Risk Assessment Form

Title of Assessment	FTIR	Date of assessment	06/12/22
		Date for review	06/12/23
Department	Research technology platform (RTP)		
Descriptions of Activities	Sample preparation and taking Fourier Transform Infrared Spectrum		
Name of those working to this assessment	Trained users of the FTIR in MAS third floor	Any others who may be affected by this assessment	Other users of the room
Assessment carried out by	Dr Jack Woolley		

Additional information

This is an internal and external user facility therefor there will be many people using the spectrometer, often just a single time. All users will be trained by the facility manager, Dr Jack Woolley, or an approved user and supervised if deemed necessary by him or their immediate supervisors.

Foreseeable Significant Hazard	Existing control measures	Controlled residual risk	**Further Action** where risk remains moderate/high	By whom & when	Controlled Risk Level
Exposure to IR Radiation	Light is entirely contained during normal operation. Some possibility of exposure when changing samples but SOPs and PPE cover this.	low			
Exposure to high voltage electricity	The electric systems are entirely closed at all times. Only certified service engineers will have access.	Very low			
Exposure to Cryogens (liquid N_2) and cold temperatures	Use of Cryogens are accessed under a separate risk assessment, but amount used are smaller and contained in a separate Dewar for the detector once filled.	low			
Exposure to Vacuum pump noise/heat	Vacuum pump only operates when needed and is never left in an evacuated state unattended. The noise is muffled by a silencer and only when the system is evacuating the heat is reduced by only operating the pump when needed.	Med	User instructed not to touch the Vacuum pump. Vacuum pump is located away from the areas in constant use to prevent accidental touching.	Users	low
Use of Nitrogen Gas.	Gas available through the pipe work of the building with the correct regulator and shut off valve. Regulator is inspected along with pipe work before use and area is well ventilated to remove the possibility of over pressurizing inside the FTIR.	low			

Exposure to hazardous chemicals	SOPs and PPE will always be in place. Sample sizes will, by necessity, be minimal, bulk sample preparation, solutions etc. will take place elsewhere. Gloves and goggles must be warn at all times when handling chemicals. No noxious chemicals or dangerous gases to be used at any times.	low	In the event of a spill of a harmful substance, SOPs must be followed and appropriate personnel (Dr Jack Woolley, or Dr James Lloyd-Hughes) must be informed immediately.	Current user, as soon as relevant.	

Work should not be carried out until the assessment is completed to a suitable & sufficient level and all required control measures are in place.

Is assessment suitable and sufficient Yes

Any further actions required to allow work to commence	

Approved By	Dr James Lloyd-Hughes
Date	07/12/22

Position	(RTP) Director

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

	Severity of injury

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

See 'Matrix for risk evaluation' for further guidance.

Overall Risk Rating (highest level found)	low