

Risk Assessment Summary Report/Print (landscape)



Reference	3493	Description of Space or Activity/Task or Equipment	Use of the Ther Fisher Nicolet iS50R FT-IR spectrometer located in Millburn house G78 at cryogenic, elevated and room temperatures. includes use of Golden Gate ATR, Linkam THMS600 VT stage, OI microstat and home built MicroSat
Assessment Date	06/09/2024	Publish To Portal	No
Assessor Name	Ben Breeze	Risk Assessment Title	Thermo Fisher Nicolet iS50R FT-IR spectrometer
Assessment Team Members		Review Date	No Review Set
Role / Space / Project Reference		Current Risk Level (1=Very Low, 2=Low, 3=Moderate, 4=High, 5=Very High)	3
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)	3
Location Details	Central Campus-Millburn House-Ground Floor-G78 - (01.005.000.051) Spectroscopy RTP Laboratory Millburn House G78	Risk Assessment Number	0

Risk Assessment Summary Report/Print (landscape)



Risk Assessment Category	Equipment	Additional Information	Users are responsible for having performed a risk assessment for their samples which must be logged at: https://warwick.ac.uk/research/rtp/spectroscopy/Safety/Sample When booking all users will provide a reference to the risk assessment for the sample used. All Users must complete training course before operating the spectrometer. Bookings are restricted to trained users who are recorded in the px-OpticalAbsorption-users web group. All users will require retraining if they have not operated the system for 18 months. Document History Version Date Reviewer Comments 1 07/12/20 Ben Breeze Initial Review 2 08/09/21 Ben Breeze Scheduled Review Updated Format 3
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Date Record Created	06/09/2024		
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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
Work Environment Temperature (too hot or cold). Equipment and Samples may be at elevated temperatures	Laboratory Worker Staff Student Burns	Admin - Awareness training provided. Admin - Emergency response plan established and trained out. Admin - Safe System of Work (SSoW) established and trained out. Admin - Signage used to raise awareness. PPE - Personal Protective Equipment (PPE) or suitable clothing is issued and worn (thermal gloves).	Serious	Unlikely	Low		Serious	Unlikely	Low

Risk Assessment Summary Report/Print (landscape)



<p>Equipment/Plant Trapping or object being dropped. Contact with rotating mechanical parts (Friction). Contact with mechanical pinch or nip points.</p>	<p>Laboratory Worker Staff Student Trapped fingers Bruises</p>	<p>Admin - Information, instruction, supervision & training. Eng/Admin - Adjustable guarding in place to allow safe use. Admin - Awareness training provided. Admin - Controls are suitably located and identified. Admin - Safe System of Work (SSoW) established and trained out.</p>	<p>Minor</p>	<p>Possible</p>	<p>Low</p>		<p>Minor</p>	<p>Possible</p>	<p>Low</p>
<p>Equipment/Plant broken glassware Contact with sharp blade (cuts).</p>	<p>Laboratory Worker Staff Student Cuts from broken quartz</p>	<p>Admin - Defective equipment taken out of use. Admin - Information, instruction, supervision & training. PPE - Personal Protective Equipment (PPE) is issued and worn (gloves goggles). Take care, dispose of sharps and broken glass in the approved receptacles provided.</p>	<p>Minor</p>	<p>Unlikely</p>	<p>Very Low</p>		<p>Minor</p>	<p>Unlikely</p>	<p>Very Low</p>
<p>Substances Cryogenics Inhalation exposure to hazardous substance. Contact with substances stored at hazardous temperature. Inhalation exposure to hazardous substance.</p>	<p>Laboratory Worker Staff Student Inhalation or ingestion causing loss of consciousness, and or Death</p>	<p>Eng - oxygen depletion sensors throughout lab Admin - Awareness training provided. Admin - Information, instruction, supervision & training. Admin - General ventilation used. Admin - Safe System of Work (SSoW) established and trained out. Admin - Storage in accordance with substance requirement. Admin - University policy & procedure guidance followed. PPE - Personal Protective Equipment (PPE) is issued and worn (specify).</p>	<p>Extreme</p>	<p>Unlikely</p>	<p>Moderate</p>		<p>Extreme</p>	<p>Unlikely</p>	<p>Moderate</p>

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<p>Substances Cryogenics</p> <p>Contact with substances stored at hazardous temperature. Contact or interaction with dangerous substances. Eye exposure to hazardous substance. Skin exposure to hazardous substance.</p>	<p>Laboratory Worker Staff Student</p> <p>Contact resulting in cryogenic Burns</p>	<p>dmin - Awareness training provided. Admin - Information, instruction, supervision & training. Admin - General ventilation used. Admin - Safe System of Work (SSoW) established and trained out. Admin - Storage in accordance with substance requirement. Admin - University policy & procedure guidance followed. PPE - Personal Protective Equipment (PPE) is issued and worn (specify). Admin - Awareness training provided. Admin - Information, instruction, supervision & training. Admin - General ventilation used. Admin - Safe System of Work (SSoW) established and trained out. Admin - Storage in accordance with substance requirement. Admin - University policy & procedure guidance followed. PPE - Personal Protective Equipment (PPE) is issued and worn (specify).</p>	<p>Serious</p>	<p>Unlikely</p>	<p>Low</p>		<p>Serious</p>	<p>Unlikely</p>	<p>Low</p>
<p>NIR Artificial Optical Radiation - Infra red Potential exposure to Non-ionising radiation (Infrared - heat/cataracts)</p>	<p>Light affecting eye Light affecting eye</p>	<p>Eng- Light power is low Eng - Engineered measures – remote controls, screening, interlocks, clamps to hold material. Eng - Fixed guarding is in place preventing access. Admin - Information, instruction, supervision & training. Admin - Safe System of Work (SSoW) established and trained out.</p>	<p>Serious</p>	<p>Unlikely</p>	<p>Low</p>		<p>Serious</p>	<p>Unlikely</p>	<p>Low</p>

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Electricity Contact with live electrics.	Laboratory Worker Staff Student Electric Shock and/or burns	Eng - Additional power sockets installed (reducing need to daisy-chain extension cables). Eng - Cables and leads are appropriately insulated. Eng - Fixed guarding is in place preventing access.	Serious	Unlikely	Low		Serious	Unlikely	Low
Assessment Conclusion	Safe operating procedure								