

Risk Assessment for: PSLU C3 Practical 1

RA1

University of Cambridge, general risk assessment form

Performing the iodine oscillator experiment. The students will mix a variety of chemicals in glass vessels and observe a reaction.

List the significant hazard(s). ¹	Describe what could go wrong – that is, say who might be hurt and how. ²	Is the risk high, medium or low? ³	Please list the existing and/or intended control measures which will reduce the likelihood of all this happening. ⁴	Suggest here any further actions which may be beneficial. Say who will carry them out and by when.
Chemical (see attached form)	See attached chemical hazards risk assessment	medium/low	Nitrile gloves, safety glasses, lab coats. Use of relatively small amounts of the chemicals. Protocol to reduce chances of exposure.	The diluted solutions, once prepared for use in the reaction, require no hazard warning.
Glassware: beakers and jars.	Glass can be broken, and this can cut people.	low	Protocol involves careful handling of glassware. High quality borosilicate glassware will be purchased, and this glassware is more robust to chips and breaks. Nitrile gloves and lab coats provide limited protection for cuts from broken glass.	A glass-resistant material to clean up the glass if it's broken, and bandages for cuts or scrapes.

List the significant hazard(s). ¹	Describe what could go wrong – that is, say who might be hurt and how. ²	Is the risk high, medium or low? ³	Please list the existing and/or intended control measures which will reduce the likelihood of all this happening. ⁴	Suggest here any further actions which may be beneficial. Say who will carry them out and by when.

Important! It is essential to check regularly that control measures specified in this risk assessment document are actually being used in practice. Any specialist emergency or first aid procedures should be specified here.

If any Standard Operating Procedure (SOP) is required, please specify it here or attach it to this form. Any specialist training required should also be specified here	
Is special monitoring (e.g. hearing test, eye test, health surveillance) required? If so, please enter details and also contact the University Occupational Health Service.	What personal protective equipment (PPE) is required (e.g. overalls, gloves, respiratory protection, eye protection)? You must ensure that any PPE specified is suitable for the purpose.

Please complete this section to confirm that this constitutes a suitable and sufficient assessment of risk.

Name of assessor: Paul B Rimmer	Signature: [DIGITAL SIGNATURE]	Date: 3 February 2025	Name of supervisor:	Signature:	Date:
---	--	---------------------------------	---------------------	------------	-------

This assessment should be reviewed regularly (usually every 12 months), or earlier if there is a material change to the process, the equipment, location or relevant safety technologies. It should also be reviewed when new people are involved, or after an accident or incident has taken place.

Reviewed by (name)	Signature	Date	Indicate changes here ⁵

¹ A list of hazards is provided below to help you, but this may not be exhaustive. If any of these hazards can be eliminated altogether, or can be reduced at source by making an inherent change then we must consider doing so. Hazards in **bold** will also need an additional, more technical assessment on a specialist form - please ask your Departmental Safety Officer or the University Safety Office for further advice.

High or low temperatures	High pressures	Chemical hazards	Biological hazards	Genetically Modified Organisms	
Ionising radiations	Lasers	Sharp objects	Dusts	Work at heights	Animal houses
Magnetic fields	Machinery hazards	Electricity	Manual Handling	Noise	Vibration
Falling objects	Collapsing structures	Flooding	Slips, trips and falls	Asphyxiant gases	Flammable gases

² Please explain how an accident, incident or health condition could arise. We must consider all events which are *reasonably foreseeable*.

³ Please see the health and safety risk assessment handbook for further guidance on levels of risk.

⁴ When deciding on suitable control measures, you should ensure that you are complying with all relevant University policy and guidance documents, and that you have considered the hierarchy of control measures. In order to comply with legislation, we must also take all steps which are 'reasonably practicable' to reduce risk. This means that we should take all steps which are (in terms of time, cost and trouble) reasonable in relation to the reduction of risk achieved.

⁵ If changes are extensive, you will need to complete a whole new form, or attach a written amendment. If there are no changes say so.