you a UBC Employee Number. Once you receive your SIN card, please bring us a photocopy of the card for our files.

The Campus Wide Login (CWL) system provides access to many of the University's online systems, such as the Student Service Centre, Connect, and Blackboard Vista, Payroll, etc. Log on to: [www.cwl.ubc.ca](http://www.cwl.ubc.ca) to register for your CWL. You will need the CWL PIN and your employee number to complete this process.

To obtain your UBCcard, proceed to the Bookstore with identification. Provide your UBC student or employee number with your identification to the attendant, they will take a picture of you and give you your UBCcard.

### **Benefits of the UBCcard**

- Identification across campus.
- CHBE Building access – if you are a graduate student, your UBCcard will automatically be activated once you are registered in CHBE 599 or 699 (no need to bring it to the office). It gives you access to floors 3-6 and the computer labs on the third floor (24/7). If you are a visiting faculty member or staff member, bring your UBCcard to Magnolia to have it programmed for CHBE building access. While your UBCcard gives you general access to the building, for access to restricted areas your supervisor will need to approve on the Access Form (see Building Access section below). If you have problems with access, please email: [access@chbe.ubc.ca](mailto:access@chbe.ubc.ca).
- Library card - access to all libraries across campus and online
- Recreation facilities - access to gym, aquatic center
- UBC Debit card - no fee debit card to pay for food, drinks and supplies at select UBC Food Services outlets and at the UBC Bookstore
- U-Pass for students using Translink

For more UBCcard information and to load your card, visit <http://ubccard.ubc.ca/>

## ***Enrolling in Payroll, Benefits, Pension (if applicable)***

### **Getting started**

After you have received an employee number, we can process your appointment for payroll. It can take up to one month for you to receive your first pay cheque. If you submit the provided Direct Deposit form with a void cheque or a document from the bank (for savings accounts) to us before we submit your paperwork, you will receive your first pay cheque electronically. If you do not submit the form to us at that time, you will need to submit the form directly to Payroll. Until Payroll receives your completed Direct Deposit form, your payments will be via cheque which you must pick up in person at the Payroll Desk in the General Services Administration Building, 2075 Westbrook Mall. ID is required to pick up pay checks.

### **Tax forms and benefit sign-up – (non-student appointments only)**

On your offer letter there is a code, i.e. SEP002 that identifies which benefits you are eligible for and is required for completing employment forms. Using your CWL, log into: <http://www.hr.ubc.ca/benefits/enrolling/>. Forms to be completed include federal and provincial tax forms and benefits sign up (mandatory and optional). Complete, print and then drop the forms off at payroll, in the reception area of Financial Services (General Services Building, 3<sup>rd</sup> floor)

It is important to fill ALL of the forms as soon as possible following your arrival. If you have any questions regarding how to fill them out, please don't hesitate to see the Manager, Administration for help.



## ***Building Access and Completing Safety Certification***

While your UBCcard gives you access to the building and various floors, you will require keys for your office and labs. All keys are ordered through Magnolia in the Main Office.

- Complete the Safety and Access form (attached).
- Obtain approval signatures. Rm 506 access to be approved by Research Assistant Ken Wong (Office CHBE 439)
- If Lab access is required, complete UBC Risk Management Laboratory Chemical Safety Course. A CWL is required to log-in.
  - a. Online at <http://riskmanagement.ubc.ca/courses/laboratory-chemical-safety>
  - b. After online course is completed, register for the Practical session. Practical sessions are offered at least once/week. There is no cost for the courses.
- Print Certificate for completed Laboratory Chemical Safety Course and submit with the completed Safety & Access form to Magnolia Flores in the CHBE office. Magnolia will submit the key request to UBC Keydesk.
- You will receive an email when the keys are ready for pick-up at:  
Parking & Access Control Services, General Services Administration Building,  
204 - 2075 Westbrook Mall
- You may have up to two types of keys:
  - a gold coloured key, generally for access to your office
  - an abloy key with a black plastic end for access to your lab(s) (if applicable)

When picking up keys, please have a valid piece of identification.  
Deposit for keys is \$20 regardless of how many keys you have.

Note: Your UBCcard will provide you access to the building and various floors outside open hours, and access to the 3<sup>rd</sup> floor computer labs 24/7.

The CHBE building's open hours are as follows:

main entrances:	7:00am to 7:30pm Monday thru Friday*
2 <sup>nd</sup> to 6 <sup>th</sup> floors:	7:00am to 5:00pm Monday thru Friday*

*\* the building is closed on statutory holidays or when the university is closed. The building is also closed between Christmas (December 25<sup>th</sup>) and New Year (January 1<sup>st</sup>) inclusively*

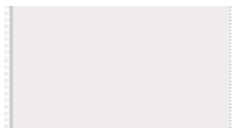
All key deposits will be returned upon key return to UBC Parking & Access Control.

