SCHOOL OF ENVIRONMENT SAFETY INDUCTION

Laboratories and Workshops
Welcome to the School of Environment

Our Goal

Provide a safe and productive research environment, while complying with policies and law.
Legislation we must comply with

- Health and Safety in Employment Act
- Hazardous Substances and New Organisms Act
- Radiation Protection Act
- Biosecurity Act
- University Health and Safety Policies
- School of Environment Health and Safety Policies
Who’s who @ the University

The University
- University Health & Wellness Manager – Robert Powell
- Hazards and Containment Manager – David Jenkins

ENV Facilities
- Head of School – Paul Kench
- Technical Manager – Blair Sowman
- Laboratory Technical Staff – Ilyas, Andres, Neville, Louise, Brendan, Dave, Colin, and Natalia.
- ENV Health & Safety Officer – Blair Sowman
- Transitional Facility Operators – Blair Sowman, Natalia Abrego
- ENV Health & Safety Committee – Blair Sowman, Andres Arcila, Paul Kench, Jon Tunnicliffe

Lab Users
- Academic staff
- Students
- Supervisors
- Visitors and clients
Laboratories, workshops and services

The School of Environment has more than 25 Laboratories and Workshops.
Laboratory and workshop Structure

Technical Manager: Blair Sowman

Laboratory or workshop Manager (Academic)

Laboratories and Workshops:
Building 302
Building 301
Kitson Place

Technicians:
Andres
Neville
Louise
Brendan
Dave
Colin
Natalia
Ilyas
<table>
<thead>
<tr>
<th>Lab</th>
<th>Room</th>
<th>Hazard</th>
<th>Hazard Rating</th>
<th>Technician in Charge</th>
<th>Academic(s) in Charge</th>
<th>Induction process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Building 302</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Laboratory – Dry</td>
<td>302.130</td>
<td>EQ</td>
<td>Low</td>
<td>Andres Arcila, Neville Hudson</td>
<td>Barry O’Connor</td>
<td>General</td>
</tr>
<tr>
<td>Teaching Laboratory - Wet</td>
<td>302.140</td>
<td>EQ</td>
<td>Low</td>
<td>Andres Arcila, Neville Hudson</td>
<td>Barry O’Connor</td>
<td>General</td>
</tr>
<tr>
<td>Sedimentology</td>
<td>302.420</td>
<td>EQ</td>
<td>Low</td>
<td>David Wackrow</td>
<td>Paul Augustinus</td>
<td>General</td>
</tr>
<tr>
<td>Dendrochronology</td>
<td>302.450</td>
<td>EQ</td>
<td>Med</td>
<td>Colin Yong</td>
<td>Gretel Boswijk</td>
<td>General</td>
</tr>
<tr>
<td>Ecology</td>
<td>302.456</td>
<td>HSNO, EQ</td>
<td>Med</td>
<td>Brendan Hall</td>
<td>Kevin Simon</td>
<td>General</td>
</tr>
<tr>
<td>Coastal and Hydrology</td>
<td>302.460</td>
<td>EQ</td>
<td>Low</td>
<td>Brendan Hall</td>
<td>Paul Kench</td>
<td>General</td>
</tr>
<tr>
<td>Climate</td>
<td>302.485</td>
<td>EQ</td>
<td>Low</td>
<td>Colin Yong</td>
<td>Jennifer Eccles</td>
<td>General</td>
</tr>
<tr>
<td>Geophysics</td>
<td>302.489</td>
<td>EQ</td>
<td>Low</td>
<td>Colin Yong</td>
<td>Jennifer Eccles</td>
<td>General</td>
</tr>
<tr>
<td>Particle Analysis</td>
<td>302.491</td>
<td>EQ</td>
<td>Low</td>
<td>David Wackrow</td>
<td>Paul Augustinus</td>
<td>General</td>
</tr>
<tr>
<td>Environmental Chemistry</td>
<td>302.730</td>
<td>HSNO, EQ</td>
<td>Med</td>
<td>Natalia Abrego</td>
<td>Luitgard Schwendenmann, Kevin Simon</td>
<td>General and Laboratory</td>
</tr>
<tr>
<td>Transitional Facility</td>
<td>302.790</td>
<td>HSNO, EQ, TF</td>
<td>Med</td>
<td>Blair Sowman</td>
<td></td>
<td>General, Laboratory and TF</td>
</tr>
<tr>
<td><strong>Building 301</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earth Science Processing</td>
<td>301.039</td>
<td>EQ</td>
<td>Med to High</td>
<td>Andres Arcila</td>
<td>Phil Shane</td>
<td>General and Workshop</td>
</tr>
<tr>
<td>ITRAX</td>
<td>301.053</td>
<td>EQ</td>
<td>Med to High</td>
<td>Ilyas Qasim</td>
<td>Phil Shane</td>
<td>General, Laboratory and x-ray</td>
</tr>
<tr>
<td>X-ray Preparation</td>
<td>301.414</td>
<td>EQ</td>
<td>Med to High</td>
<td>Ilyas Qasim</td>
<td>Phil Shane</td>
<td>General, Laboratory and x-ray</td>
</tr>
<tr>
<td>X-ray Fluorescence (XRF)</td>
<td>301.415</td>
<td>EQ</td>
<td>Med to High</td>
<td>Ilyas Qasim</td>
<td>Phil Shane</td>
<td>General, Laboratory and x-ray</td>
</tr>
<tr>
<td>X-ray Diffraction (XRD)</td>
<td>301.416</td>
<td>EQ</td>
<td>Med to High</td>
<td>Ilyas Qasim</td>
<td>Phil Shane</td>
<td>General, Laboratory and x-ray</td>
</tr>
<tr>
<td>Postgraduate Rock Analysis Room</td>
<td>301.511</td>
<td>EQ</td>
<td>Low</td>
<td>Neville Hudson</td>
<td>Julie Rowland</td>
<td>General</td>
</tr>
<tr>
<td>Academic Rock Analysis Room</td>
<td>301.525</td>
<td>EQ</td>
<td>Low</td>
<td>Neville Hudson</td>
<td>Julie Rowland</td>
<td>General</td>
</tr>
<tr>
<td>Microscopy</td>
<td>301.533</td>
<td>EQ</td>
<td>Low</td>
<td>Andres Arcila</td>
<td>Phil Shane</td>
<td>General</td>
</tr>
<tr>
<td>Specialised Geochemistry Preparation (HF)</td>
<td>301.535</td>
<td>HSNO, TF, EQ</td>
<td>Med to High</td>
<td>Natalia Abrego</td>
<td>Michael Rowe</td>
<td>General, Laboratory and HF</td>
</tr>
<tr>
<td>Microscopy (Cryogenic and Gas)</td>
<td>301.536</td>
<td>HSNO</td>
<td>Low to Med</td>
<td>Andres Arcila</td>
<td>Phil Shane</td>
<td>Cryogenic safety</td>
</tr>
<tr>
<td>Geochemistry Preparation</td>
<td>301.539</td>
<td>HSNO, TF, EQ</td>
<td>Med to High</td>
<td>Natalia Abrego</td>
<td>Michael Rowe</td>
<td>General and Laboratory</td>
</tr>
</tbody>
</table>
How to gain access to the laboratories and Workshops

