

Laboratory Safety Guidelines

Palaeobiology Laboratories Inner Court Level 3



Applies to: All users of labs IC26, 27, 28, 29 and 29a

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Faculty/Division: Science

School: Earth Sciences

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1. Laboratory Induction and Health and Safety Documentation

Prior to undertaking any work in the laboratories, all users must:

1. Complete a short **Laboratory Induction** with the Palaeobiology Laboratories Manager
2. Ensure all relevant **Risk Assessments** have been completed for the planned work *and* authorised by the Palaeobiology Laboratories Manager and your PI/Supervisor. These may include a:
 - Generic Risk Assessment for standard techniques/equipment used in the laboratories
 - Integrated Risk Assessment (IRA) detailing the protocol to be used and associated hazards/ risks
 - Equipment Risk Assessment (ERA) plus training for bespoke equipment
3. Read and familiarise themselves with all **COSHH Regulations** (Control of Substances Hazardous to Health) and **MSDS** (Materials Safety Data Sheets) relevant to the proposed work
4. Be familiar with **University Codes of Practice**, **Earth Sciences Health & Safety Policy Handbook** and the **Local Rules for Laboratories and Workshops**
5. Anyone proposing to use **biological material** during the course of their work **must** obtain consent from their Supervisor and the Palaeobiology Laboratories Manager *and* register with the School Safety Adviser. It is also strongly advised that anyone working with biological material attend the Biological Safety Course run by the University Health and Safety services.

To arrange an induction or for advice and forms please contact the Palaeobiology Laboratories Manager (email: charlotte.cook@bristol.ac.uk). All relevant documentation and training must be completed prior to undertaking any lab work, so it is advisable to seek advice well in advance of your proposed start date.

See also the **School Safety Webpages:** <http://www2.gly.bris.ac.uk/safety/index.html>
Bristol University Health and Safety Webpages: <http://www.bristol.ac.uk/safety/>

2. Personal Protective Equipment (PPE)

Anyone undertaking work in laboratories IC26, 28, 29 and 29a must wear appropriate PPE.

Lab Coats: Lab coats must be worn **at all times** when working in the laboratories. Spares are available from IC29 for those working in Palaeobiology Laboratories on Level 3 only and should not be removed from the lab.

Footwear & Clothing must be appropriate for the laboratory. When carrying out laboratory work you must wear a buttoned up lab coat. Long trousers or jeans must be worn to cover all of your legs. Sandals, open-toed shoes and flip flops are not permitted. Trainers are ok.

Other PPE (e.g. safety specs, gloves, dust masks and ventilators) must be worn if recommended by relevant MSDS and/or Risk Assessment related to the activity being undertaken, and in accordance with manufacturers instructions.

Fume Hoods: After reading any warnings and recommendations, use all chemicals carefully and in a fume hood wherever possible. Do not store chemicals/equipment in the fume hood.

Wash your hands before leaving the laboratories. Hand rub is provided in IC29 and IC28.

3. Laboratory Etiquette

- **No unauthorised access to the laboratories.** Do not use your swipe card to let unauthorised people into the labs.
- **Eating and drinking is strictly prohibited in any of the laboratories.** Laboratory water supplies should not be used as drinking water.
- **Mobile phones, personal stereos, etc. must be switched off when entering the laboratory.** Anything that interferes with your ability to hear in the laboratory is a potential hazard.
- **Bench space:** Please ensure that benches and surrounding areas are kept clean and tidy. Bench space should be cleared at the end of the day (except for experiments which run over several days). It is your responsibility to ensure samples / specimens are safely stowed.
- **Clean and stow any glassware / plasticware ready for the next user.** If you are unsure of the best way to clean an item, please consult the **Glassware Cleaning Protocol** located near to the sinks in labs.
- **When using solid or liquid reagents do not return surplus to the reagent bottle.** This can contaminate the whole bottle.
- **Equipment failures or faults:** please notify the Palaeobiology Laboratories Manager.

4. Labelling

All users must ensure that their **samples and chemicals** are clearly labelled with:

- Their name and contact details (phone number and/or email address)
- Date of use
- Description of the contents, noting any potential hazards
- **NB** This does not apply to communal chemicals

Samples and chemicals must be **stored appropriately** (i.e. not left in fume cupboards, on benches, on the floor creating a trip hazard, etc.).