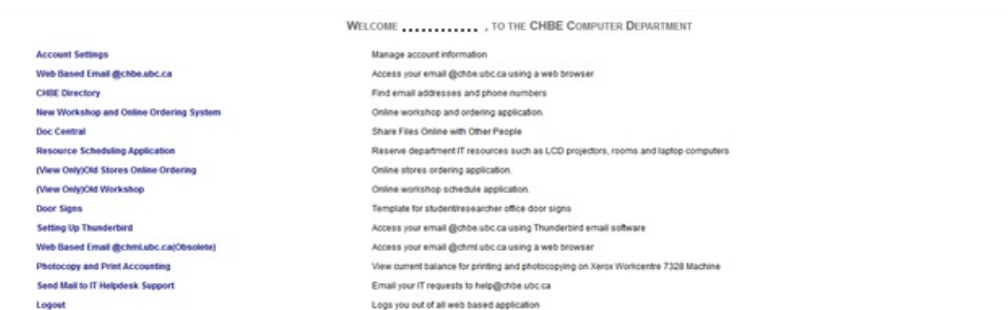
Lost Keys and Fobs If you lose your keys, check UBC Lost & Found at <http://security.ubc.ca/content/lost-and-found> or call (604) 822-9922. If you cannot locate the keys, see Magnolia in the CHBE Main Office for a replacement key order.

## Getting an IT account

The CHBE IT account gives you access to your departmental email as well as access to various services. In order to obtain a CHBE IT account, please read and sign the CHBE IT policy located in your welcome package and return to the Graduate Secretary (grad students) or Manager, Administration (all others).

## Benefits of the CHBE IT account

	<b>NEW Resource Scheduling Application</b>	Reserve department IT resources such as LCD projectors, rooms and laptop computers
	<b>Door Signs</b>	Template for student/researcher office door signs
	<b>Logout</b>	Logs you out of all web based application



The screen shot above shows the screen viewed on log-in to CHBE IT resources.

## Settling into your office

### Door signs

If the desk assigned to you on your safety orientation sheet is occupied, take another free one in the same office and contact the Manager, Administration to correct the desk assignment. . Once you are settled into your desk and you have familiarised yourself with your office-mates, log into the CHBE website and prepare a door sign with the correct names, so everyone knows where you are located. . The template is in Adobe Acrobat and is found under “door signs” (please refer to screen shot on previous page),

### CHBE Directory

**Account Settings** - Click onto Account settings and enter your personal data for the CHBE Directory. The CHBE directory lists all the Grad, Researchers, Postdocs, Visitors, Faculty and Staff. Click on CHBE directory; you will see this screen:

Logout

Search::	
Search for:	Sort By:
<input type="text"/>	Last Name
<input type="button" value="submit"/>	

Name	Email	Group	
Abo-Ghander, Nabeel	nabeels@chml.ubc.ca	graduate	<a href="#">details</a>
Adeyemo, Adebola	aadeyemo@chml.ubc.ca	graduate	<a href="#">details</a>
Ahmad, Zaid Kaduim	zahmad@chml.ubc.ca	graduate	<a href="#">details</a>
Ahmed, Sahana	sahana@chml.ubc.ca	graduate	<a href="#">details</a>
Al Marzouqi, Mohamed	amohamed@chml.ubc.ca	research	<a href="#">details</a>
Al-Aqqad, Emad	emada@chml.ubc.ca	graduate	<a href="#">details</a>
Al-Atar, Eman	alatar@chml.ubc.ca	graduate	<a href="#">details</a>
Al-Saifi, Nayef	nayefa@chml.ubc.ca	graduate	<a href="#">details</a>
Alaqqad, Mohammed	malaqqad@chml.ubc.ca	graduate	<a href="#">details</a>
Anderson, Ryan	randerson@chml.ubc.ca	graduate	<a href="#">details</a>
Asadishad, Bahareh	basadishad@chml.ubc.ca	graduate	<a href="#">details</a>
Baker, Ryan	ryanb@chml.ubc.ca	graduate	<a href="#">details</a>
Baldwin, Susan	sbaldwin@chml.ubc.ca	faculty	<a href="#">details</a>
Bauer, Alexander	a.bauer@chml.ubc.ca	graduate	<a href="#">details</a>
Beauchesne, Pascal	pbeauchesne@chml.ubc.ca	graduate	<a href="#">details</a>
Bennington, Chad	cpjb@chml.ubc.ca	faculty	<a href="#">details</a>
Bhole, Manish	mbhole@chml.ubc.ca	research	<a href="#">details</a>
Bi, Xiaotao	xbi@chml.ubc.ca	faculty	<a href="#">details</a>
Biniaris, Andreas	abiniaris@chml.ubc.ca	graduate	<a href="#">details</a>

The listing is alphabetical order by last name. The CHBE directory can be searched by name or appointment type.