- Everyone who wishes to access School of Environment Laboratories, must attend a General Safety Induction to gain their access.
  - Remember to sign the List today

- For those interested in work in the chemical labs, HF lab, ESP labs and X-Ray Labs, they must also:
  - Complete a specialised safety induction, pass an online test, complete the Hazard Management Plan for your project and have specialized analytical training.
  - Please sign the list today if you want to be enrolled for a specialised safety induction (Chemical, HF, ESP or X-ray).
Laboratory Work Practices

The following good laboratory practices must be observed in all laboratories and workshops in the University of Auckland:

- Food or drink for human consumption must not be consumed in any laboratory or workshop, or kept where hazardous substances are stored or used (i.e. refrigerators).
- Protective clothing including laboratory coats and safety glasses must be worn in laboratories and workshops that require them, and must be removed when going from laboratory areas to the tearooms or office areas.
- Protective gloves of appropriate material must be worn when handling chemicals (see SMOU PPE for more details).
Closed footwear and pants must be worn where hazardous substances or equipment is stored or used.

Hands must be washed before leaving laboratories.

A fume hood, fume cupboard or other means of ventilation, isolation or extraction (e.g. an isolating cabinet or a ‘cytotoxics’ cabinet) shall be used when working with toxic, volatile or odoriferous substances, or particulate/dusty matter, to ensure a safe working environment.

