

Risk Assessment Form

Title of Risk Assessment

Date of assessment

Department

Date review due

Description of Task/Process

Assessment carried out by

Additional information

This lab contains 3 particle sizing instruments, 1 drop shape analyser, 1 universal tester plus an electrochemical rig owned by Paul Wilson (Chemistry) which is covered in a separate risk assessment. In these cases contact with the researchers own samples must be taken into account. If users are bringing hazardous substances into the lab they must have their own materials risk assessments. Any other users within the vicinity should be made aware of any substances that they could possibly come into contact with. Gloves are to be worn as appropriate for sample preparation. Lab coats and safety specs are mandatory. Gloves must be removed when using computers to minimise transfer of chemicals.

No instrumentation is to be used other than that which the individual is trained for, however, they should be aware of the all the risks possible in the lab.

Users are not permitted to access any of the inner workings of these instruments. The detectors of these instruments contain lasers (covered in hazard assessment). No one apart from instrument engineers have access to these and they are contained with units that have multiple layers and will shut down if the first layer is opened. Some solvents are required as dispersants for the instruments, these are not provided by the facility and users are expected to have their own risk assessments for any materials they bring into the lab. Some calibration standards are kept within the lab.

The lab is an instrumentation lab and is not appropriate for any synthetic work.

For any minor injuries, first aid is available immediately outside of the lab to the right. An eyewash is located at one end of the lab. A list of local first aiders can be found immediately outside of the lab.

Lab access is restricted as it is located on a card-access corridor to prevent non-inducted personnel interfering in the lab without permission.

All users are trained and inducted by RTP staff. This includes information on what are the hazards and how to avoid them where possible. Any non-inducted lab visitors will be escorted and prevented from interaction with any equipment.

A first aid kit and spill kit are located outside of the lab to the right hand side by the lift. First aiders are located along the corridor, where a list is found near the lift.

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<u>Hazards and how they may cause harm</u>	<u>Who may be at Risk?</u>	<u>Existing Control Measures</u>	<u>Current Risk Level</u> (VL,L,M,H,VH)	<u>Where current risk is M, H or VH, what additional Control Measures are required?</u>	<u>Action required by whom & by when?</u>	<u>Final Risk Level</u>
Lasers (classes 1 & 3)	Users of the instrument, cleaners, visitors	In particle size instruments access to internal parts of the instruments is limited and training is given to dissuade users from trying to access the internal parts. Safety features built into instruments lead to automatic shut-down if laser access is attempted. Non-inducted users to be chaperoned by trained member of lab.	L			
Mechanical/moving parts	Users of the instrument, cleaners, visitors	Mechanical risks are minimised by removing those that where possible. Syringe pump on DSA can move, however, it is not mechanically	L			

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		strong and access to it is physically limited. Universal tester is a moving rig. It is only to be used by trained personnel. It has an emergency shut off button if required. As part of induction users will be taught the associated mechanical risks of the labs and how not to interact with moving parts. Non-inducted users to be chaperoned by trained member of lab.				
Exposure to chemicals from samples (inhalation, skin contact, ingestion)	Users of the instrument, cleaners, visitors	Risk assessments for an individual's materials must be known to the individual. PPE must be worn, gloves if appropriate. Users must take care not to allow their materials to come into contact with others, and others should not interfere with materials of others. Any of these chemicals should be present in low quantities (under 100 mg). Eating and drinking prohibited to prevent accidental consumption. Spare PPE provided.	Dependent on material. M			
Exposure to chemicals stored in the labs (inhalation, skin contact, ingestion)	Users of the instrument, cleaners, visitors	Only calibration standards are stored in the lab. The specific risks are covered in the hazard assessment for this lab. Gloves and correct disposal is provided. Access to chemicals is limited to laboratory staff.	M			

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Slips, trips and falls.	Users of the instrument, cleaners, visitors	Walkways are kept clear and floors kept clean and dry.	L			
Fire hazard	Users of the instrument, cleaners, visitors	Fire risk always a possibility. Flammable materials kept to a minimum. Some electrical equipment present which could lead to electrical fires however, electrical equipment is regulated and tested and no electrical items are overloaded. Equipment has PAT sticker.	L			
Cuts from broken glass	Anyone using glass	Glass pipettes provided. These are delicate and easily break and can lead to minor cuts. Correct handling of glassware should be applied. First aid kit is provided outside of the lab to the right hand side by the left. First aiders are present throughout the corridor.	L			

Work should not be carried out until the assessment is completed and all required control measures are in place.

Overall Final Risk Rating (Highest level in final column above)	M
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Additional Comments from Risk Assessor (e.g. funding or practical implications)	
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Approved By	
Date	

Position	
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Please print a copy, sign it and keep for your records

	Severity				
Likelihood	Superficial	Minor	Serious	Major	Extreme
Unlikely	Very low	Very low	Low	Low	Moderate
Possible	Very low	Low	Low	Moderate	High
Likely	Low	Low	Moderate	High	Very high
Very likely	Low	Moderate	High	Very high	Very high
Extremely likely	Moderate	High	Very high	Very high	Very high

Risk Level	
Very low	Acceptable risk - no action required
Low	Tolerable risk - further control measures not required, but status must be monitored
Moderate	Further control measures required to reduce risk as far as is reasonably practical
High	Urgent action required to allow activity to continue
Very high	Risk intolerable - activity must cease until the risk has been reduced

See ['Matrix for risk evaluation'](#) for further guidance.