## Settling into the UBC Community

New to UBC webpage (<http://www.hr.ubc.ca/faculty-staff-resources/new-to-ubc/>)

This webpage is full of information. Be sure to go through it if you don't do anything else regarding the campus-at-large. It includes:

1. Online Orientation (for staff and researchers)  
UBC has orientation that you can go through online. It allows you to pick and choose what you would like to know more about regarding Vancouver, the campus, services, etc. It is strongly recommended that you visit it at least once; chances are you will learn something useful in the process.
2. Campus-Wide Login (CWL) sign-up  
The CWL is useful in many ways. It is required to access the campus-wide wireless network, if you are salaried, you will need it to access the Faculty & Staff Self Service application (see further on) and you can access your "my UBC" home page. To sign up, you will need your UBC employee number and CWL PIN. Here's the link:  
<https://www.cwl.ubc.ca/SignUp/cwlsubscribe/SelfSubscribeIndex.do>. For instructions on how to fill the form out, you can look at <http://it.ubc.ca/accounts-passwords/campus-wide-login-cwl/how-create-account>.
3. Faculty and Staff Self-Service (important especially for salaried users) – [www.msp.ubc.ca](http://www.msp.ubc.ca)  
This will be your hub regarding your employment at UBC. Paycheque stubs, benefit summaries, personal information summaries (emergency contact, home address, phone number, etc.) can be viewed and/or updated online. Once you have registered for your CWL, simply go to the webpage listed above and log in.

## Useful Central UBC Departments

### Payroll

The payroll department is housed in the Finance Services department located at the General Services and Administration Building (GSAB). This department is the one to contact should you wish to receive a letter of employment (proof of employment, etc.). Please note that all requests should be in writing and should include your employee number. It always helps if you copy the Manager, Administration on this communication. For CHBE, the contacts are as follows:

POSITION	PAYROLL CONTACT
Staff & Students	Nicole Mo ( <a href="mailto:nicole@finance.ubc.ca">nicole@finance.ubc.ca</a> )
Faculty, Postdocs, Research Associates, Visitors	
• A to G	Jacqueline Hua, ( <a href="mailto:jhua@finance.ubc.ca">jhua@finance.ubc.ca</a> )
• H to O	Selma D'Silva, ( <a href="mailto:selmad@finance.ubc.ca">selmad@finance.ubc.ca</a> )
• P to Z	Hollie Griffin ( <a href="mailto:hgriffin@finance.ubc.ca">hgriffin@finance.ubc.ca</a> )

Payroll is also the department which processes benefit sign-up forms and changes, so if you wish to follow up on an issue on this front, they should be the ones to contact.

## Requesting an employment letter

An employment letter indicates the position you currently hold, your start date at UBC and your current salary. To request an employment letter, send an email to your payroll clerk with your employee number (not the same as your student number). Please note that all requests must be made in writing and the clerk will respond to you via email once the letter is ready.

### Building Operations

Building Operations is the department responsible for the proper functioning and maintenance of all UBC buildings. Should you notice anything abnormal about your environment (not chemical driven), from an office or lab being too cold, to abnormal air pressure in the labs, to dirty washrooms, etc. please Contact the CHBE Technical & Physical Resource Manager, Marlene Chow ([marlene.chow@ubc.ca](mailto:marlene.chow@ubc.ca)) or CHBE Safety Officer, Ivan Leversage ([ileversage@chb.ubc.ca](mailto:ileversage@chb.ubc.ca)). Marlene and Ivan will submit building maintenance requests. If the problem is after hours and cannot wait until morning (i.e. overflowing toilet), you may call Trouble Calls at 2-2173.

## **CHBE Resources**

### CHBE Stores

CHBE Stores is your ordering service, shipping/receiving of all goods (goods must be ordered through the stores online database) and inventory warehouse.

CHBE Stores also serves as the final portal for your waste chemicals and contaminated broken glass.

Finally, Stores staff can help you in selecting supplies/equipment for your research project

Stores hours are as follows:

**Pickup of orders or booked resources, Consulting – 8:00 am– 4:00 pm, Monday to Friday**

### Online Stores Ordering

To order, you must have a CHBE account and your supervisor must have added you to his/her speedchart. A speedchart is a four-letter code which determines which source/grant to charge for purchases/services. Once you have logged into IT Resources, select "New Stores/workshop online ordering", then click on the "Ordering" tab, then "New Orders", then "New Order". Follow steps on screen. Detailed instructions are in the attached booklet.

### Waste Chemicals

Each lab is equipped with a Chemical Safety Manual. Consult the manual for the appropriate disposal procedure for each chemical. Do NOT dump chemicals down the drain unless it is an appropriate procedure.

### Resource Booking

There are many resources available for booking online by selecting "Resource Scheduling Application" on the CHBE home IT Resources menu. It will require you to login again; simply use the same username

and password as you do when logging into CHBE home. There are two types of bookings available: resources and rooms.

### **Resources**

The following resources can be booked through the online system. These bookings do not need subsequent approval, but *do* need to be booked up to 24 hours in advance (truck) and as little as 30 minutes in advance (camera). We have:

- 1 Portable LCD Projector
- 3 Laptops with wireless capability
- 1 Compact Digital Camera
- 1 Toyota Tacoma truck

The resources are available for pickup from Stores. Please return at the end of the scheduled booking time so that the resource is available for other bookings.