If running equipment and/or experiments overnight or over the weekend, users are responsible for these and must post a notice next to the equipment/experiment stating:

- 'Experiment In Progress: Please Leave On'
- Their name and contact details (e.g. phone number). Users must provide a number that they can be easily reached on in the event of queries
- Start / Finish Dates
- A clear description of the possible hazards of the equipment or experiment (e.g. 'flammable'). This is for the benefit of security night staff
- Emergency Shutdown Procedure

5. Waste Disposal and Spills

All waste should be disposed of in an appropriate manner:

- **Hazardous Waste bin:** This contains yellow bags marked 'hazardous waste only: for incineration' and is for contaminated cloths, gloves, etc. Collected by the University's Hazardous Waste Contractor.
- **Sharps bin:** Round yellow container for pipette tips contaminated with hazardous waste, glass slides, cover slips, broken *contaminated* glass/pyrex, etc. Collected by the University's Hazardous Waste Contractor.
- **Grey Pyrex bin:** This is for clean, broken pyrex glassware only. Collected by the Sustainability Team. NB No sharps are to be placed into this bin.
- **Refuse bin:** Black bin bag, collected by the cleaners. This is for non-hazardous waste e.g. uncontaminated paper towels/tissues/gloves, etc. Rubbish placed here goes to landfill.

Biological material: Decontamination procedures may apply. Please consult the University's **Policy on Biological Waste Decontamination and Disposal** and the **Biowaste Decontamination and Disposal Chart** (located in IC29).

Old/unwanted chemicals and chemical waste: To arrange disposal please contact the Palaeobiology Laboratories Manager (charlotte.cook@bristol.ac.uk). You will need to provide the following information:

- Description of the waste (including chemical name, trade name and manufacturer)
- Approximate quantity
- Special handling and safety information and/or a copy of the relevant Materials Safety Datasheet (MSDS)
- Location of the waste (e.g. lab number, in fume hood, etc.).

Any waste awaiting collection should be clearly labelled 'WASTE' alongside your name, contact details, date of use and description of contents (noting any potential hazards). It should be stored in safe, clean, dry conditions.

- Further information can be found on the **Laboratory Waste Disposal Chart** located in IC29.

Chemical spills must be cleaned up as soon as reasonably practicable and in an appropriate way. If unsure, check the Materials Safety Datasheet. A spill kit for cleaning up small non-aggressive liquids is located in IC29. If you are unsure of the best way to deal with a spill please seek advice from the Palaeobiology Laboratories Manager and/or your Supervisor.

6. Working Outside of Normal Hours and Working Alone in Offices and Laboratories

Special conditions apply to Staff, Postgraduates and Undergraduate Students with regard to working outside of normal working hours and/or working alone in offices and laboratories. You may need to complete a special Risk Assessment and authorisation may be required from your PI/Supervisor and Lab Manager as appropriate. Consult the relevant policies posted on the noticeboard next to the entrance to the Palaeobiology Laboratories or view them online:

Working Outside of Normal Hours: <http://www2.gly.bris.ac.uk/safety/department/hours.html>

Lone Working: <http://www.bris.ac.uk/safety/media/gn/lone-working-gn.pdf>

7. Accidents and Emergencies

All users must familiarise themselves with the locations fire exits, first aid kits, laboratory telephones, etc.

Fire: On discovering a fire, operate the nearest fire alarm (red break-glass box marked FIRE). Call the Fire Brigade, via Campus Security Services (**Internal: 11 22 33 / External: 0117 33 11 22 33**) and report the nature and location of the fire. Do **not** attempt to fight the fire. Evacuate to the **Assembly Point** located on the patio outside the Merchant Venturers Building. **Note:** Fire alarm testing takes place in the Inner Court Laboratories every Friday at 1000.

Toxic or major gas escape: Leave the area immediately. Close all doors on exit. Activate the nearest fire alarm and call Campus Security (Ext. 112233). Warn people to avoid the affected area.

Flood: If it is obvious stop the leak, phone the Porters (Ext.45219). Warn people in the laboratories or offices below to safeguard papers and equipment. Do not attempt to move wet electrical equipment until disconnected from the mains.

Failure of services: If there is a failure of gas, water, electricity or lift services during working hours, phone the Porters (Ext. 45219); if out of hours, call Security on Ext. 112233.

Injuries: Apart from very minor injuries, a first aider should be called. **First aid kits** are located in IC29, IC29a and IC24. All **incidents or accidents** should be reported to the Palaeobiology Laboratories Manager.

Further information can be found on the **School Safety Webpages:** <http://www2.gly.bris.ac.uk/safety/index.html>

8. Laboratory Supplies and Ordering

If you require and equipment and consumables and you cannot find these in the lab please contact the Palaeobiology Laboratories Manager or your PI/Supervisor. Laboratory orders are placed by the Palaeobiology Laboratories Manager on **Tuesdays and Thursdays**. All purchases need to be authorised by the School. Please plan ahead and allow one to two weeks for delivery of standard items such as laboratory consumables and glassware. NB this is an estimate only, if your order is complex, bespoke and/or requires special authorisation this may take longer.