All hazard labels on surplus containers and packaging must be defaced or rendered illegible before discarding.
- Know the location of all emergency exits, fire alarms, first aid kits and phones.
- Smoking is prohibited on all University premises.
- No goofing around or throwing things in labs.
- Do not tamper with anything that appears to be in use or does not concern you.
- Advise staff of any faults, breakages, spills, incidents, or any potential hazards.
- The University and the School do not accept responsibility for lost or stolen items. Do not leave personal belongings or valuables unattended in the labs.
- Use of personal music equipment using headphones (such as iPods, etc) is not permitted in any ENV workshops or labs.
- Respect all other lab users, staff and students
- Respect decisions made by the technician in charge and lab managers, follow instructions when given
Stick to the rules

You are expected to work within all the provided guidelines and maintain a safe working environment.

**Minor infringements** will work on a three-strike rule. Three strikes will result in temporary expulsion from the lab and a follow up discussion with Lab Managers and supervisors. You may then be required to attend relevant induction sessions again.

**Major infringements** will result in immediate expulsion from the lab. Expulsion from the lab will usually be temporary depending upon the nature of the infringement. A discussion with Lab Managers and supervisors will follow. Severe and intentional misconduct will be dealt with as a disciplinary matter.

We will be enforcing the rules as rigorously as possible to keep you and other lab users safe.
When finished for the day

- Clean up! Return any gear to its correct location, wipe down your work area and store all samples appropriately.
- If you are leaving work in progress on a lab bench you must label your work clearly with a completed LABWORK IN PROGRESS label (Green Cards).
- If you intend to leave processes running while absent from the lab please discuss first with relevant technical staff.
- Work left without a LABWORK IN PROGRESS label may be cleared away and stored in a holding area. Material left for more than 4 weeks will be disposed of without warning.
- Ensure that all equipment that is no longer in use is turned off.
- Ensure that the labs are locked when you exit them.
When completely finished a project

- Return all borrowed equipment to the correct location.
- Clean all equipment, glassware, workspaces, and storage spaces.
- Dispose of all unwanted samples, paperwork, etc. in the appropriate manner.
  - o Sediment bin – for rocks and sediment ONLY – no plastic bags or containers
  - o Paper waste bin – for clean paper and cardboard only
  - o Aluminium bin – for used aluminium trays (please keep for reuse if clean)
  - o Recycle bin – for recyclable glass and plastic (no lab glass!)
  - o Used vibrocore tubes – please see technician
- Liquid samples and chemical waste - please see technician
- Samples that are considered suitably important or valuable can be archived – see staff.
Reporting Accidents and Incidents

- All accidents and incidents must be reported to the technician in charge or the laboratory manager as soon as possible.

- All accidents and near misses must be reported to University Health and Safety Office on the prescribed University Accident/Incident form. This should be directed through your supervisor and the Technical Manager.

- Accidents involving splashes to the eye may require reporting to Worksafe. These accidents must be reported as soon as possible to the School Health and Safety Officer.

- The Laboratory Manager and any person with information relevant to the emergency must make themselves available to Emergency Services.
After hours

- The School laboratories are open from 7:30 am to 6:00pm Mon to Fri (excluding statutory or university holidays). Work beyond these hours is at the discretion of the technician in charge or Lab Manager depending upon the activity undertaken and potential risk.

- There are notes on the doors stating the days/hours that technicians will be around for assistance.

- Formal approval to work after hours on an ongoing basis must be arranged in advance through the Technical Manager. After hours access is generally not allowed for laboratories that are high risk (gases, chemicals, machinery).
General Conduct

■ Be considerate of other lab users and keep noise to a minimum.
■ Keep your work area tidy and confined to your allocated workspace(s).
■ Resources are shared. Do not monopolize equipment, workstations, or space.
■ Advise staff of any shortage in supplies, paper, consumables, reagents, etc.
■ Be respectful with other lab users and Staff in charge.
Visitors and undergraduate students

- All ENV laboratories and workshops are generally off-limits to those not present on valid University business.
- All visitors must report to the relevant ENV staff member before entering ENV laboratories and workshops.
- Undergraduate students must be accompanied by a lab manager or technician while they are in a laboratory or workshop.
Emergency Procedures

For:
- Life threatening or urgent emergency assistance
- Fire
- Gas Leak
- Bomb threat
- Hazardous substance spillage
- Medical emergency

You must:
1. Clear the area. Be safe
2. Notify personal in charge.
3. Call 1-111 for help
WHERE TO FROM HERE

1. Complete required inductions
2. Complete online assessments
3. Complete your lab folder, including supervisors signature
4. Get your lab folder signed by the Technical Manager
5. Get keys/access
6. Undertake specialised training
7. Start working
8. Complete an annual refresher (online) one year from today (or before)