### **USE OF DEPARTMENT TRUCK**

**Our insurance policy only covers the use of the vehicle for legitimate departmental business. The vehicle is not available for personal use.**

#### **1. AUTHORIZATION:**

- The truck may be borrowed by a faculty or full time staff member for department business only.
- Students may borrow the truck for authorized use only with the approval of their supervisor or the Technical & Physical Resource Manager.
- Special requests for overnight or multi-day rental may be approved only during periods of very low anticipated use. Requests must be submitted 1-2 weeks in advance. Such use requires the approval of the Manager, Technical & Physical Resources.

#### **2. HOURS OF USE:**

- Available for authorized use only between the hours of 8:00 a.m. and 4:00 p.m. Monday to Friday. Not available weekends or holidays.
- If borrowed overnight, the truck must be used only for the purposes authorized. Driver will make every effort to park the truck in a safe location overnight and to return it undamaged in the morning.

#### **3. PROCEDURE –**

- At least 24 hours in advance of required date. check on line for truck availability and complete booking.
- Obtain a Truck Sign out form, available from the Machine Shop (Rm 1.83), and complete by obtaining supervisor approvals. )  
Bring the completed form with valid Drivers Licence to Stores.

Note: Individuals signing out the truck must be the driver with a valid driver's licence. Our insurance policy does not permit new drivers with an "N" to drive the truck.

#### **4. CHARGES:**

- Flat fee of \$20.00 will be charged to the speed chart # provided.
- Truck returned after 4:30 p.m. will be charged an additional \$20.00 late return fee to the speed chart #

#### **5. ACCIDENTS: (Dept. shop line 604-822-2433)**

If you are involved in an accident you must report it to the Proper legal authorities and to the Chemical & Biological Engineering Department (Manager, Technical & Physical Resources)

#### **6. RESPONSIBLE USE:**

- Payment of parking or speeding tickets is the responsibility of the borrower.
- Drivers of Chemical & Biological Engineering vehicle are representatives of both the University and the

Department and are expected to behave in a courteous and professional manner at all times. Violations will result in a ban on future truck use.

### Rooms

The CHBE building has rooms managed through the online room booking system located on our website. 24hr notice is required when booking these rooms, and bookings must be approved by one of the main office staff prior to being confirmed. These rooms are available for booking between the hours of 8 am and 5 pm. Student bookings outside of these hours will not be permitted. The rooms available are listed as follows:

- CHBE 202 (seminar room, capacity 90)
- CHBE 204 (meeting room, capacity 30)
- CHBE 222 (board room, capacity 8)
- CHBE 304 (seminar room, capacity 25)

Always provide a description of the event/reason for booking. In the case of multiple (weekly bookings during term time (September to April inclusive) are only accepted one term at a time (September-December and January-April). The Department has priority booking on all rooms and your booking may occasionally be cancelled for a department event such as a graduate student thesis defense. The Department always provides as much notification as possible should such occurrences happen.

### CHBE Workshop

The CHBE workshop is the in-house mechanical and electronic resource for the department. The Workshop can fabricate parts, build and assemble equipment provide advice based on your needs, and help you find solutions to issues you are facing with your equipment, etc. To place a workshop order, choose "Workshop" in the New Stores/workshop online ordering system. The Workshop will estimate the hours required to complete a job. Workshop time and materials are charged to projects so your Supervisor approval is required for the estimate prior to any work beginning on a work request.

The workshop is open according to the following schedule:

**Technicians – 8:00 am– 4:00 pm, Monday to Friday (closed to most stakeholders)**  
**Consulting hours (drop in) – 1:00 pm – 3:00 pm, Monday to Friday**

There are 4 major categories of work requests that go through our workshop:

- 1) building an entire piece of equipment
- 2) building part of a piece of equipment
- 3) plumbing/installing a piece of equipment ordered internally or externally
- 4) work requests requiring 30 minutes or less (i.e. cutting a piece of unistrut)

For each of these types of request, the following is required at time of submission. Please note that these represent *minimum* requirements and that a detailed process chart of the preferred procedure is shown below. The objective of this step is to ensure jobs are submitted in the queue when they are truly ready to be taken on by the workshop, with part numbers checked and all aspects considered.

Job Type	Job Type Description	Minimum Requirements
1	Building an entire piece of equipment	Technical assembly drawing and component drawings for each of the components (imperial measurements preferred; if at all possible, please avoid mixed metric and imperial in the same drawing)
2	Building part of a piece of equipment	Technical drawings and full flow chart of the overall role of the part in the equipment
3	Plumbing/installing a piece of equipment ordered internally or externally	If metering parts play a role on this, technical drawings and overall schematic of end product; if not, just the schematic is sufficient (however the overall time it will take to complete the work is likely to be longer.

