



School of Environment General Safety Induction for Laboratories and Workshops





Welcome to the School of Environment

The School of Environment combines a diverse range of programmes and research interests that explore the social and natural worlds in which we live. Along with our internationally recognised disciplinary programmes in Geography, Geology, Geophysics and Geographical Information Science, we offer interdisciplinary programmes in Earth Science, Environmental Management, Environmental Science and Environmental Change.

We have world class laboratory facilities and equipment to help with your research.

We aim to provide a safe and productive research environment, while complying with all UoA policies and NZ law.



What we must comply with:

- Health and Safety in Employment Act
- Hazardous Substances and New Organisms Act
- Radiation Protection Act
- Biosecurity Act
- School of Environment Policies
- University of Auckland Health and Safety Policies
 - https://www.staff.auckland.ac.nz/en/human-resources/health-safety-andwellbeing.html

Who's who at the University

The University

- FoS Health and Safety Manager Howard Fox
- Hazards and Containment Manager David Jenkins

ENV Facilities

- Head of School Julie Rowland
- Technical Manager Blair Sowman
- Laboratory Technical Staff Ilyas, Andres, Neville, Brendan, David and Natalia.
- ENV Health & Safety Officer Blair Sowman
- Transitional Facility Operators Blair Sowman, Natalia Abrego
- ENV Health & safety Committee Blair Sowman, Andres Arcila, David Hayward

Lab Users

- Academic staff
- Students
- Supervisors
- Visitors and clients

Laboratories, workshops and services

The School of **Earth Science** Postgraduate Geophysics Microprobe Dark Room Environment has more Processing Computing than 25 specialised laboratories, workshops and facilities! Hydrology and Dendrochronology Sedimentology Particle Analysis Ecology Coastal Specialised Multidisciplinary Chemical Paleontology Geochemistry Geochemistry Teaching Instrumentation **ICP-MS** and Postgraduate Academic Rock Microscopy Ontology Laser Ablation **Rock Analysis** Analysis ITrax Core Chemical X-ray XRF Climate Preparation Preparation Scanning

How to gain access to the School of Environment Facilities

- Everyone who wishes to access School of Environment Laboratories, must attend a General Safety Induction to gain their access.
 - You are here so that's a good start!
- For those interested in working in the chemical labs, HF lab, ESP Workshops 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 long pants/skirts 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 shall be used when working with toxic, volatile or odoriferous substances, or particulate/dusty matter, to ensure a safe working environment.
- All surplus chemical containers must be rinsed and hazard labels on packaging rendered illegible before discarding. They have to be removed from JAGGAER, the University chemical management system.
- Do not move equipment or chemicals between spaces without first talking to the technician. What you move might inconvenience other lab users.

Laboratory Work Practices

- Know the location of all emergency exits, fire alarms, first aid kits and phones.
- Smoking is prohibited on all University premises, this includes vapes and e-cigarettes.
- 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 as soon as possible. Don't leave it for the next person to deal with.
- The University and the School do not accept responsibility for lost or stolen items. Do not leave personal belongings or valuables unattended in labs or workshops.
- Use of personal music equipment using headphones (such as iPods, etc) is not permitted in any ENV workshops or labs. You may not be able to hear fire alarms or the instructions from lab management.
- Respect all other lab users, staff and students
- Respect decisions made by the technician in charge and lab managers, follow instructions when given.
- You are expected to work within all the provided guidelines and maintain a safe working environment.
- Resources are shared. Do not monopolize equipment, workstations, or space.
- Advise technical staff of any shortage in supplies, paper, consumables, reagents, etc.
 - If you are found to be in breach of the rules you will be given a warning.
 - If you continuously breach the rules your access will be revoked.

When you are 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 unsure how or where, then as the technician.
- If you are leaving work in progress on a lab bench you must label your work clearly with a completed Labwork in Process label (Green Card) which are found in all labs.
- If you intend to leave processes or experiments running while absent from the lab please discuss first with relevant technical staff. This includes overnight and weekends.
- Work left without a Labwork in Process label may be cleared away and stored in a holding area
 - Material left for more than four-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, if they are on the key system. Swipe labs will automatically lock themselves.

When you have completely finished your project

- Return all borrowed equipment to its 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.
- The technicians will not dispose of items for you if you just leave them behind. If they are required to do so, then you will be invoiced.

Reporting Accidents and Incidents

- All accidents and incidents must be reported to the technician in charge or the laboratory manager as soon as possible. Ideally immediately, but no longer than 24 hours. Yes, there is a form you need to fill out.
 - What you report may just save someone else having an accident.
- 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 Technical Manager.
- The Laboratory Manager and any person with information relevant to the emergency must make themselves available to emergency services if required.
- If the technician in charge or lab manager tells you to stop something then stop. Don't argue or ask for a few more minutes.

After hours

- The School laboratories are open from 7:30 am to 6:30pm Mon to Fri (excluding statutory or university holidays).
 - Work beyond these hours is at the discretion of the Technical Manager and technician in charge, 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. If you are unsure, then ask them.
- 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).

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 threating 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 now?

- 1. Complete required inductions
- 2. Complete online assessments for chem labs
- 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 when required
- 7. Start working
- Complete an annual refresher for the Chemical Laboratories (online) one year from today (or before). If you don't, then you will find your access will be revoked.

Who		How to contact	What they look after
Blair Sowman Technical Manager		Office - 302.415 Extn. 84128 b.sowman@auckland.ac.nz	Technical Manager Health and Safety Manager Laboratory access approval Field trip plan approval 302.790 – Transitional Facility
Andres Arcila Lapidary Technician		Office – 302.531 Extn. 87417 <u>a.arcila@auckland.ac.nz</u>	302.130 – Teaching Lab 302.140 – Teaching Lab 302.586 – Microscopy 301.039 – Earth Science Processing 301.042 – Earth Science Processing Electrical Safety HSW Rep
Neville Hudson Paleontology Technician		Office - 302.531 Extn. 87431 n.hudson@auckland.ac.nz	302.130 – Teaching Lab 302.140 – Teaching Lab 301.511 – Postgraduate Rock Analysis 301.525 – Academic Rock Analysis Kitson Place Storehouse Sample Curation
David Wackrow Geoscience Technician		Office - 302.433 Extn. 81396 d.wackrow@auckland.ac.nz	302.420 – Sedimentology 302.491 – Particle Analysis Coring and sampling equipment General field equipment Vehicles
Brendan Hall Geoscience Technician		Office - 302.433 Extn. 84562 <u>b.hall@auckland.ac.nz</u>	302.450 – Dendrochronology 302.456 – Ecology 302.460 – Coastal and Hydrology Topographical field equipment General field equipment Boat Skipper Drones
Natalia Abrego Environmental Chemistry Technician		Office - 302.731 Extn. 82433 n.abrego@auckland.ac.nz	302.730 – Environmental Chemistry 301.535 – HF Lab 301.539 – Geochemistry MPI Risk good imports
Ilyas Qasim X-ray Technician	100	Office – 302.531 Extn. 89164 <u>ilyas.qasim@auckland.ac.nz</u>	301.053 – Itrax core scanner 301.414 – X-Ray Preparation 301.415 – X-Ray Fluorescence iLab bookings and support

Questions?