

Reference	2043	Description of Space or Activity/Task or Equipment	The Laboratory house 4 optical Microscopes, associated accessories and storgae for non hazardous samples.
Assessment Date	01/09/2022	Publish To Portal	No
Assessor Name	Ben Breeze	Title / Location	Millburn House Ground Floor G31 Optical Microscope Room
Assessment Team Members	Ben Breeze Ben Green Gloria Zhou	Review Date	28/09/2023
Role / Space / Project Reference		Current Risk Level (1=Very Low, 2=Low, 3=Moderate, 4=High, 5=Very High)	2
Department	Use the search function above or double click here for org chart -> Academic Faculties -> Faculty of Science, Engineering and Medicine -> Research Technology Platforms - RTPs -> Spectroscopy Research Technology Platform - RTP	Final Risk Level (1=Very Low, 2=Low, 3=Moderate, 4=High, 5=Very High)	2
Location Details	01.005.000.031 Millburn House Ground Floor G31 Optical Microscope Room	Not in use	0
Risk Assessment Category	Space	Additional Information	Each piece of equipment has its own SoP and RA these should be followed as well as this document.
Date Record Created	28/09/2022		

## Risk Assessment Summary Report/Print (landscape)



Hazard Type & Hazard Description	Who may be at Risk? & How May Person(s) Be Harmed	Existing Control Measures	L	S	R	Where current risk is M, H or VH, what additional Control Measures are required?	L	S	R
Equipment/Plant Rupture of pressurised systems.	Contractor Laboratory Worker Staff Student	Eng/Admin - Access is restricted to authorised personnel. Eng/Admin - Emergency stop controls are suitable located and identified. Admin - Associated equipment installed by competent persons. Admin - Awareness training provided. Admin - Good levels of housekeeping maintained with clean as you go policy in place. Eng - Volume of pressure tank kept to a minimum. Eng - Pressure release valves on tank.	Serious	Unlikely	Low		Serious	Unlikely	Low
Work Environment Insufficient or poor lighting.	Contractor Laboratory Worker Staff Student Falls Trips Bruies	Eng - Lighting level sufficient for work activity. Additional task lighting to be considered. When possible the full room lights are left on.	Superficial	Possible	Very Low		Superficial	Possible	Very Low
Hand Tools / Powered tools Scaple and cutting tools	Contractor Laboratory Worker Staff Student cuts	Admin - Appropriate tool for the job. Admin - Defective equipment taken out of use. Admin - Hair tied back / no ties or jewellery. Admin - Portable Appliance Testing (PAT) conducted as per regime. PPE - Personal Protective Equipment (PPE) is issued and worn (specify).	Minor	Possible	Low		Minor	Possible	Low



Substances Epoxy glue used for sample mounting.	Contractor Laboratory Worker Staff Student Irritation to skin Damage to eye Inhalation of fumes.	Admin - Awareness training provided. Admin - General ventilation used. Admin - Refer to relevant COSHH Assessment (see safety Folder in lab). Admin - Storage in accordance with substance requirement. Admin - University policy & procedure guidance followed. PPE - Personal Protective Equipment (PPE) is issued and worn (gloves and safety glasses available in lab).	Minor	Possible	Low	Minor	Possible	Low
Hand Tools / Powered tools Hand tools used for equipment set up and sample mounting.	Contractor Laboratory Worker Staff Student Cuts Bruises	<ul> <li>Admin - Appropriate tool for the job.</li> <li>Admin - Defective equipment taken out of use.</li> <li>Admin - Hair tied back / no ties or jewellery.</li> <li>Admin - Portable Appliance</li> <li>Testing (PAT) conducted as per regime.</li> <li>PPE - Personal Protective</li> <li>Equipment (PPE) is issued and worn (specify).</li> </ul>	Serious	Possible	Low	Serious	Possible	Low
Substances Solvents used for cleaning samples. Acetone 2-Propanol	Contractor Laboratory Worker Staff Student Irritation to skin Damage to eye Inhalation of fumes.	Admin - Awareness training provided. Admin - General ventilation used. Admin - Refer to relevant COSHH Assessment (see safety Folder in lab). Admin - Storage in accordance with substance requirement. Admin - University policy & procedure guidance followed. PPE - Personal Protective Equipment (PPE) is issued and worn (gloves and safety glasses available in lab).	Minor	Possible	Low	Minor	Possible	Low

## Risk Assessment Summary Report/Print (landscape)



NIR Artificial Optical Radiation - Infra red NIR light from an incoherent broad band source.	Contractor Laboratory Worker Staff Student Burns Damage to Eye Irritation to Eye or Skin	Eng/Admin - Access is restricted to authorised personnel. Eng - Specific guarding in place to reduce exposure. Admin - Information, instruction, supervision & training. PPE - Personal Protective Equipment (PPE) is issued and worn (specify). Eng - Light is non coherent and non columnated so does not pose a large hazard. Elim - Light is kept at low power levels when possible. Eng - When required to be at high light is enclosed in class style light tight boxes with interlocks.	Serious	Possible	Low	Serious	Possible	Low
NIR Artificial Optical Radiation - Ultraviolet UV-VIs light from an incoherent broad band source.	Contractor Laboratory Worker Staff Student Burns Damage to Eye Irritation to Eye or Skin	Eng/Admin - Access is restricted to authorised personnel. Eng - Specific guarding in place to reduce exposure. Admin - Information, instruction, supervision & training. PPE - Personal Protective Equipment (PPE) is issued and worn (specify). Eng - Light is non coherent and non columnated so does not pose a large hazard. Elim - Light is kept at low power levels when possible. Eng - When required to be at high light is enclosed in class style light tight boxes with interlocks.	Serious	Possible	Low	Serious	Possible	Low



Electricity Contact with live electrics.	Contractor Laboratory Worker Staff Student Electocution Burns	<ul> <li>Eng - Cables and leads are appropriately insulated.</li> <li>Eng - Fixed guarding is in place preventing access.</li> <li>Eng - Electrical cabinets are secured.</li> <li>Eng - Electrical equipment is suitably fused and earthed.</li> <li>Eng/Admin - Access is restricted to authorised personnel.</li> <li>Admin - Awareness training provided.</li> <li>Admin - Information, instruction, supervision &amp; training.</li> <li>Admin - Permit to work system establish and used.</li> <li>Admin - Safe System of Work (SSoW) established and trained out.</li> </ul>	Major	Unlikely	Low	Major	Unlikely	Low
Assessment Conclus	sion A low risk wo	rking area with only very mir	nor sample	handling task	S.			