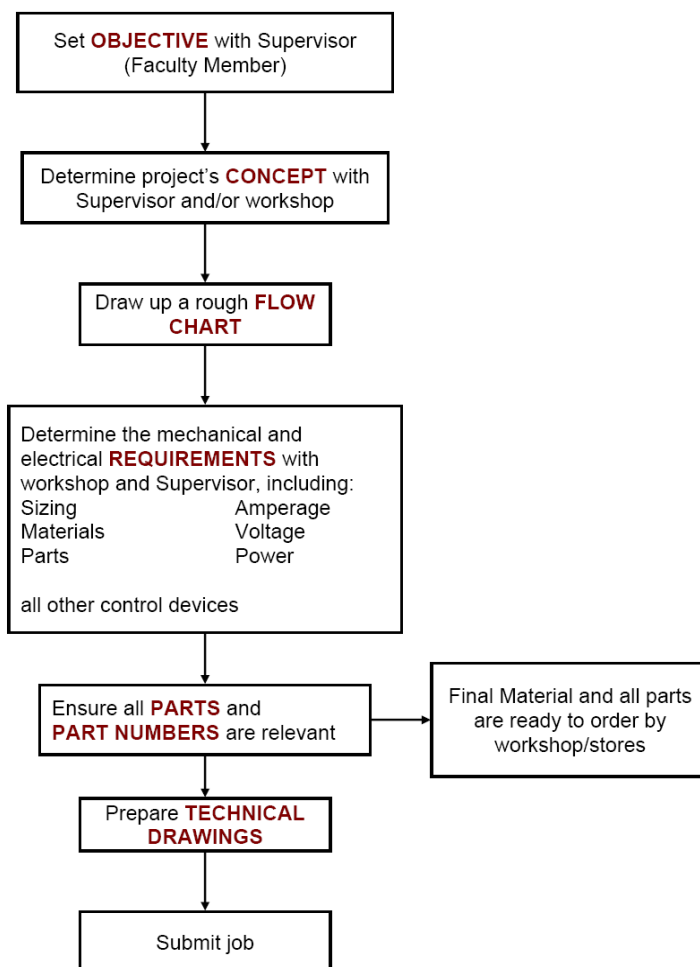
4	Work requests requiring 30 minutes or less	None of the above is required, just the raw material. A very limited number of jobs fall under this job type and they must still be submitted in the work order system.
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If the minimum requirements are not met upon job submission, the job will be returned to sender/requestor asking for the missing information and the supervisor will be copied via email.

**If the minimum requirements are met, but there was no consultation with the workshop prior to submitting it, the workshop will perform the job as drawn; if it doesn't work (leaks, etc.), the request will need to be re-queued for fixing/adjustment.**

**Any changes to the original job request representing more than 20% of the totality of the job will require the job to be re-queued, to ensure consistent flow of the queue.**

## WORKSHOP WORK REQUEST PROCESS



## Computer Labs

The CHBE building has 2 computer labs for teaching use on the 3rd floor that can be accessed by graduate students and researchers. Use your CHBE login and password, to log-in on any of these computers. Computers are to be used in accordance with the CHBE Responsible Use of Information Technology agreement you signed when obtaining your CHBE computer account. Do not save anything to the hard drives, as the file(s) are deleted without notice during software and/or network upgrades.

## Common Research Spaces

The 5<sup>th</sup> and 6<sup>th</sup> floors of the CHBE building are designated for research. On each of these floors are graduate student, researcher and visitor offices along the north side of the building and research labs along the south side of the building. Among these labs, two spaces are meant for common use: labs 5.12 and 5.06

### Lab 5.12 – Anaerobic Lab

The anaerobic lab contains a de-ionized water filtering unit (18 MW) and a spill cart in case of a minor chemical spill outside of office hours (please see laboratory safety on how to proceed in the case of chemical spill). The DI water unit is provided and maintained by the department; therefore if you see anything out of the ordinary (from water purity, to pressure, to leaks), please contact Ken Wong (7-4833).

### Lab 5.06 – Analytical Lab

The analytical lab consists of analytical instrumentation either partly or completely purchased by the department for all research purposes. This lab is maintained by the Department and use is restricted. Graduate students and visitors must have their supervisor's approval and receive an orientation from Ken Wong prior to receiving access to this lab via fob/UBCcard. Your supervisor can request access for you on the Access Safety Form. Each piece of equipment has a log book; please be sure to fill the log book diligently, as it is important to understand which groups use which equipment under what circumstances.

## Safety Orientation

### Departmental Requirements - Department of Chemical and Biological Engineering

Worksafe BC and UBC Risk Management Services require the Department of Chemical and Biological Engineering to provide proper direction and instruction to workers in the safe performance of their duties. Through training and supervision, employees are made aware of hazards and safe work procedures to follow in order to protect themselves.

The Department of Chemical and Biological Engineering meets this requirement by providing workers with:

1. complete orientation and on the job training
2. consistent and fair work supervision.

