

Sustainability Induction

Our Commitment to Sustainability

We are committed to reducing our environmental impact through the responsible use of energy, water, materials, and laboratory resources. Everyone has a role to play in supporting a more sustainable workplace. Simple actions such as switching off equipment and lights when not in use, minimising waste, recycling correctly, and using resources efficiently can make a significant difference.

Please take a few minutes to read the sustainability notes below and consider how these principles can be incorporated into your daily work. Small actions by all staff and students can make a significant contribution to reducing waste, conserving resources, and promoting responsible use of materials and energy. Together, we can create a safer, more efficient, and more sustainable working environment.

Waste and Recycling

Please dispose of waste in the correct container:

- **Paper** should be placed in the **recycling bins**.
- **Sharps** should be placed in the small yellow **sharps bin** located in each laboratory.
- **Glass** should be placed in the **glass disposal** box in **P130**.
- All other **general waste** should be placed in the **general waste bins**.
- Batteries - **return to stores** for recycling.
- Any electrical equipment, cables or electronic devices must not be placed in general waste bins. Please contact your **PI or a technician** for guidance on the appropriate disposal procedure.

Paper Recycling

Please place only clean, dry paper and cardboard in the recycling bins.

The following items **can be recycled**:

- Office paper, printer paper, and notebooks
- Newspapers, magazines, and leaflets
- Cardboard and paper packaging
- Envelopes (including those with windows)

The following items **should not be placed in paper recycling**:

- Used tissues, paper towels, and wipes
- Paper contaminated with chemicals or laboratory materials

- Disposable gloves
- Sticky labels and backing paper
- Foil-lined or wax-coated paper

If paper is contaminated or cannot be recycled, it should be disposed of in the **appropriate waste stream** or **general waste bin**.

When in doubt, keep it out of recycling and seek advice from laboratory staff.

Glove - Use and Sustainability

We are committed to reducing waste while maintaining the highest standards of safety and good laboratory practice. Gloves should be worn only when required for the task and the correct glove type should be selected based on the hazards present.

Disposable gloves are intended for single use and should not normally be reused. Reusing disposable gloves can increase the risk of contamination, reduce protection if the material has been damaged or degraded, and may compromise experimental results. Disposable gloves should be replaced immediately if they become contaminated, damaged, or worn.

Where tasks require frequent glove use, users should consider whether gloves are genuinely necessary for all stages of the work and remove them when handling non-hazardous items such as keyboards, door handles, and telephones to avoid unnecessary waste.

Reusable gloves designed for repeated use may be appropriate for some applications. These gloves should be inspected before use and, where necessary, cleaned and stored according to laboratory procedures and the manufacturer's instructions. Reusable gloves must be discarded if they show signs of damage, deterioration, or contamination that cannot be safely removed.

By using gloves responsibly, avoiding unnecessary consumption, and choosing reusable options where appropriate, we can reduce waste while ensuring a safe and sustainable laboratory environment.

Energy

Lights - Energy-Saving Reminder

To conserve energy, please ensure that all lights are switched off when leaving the room after **5.00 p.m.**, unless the room is still occupied.

Efficient Use of IT Equipment

Computers, monitors, printers, and other IT equipment consume energy throughout their lifetime. Using this equipment efficiently helps reduce energy consumption, lower costs, and minimise environmental impact.

- **Switch off your desk computers, monitors, and peripheral equipment when not in use**, particularly at the end of the day.
- Use **sleep or power-saving modes** during periods of inactivity.
- Turn off monitors when leaving your workspace for extended periods.
- Avoid unnecessary printing. Where printing is required, use **double-sided (duplex) printing** and print only the pages that are needed.
- Store and share documents electronically whenever possible to reduce paper consumption.
- Unplug chargers and other devices when they are not in use, as some equipment continues to consume power even when switched off.
- Report faulty or inefficient equipment so that it can be repaired, replaced, or recycled appropriately.
- Dispose of unwanted IT equipment through the University's approved disposal and recycling routes rather than placing it in general waste.

Small changes in how we use IT equipment can significantly reduce energy consumption, extend equipment lifespans, and support a more sustainable workplace.

Equipment Shutdown Procedure

At the end of use, please:

1. Put the apparatus into the appropriate **shutdown state** ($H = 0$, $T \geq 10$ K).
2. **Switch off the rotary pump.**
3. Place a clearly visible notice on the equipment indicating that the **pump has been switched off.**

Please follow this procedure to maintain equipment safety and reliability.

Chemicals and Samples

Efficient Use of Chemicals for Sample Preparation

The efficient use of chemicals is an important part of sustainable laboratory practice. Careful planning can reduce waste, lower costs, and minimise environmental impact while maintaining the quality and reliability of experimental results.

- Plan experiments carefully and prepare only the quantity of material required for the work.
- Calculate masses and stoichiometries in advance to avoid unnecessary consumption of chemicals.

- Where appropriate, prepare smaller batches of samples to minimise waste from materials that may no longer be required.
- Check existing stock before ordering new chemicals to avoid duplication and unnecessary disposal.
- Label all prepared samples clearly with their composition, date of preparation, and owner.
- Store chemicals and samples correctly to prevent degradation and maximise their useful lifetime.
- Share commonly used chemicals and source materials within the research group where practical.
- Maintain accurate records of chemicals used and samples prepared to reduce repeat work and unnecessary consumption.
- Dispose of unwanted chemicals and samples through the appropriate University waste streams and never place hazardous materials in general waste.

By using chemicals efficiently and preparing only the materials needed, we can reduce waste, conserve resources, lower costs, and support a safer and more sustainable laboratory environment.

Sample Management and Storage

All samples should be **clearly labelled** and stored appropriately. Maintain accurate and up-to-date records of all samples that are prepared, including relevant details such as contents, date of preparation, and ownership.

Samples that are no longer required should be disposed of through the **University's approved waste disposal procedures**. Unlabelled or abandoned samples should not be retained unnecessarily.

Please consult your **PI** before disposing of any samples. Samples that are still required for ongoing or future work should be stored safely and discussed with the PI if there is any uncertainty regarding their retention.

Good record keeping and responsible sample management are essential for safety, compliance, and efficient use of laboratory space.