Records of orientation and training are maintained to verify that employees have received adequate instruction to work safely. The area supervisor signs each record upon completion of an employee's training and will regularly follow up on that training to ensure consistency and competency.

### **Orientation**

The Department of Chemical and Biological Engineering holds a department orientation session for all new or transferred students and employees. Supervisors are required to conduct orientation sessions for the employees and students in their areas in accordance with Faculty/Departmental Orientation and Training Guidelines. The Safety Orientation Safety sheet should be completed by employees before starting lab work.



# Welcome to CHBE at UBC – Safety Orientation Sheet

Name: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Office #: \_\_\_\_\_ Desk #: \_\_\_\_\_ Tel: \_\_\_\_\_

## Personal Safety Information That I Need to Know

(Include all of the areas that I work in)

Room#	Phone Number	Fire alarm	Fire extinguishers	Fire exit	Eyewash/Safety Shower

MSDS sheets are located in each laboratory near the door and can be found at <http://ccinfoweb.ccohs.ca/msds/search.html>

**Personal Protective Equipment** required for my work:

Lab coat: ☒ Safety glasses: ☒ Gloves: ☒ Other: \_\_\_\_\_

\*gloves required when manipulating chemicals should remain in the lab at all times; remove prior to leaving the lab.

In case of a **chemical spill** contact Ivan Leversage at 2-3857 or Ken Wong 7-4833.

**Nearest First Aid Attendants:**

Name	Room #	Phone #
Doug Yuen	1.83	2-2433
Richard Ryoo	1.76	2-0821
Graham Liebelt	1.83	2-2433
<b>Ivan Leversage</b>	<b>4.37</b>	<b>2-3857, cell 604-328-7423</b>
Dhanesh Kannangara	4.01	2-0084
<b>First Aid Room</b>	1.75	

**Emergency Phone Numbers** CHBE Address: 2360 East Mall, Vancouver

<b>Police, Ambulance, Fire</b>	<b>911</b>
Hazardous Materials Response (HAZMAT)	911
Emergency / First Aid	2-4444

**Non Emergency Numbers**

Campus Security	2-2222 (24/7)
UBC Urgent Care Centre	604-222-7222
Poison Control Centre	1-800-567-8911
Walksafe UBC	604-822-5355
Student Health Services	604-822-7011
Trouble Calls	604-822-2173

<b>Fire Bell Ringing</b> <ul style="list-style-type: none"> <li>Intermittent = Standby Alert</li> <li>Solid Ring = Evacuate</li> </ul>	<ul style="list-style-type: none"> <li>Stop all procedures – turn off appliances and gas valves</li> <li>After the last person has left the room, CLOSE ALL DOORS (DO NOT LOCK)</li> <li>EXIT BUILDING IMMEDIATELY – DO NOT USE THE ELEVATOR. Use closest stairs.</li> <li>Meeting point is lawn on west side of East Mall</li> <li>DO NOT RETURN until the Fire Warden has announced “ALL CLEAR”</li> </ul>
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## ***Laboratory Safety***

It is important to maintain a high awareness of the risks associated with the chemicals and processes while working in labs. CHBE has an active Health & Safety Committee that focuses on improving safety in the department. The number of reported incidents decreased from 3 in 2011 to 2 each in 2012 and 2013. Of these seven incidents, there were 5 spills and one personal injury, a burn. All incidents are avoidable with due care and attention.

### **Personal Protective Equipment (PPE)**

When in laboratories (whether you are running an experiment or not), you must wear a lab coat and safety glasses (regular sight glasses are not sufficient). Both of these items are available to you by your supervisor. Laundry for the lab coats is supplied by the department through stores.

If you are handling chemicals, you **MUST** wear the appropriate gloves in order to protect your skin from chemical burn or spill. Gloves are available from Stores.

Steel toed footwear is recommended. **NEVER** wear open-toed shoes (sandals, flip-flops, etc.) or open-heeled shoes (slingbacks, holey soles/crocs) in a laboratory. As a minimum, wear closed-toed water-resistant shoes.

In certain cases, (use of UV table, manipulation of small particles, etc.), special PPE may be required. Ensure that you understand the risks and requirements, review procedures and implement appropriate precautions completely prior to handling any materials.

### **Other Laboratory Safety**

All CHBE laboratories are under slight negative pressure in order for all fumes to exhaust through the ventilation in the labs. Please keep the doors to labs closed at all times. If there are excessive fumes exhausting from your experiment, run the experiment in a fume hood or with a direct connection to the exhaust.

Do not travel in hallways or elevators with volatile samples. If you need to use equipment in another laboratory to complete your tests, bring the equipment to your lab. If this is not feasible, then be sure that proper ventilation will be provided (i.e. fume hood) in the destination lab and that the sample is sealed tight in travels between fume hoods.

### **New Experiments or Setups**

All new and modified experimental set-ups must be inspected by the Safety Committee prior to beginning operation or running. Please be sure to ask your supervisor to request an inspection with the safety committee early, so that your research does not get delayed. Marlene Chow (marlene.chow@ubc.ca , cell 778-879-5105) is available for consultation on HAZOPS during the planning phase of projects.

### **Labelling your Chemicals**

Please note that ALL chemicals and samples must be labelled. You may know what it is, but your colleagues, supervisor or safety officer will likely not. Labels are supplied (large and small) in the wall-mounted mailbox near the entrance of your lab. If you need more, you can obtain them from stores.

### **Working alone**

UBC has a Work Alone Policy:

(<http://riskmanagement.ubc.ca/sites/riskmanagement.ubc.ca/files/uploads/Documents/UBC-Working-Alone-or-Isolation-procedure.pdf>) to ensure that there are communications procedures in place so that individuals working alone receive assistance if an accident or incident occurs. Prior to planning to work alone:

- Review your lab procedures and experiments with your supervisor and complete a risk assessment to ensure measures are implemented that ensure it is safe to work alone. The risk assessment should include establishment of the frequency on contact with a “buddy”
- Make sure that someone else on the same floor knows you’re in the lab (a buddy). Let them know how long you should be in the lab and check in with them on the established frequency. Also, know each other phone extensions, in case of emergency.

## Reporting Incidents or Near Misses – Personal Injury

No matter what precautions we take, they only minimize the risk of incident. If you get hurt while in the department:

### During office hours

If the injury is of a chemical nature, find the nearest safety shower and flush the affected area. Call your nearest first aid attendant as listed on your safety orientation sheet and ideally on your lab door. Should they deem necessary, they will accompany you to UBC Hospital’s Urgent Care Centre.

### Outside office hours

If the injury is of a chemical nature, find the nearest safety shower and flush the affected area. Call your buddy and ask them to accompany you to UBC Hospital’s Urgent Care Centre. On the following business day, report the incident to the Safety Officer (Ivan Leversage), in order to keep the departmental administration updated.

No matter what, notify your supervisor and the Safety Officer of the incident.

## Reporting Incidents or Near Misses – Chemical Spills

Chemical spills can be small and manageable (10mL of 50% methanol on a benchtop) or unmanageable (20L of heavy oil on the hallway floor). Clearly these examples represent extremes; however all chemical spills must be taken seriously. Although our benchtops are chemical *resistant*, they are not chemical *proof*. Therefore if you don’t clean up your benchtop chemical spill, it will likely discolour or burn through the surface over time. For information on how to handle a small chemical spill, you can refer to page 56 or the Chemical Laboratory Safety handbook located in your wall-mounted mailbox near the lab. If you need additional supplies to clear the spill, there is a spill cart available for use in room 5.12. Please notify the Safety Officer (Ivan Leversage) of the nature of the spill and materials used from the spill cart on the next business day so the cart can be resupplied.

### **If the spill is unmanageable:**

#### During office hours

Contact the Safety Officer Ivan Leversage – 2-3857 or cell 604-328-7423 for assistance. If Ivan is not available, contact Ken Wong, 7-4833

#### Outside office hours

Call the campus HAZMAT (2-4444) and notify them of the location, chemical nature, concentration and phase of spilled substance; they will provide you with further instruction.

## Lab Safety & Housekeeping

As a user of CHBE facilities, you are expected to maintain good housekeeping practices. Good housekeeping practices will:

- make your lab a more pleasant place to work
- result in better, more reliable data
- be a more efficient work area and uses less space
- create a safer work environment for you and your colleagues
- reflects your professional approach to research and work

Ivan Leversage is the lab safety contact for CHBE's undergrad labs, the 5<sup>th</sup> and 6<sup>th</sup> floor labs, CERC High Head Lab, Gas Gun and Living Lab. He performs walkthroughs and will notify you to make changes to your setup if it isn't safe. Ivan is also your point of reference if you have any questions regarding your setup. Ivan can be reached at 2.3857; his extension forwards to a cell phone (mobile), as is often out of his office. Ivan can also be reached via email at [ileversage@chbe.ubc.ca](mailto:ileversage@chbe.ubc.ca).

For broader, proactive questions, you can contact all of the members of the safety committee directly by emailing [safety@chbe.ubc.ca](mailto:safety@chbe.ubc.ca).

## ***Building Policies***

### **Bicycles/rollerblades**

#### **Bicycles**

Please note that bicycles may not enter or be stored inside the CHBE building (office, lab, project or club rooms included). The campus offers multiple options for storage, depending on the level of security you are looking for your bike:

- **bicycle racks** are located next the East Mall and the Health Sciences Mall entrances; in addition, covered bicycle racks are located at the South entrance (more secluded from the street too!)
- **secured bicycle storage** is available in the **Health Sciences** and **Thunderbird parkades**. It is **FREE** and right across the street; all you have to do is sign up to the trek program. For more information, click on this link: <http://transportation.ubc.ca/transportation-options/cycling/cycling-facilities/>
- you can **rent bicycle lockers**. Rental rates can be found by clicking this link: <http://transportation.ubc.ca/transportation-options/cycling/secure-bike-parking-facilities-bicycle-lockers/>. Rates are reasonable, although it's not free.

The administration reserves the right to remove any bicycles found inside CHBE.

#### **Rollerblades/Skateboards**

Same as bicycles, rollerblades and/or skateboards may not be ridden inside the building. Please carry your skateboard until you are outside.

Please take your rollerblades off **BEFORE** entering the building. There is a bench on the south side of the building, sheltered from the rain to do so. Also, please put your rollerblades on outside.

### **Snow/emergencies**

As the University and Faculty of Applied Science both have procedures to follow in the case of declaring a snow (or weather emergency) day, so does the Department of Chemical & Biological Engineering. If you think the University or department may be closed due to inclement weather, you can check the following:

- the University will notify CBC Radio, CKNW and other local radio stations of the closure and will post the announcement on their website
- Engineering Student Services (ESS) will change the voice mail greeting on the main telephone line (604-822-6556) announcing the closure and projected return to operations
- The Faculty of Applied Science Dean's Office will change the voice mail greeting on the reception line (604-822-2439) announcing the closure and projected return to operations
- The Department of Chemical & Biological Engineering's Main Office will change the voice mail greeting on the reception line (604-822-3238) and the Manager, Administration line (604-822-5548) announcing the closure and projected return to operations.

Please note that the Department may close its doors while the University remains open.

## **Safety Walkthroughs**

As mentioned earlier, safety walkthroughs occur regularly throughout the research laboratories. There is a 4-step policy/procedure the Safety Officer follows in the case of a hazard being spotted (each step is escalated to the next should action not be taken, contact not been made with the Safety Officer):

- 1- Email to user/notification posted in lab;
- 2- Email to user, cc' PI (supervisor) notifying the issue is still existing and requesting corrective action;
- 3- Email to user, cc'ing the PI and [safety@chbe.ubc.ca](mailto:safety@chbe.ubc.ca) notifying the issue is still existing and presenting consequence in the case of inaction
- 4- Email to user, cc'ing the PI and [safety@chbe.ubc.ca](mailto:safety@chbe.ubc.ca) notifying that as the issue is still existing and the Safety Officer has not been notified of corrective action, operation of the lab and any related experiment is deemed suspended until further corrective action has been completed and communicated to the safety committee.

## ***Other Helpful Hints***

### **Using the fax machine**

The Fax machine located in the mail room is available for research use. You may use it as you would a regular phone (dialing 9 to dial out, 8 for long distance and the 5-digit extension if you're faxing to someone else on campus. Documents must face up and once you have dialled, please enter the information for your fax parallel to the number that comes up on the screen. This will allow secretarial staff to know whom to notify should a fax not go through completely.

### **Main Office Photocopier**

Use your CHBE login name and password for copying jobs. If you are having any problems, please don't hesitate to speak to one of the secretaries in the main office and they'll be able to help you out.

Please note that use of the photocopier is meant for research or thesis purposes ONLY. Should any abuse and/or excessive use of your access rights to the copier be noticed, they will be removed.

## **Leaving CHBE?**

### ***Clearance process***

As many in CHBE work with hazardous chemicals and may perform modifications on equipment which may never be followed-up on in the long term, the clearance process from the department is a tedious one if all isn't planned ahead. Approximately 1 month prior to leaving CHBE, ask one of the secretaries from the Main Office for a clearance form. All of the required instructions are included.

At the top of the page, please be sure to include all of the supervisors/research groups you have worked with and every position you have occupied with the department (if you were first a PhD and then a Postdoc, list both positions only if you did not fill a clearance form following your PhD).

- 1) Complete pages 3 and 4 first. All chemicals and equipment you used must be listed on these two pages and must either be transferred to your successor (with the successor's signature next to it) or disposed of (waste chemicals should have gone through the process with HSE, equipment needs to have the decommissioning form completed; you can obtain one from the workshop)
- 2) Set up a meeting time with Ivan Leversage, the Safety Officer. He will walk through your office, labs in which you worked, storage areas, etc. with you to ensure you have indeed cleared out.

3) Obtain the signatures as listed; here is what each of them checks for when they sign:

- Storeskeeper checks to ensure there are no waste chemicals with improper packaging
- Workshop supervisor ensures all equipment requiring decommissioning have the form duly completed
- The secretary is thereby notified to archive your file
- The safety chair ensures all safety protocols are being followed in the clearance process
- The Key clerk ensures all keys have been returned (be sure to obtain a receipt from Parking & Access Control)
- The Advisor is your supervisor; it informs the administration (s)he is knowledgeable of your departure
- The Manager, Administration reviews the completed clearance form and clears you out of the office allocation spreadsheet.

It doesn't matter if your office and/or lab were not located in the CHBE building. This is one of the only chances a departmental representative can ensure no unknown chemicals and/or equipment will be left behind over the long term. The Safety Officer will come to your home building and office to ensure the same clearance process has occurred.