

Project Risk Assessment

Project title:				
Student experimenter:				
Project supervisor:				
Location:				
Duration:	Start date:		End date:	

Safety key no. (if applicable):	
Main point of isolation:	
Special precautions/instructions:	

LEVEL OF SUPERVISION

(to be completed by the Academic Supervisor/Laboratory Manager)

Work to be carried out only with other Authorised Experimenters/Authorised Student Experimenters present in the laboratory:	<input type="checkbox"/>
Work to be carried out in the presence of the student's Academic Supervisor:	<input type="checkbox"/>
Work to be carried out in the presence of a Senior Authorised Experimenter (SAE):	<input type="checkbox"/>
Work to be carried out with a SAE present in the building:	<input type="checkbox"/>

ACKNOWLEDGEMENT

The Risk Assessment is valid only for the work described in this document and for the indicated dates. Any change in the work beyond what is identified in this document means that work must stop and the Risk Assessment reviewed. This Risk Assessment should be clearly displayed at the location where the work is taking place at all times.

Student name:		Signature:		Date:	
Supervisor name:		Signature:		Date:	

METHOD STATEMENT

<Description of the experiment/work undertaken including relevant diagrams and list of equipment>

Hazard(s) & Possible Consequences	Persons or Equipment at Risk	Control measures applied to eliminate / minimise risk	Residual risk with control measures applied			
			Severity	Likelihood	Risk rating	Risk Acceptable?
Electric shock from high voltage (1kV up to 30kV) Operating at approx. 20kV	Anyone present in the laboratory	1. HV supply is safely interlocked to prevent supply being energised when test area doors are open. 2. Remote operation of test equipment from outside salt fog chamber. 3. Operation of HV test supplies is supervised by appropriately trained and experienced personnel only. 4. Test supply controlled by safety key- kept on the person of the experiments at all times when test rig is not energised. 5. Manual earths applied to supply outputs when entering the test area. 6. Warning lights and hazard notices are prominently displayed.	5	1	5	yes
Electric shock from low voltage(below 1kV)	Test Operator	All Low Voltage 0 - 415V Supply To Salt Fog Chamber Controlled Outside Chamber From Appropriate Control Panel. All Voltage, Current & PD Measurements To Be Made Via Low Impedance Sources.	2	2	4	yes
Head Height Hazards	Person setting up the experiment	Head height hazard presented by overhanging bushing inside the chamber and insulators, suspended inside the chamber.	4	1	4	yes

Slip hazards due to water	Person setting up the experiment	Slip hazards may be present due to small amounts of water being present on chamber floor. All excessive water to be mopped after test so floor surface isn't at slip.	5	1	5	yes
Trip hazards due to trailing leads	Anyone Present In The Laboratory	Trip hazards present from earth and instrumentation leads inside and outside chamber	2	1	2	yes
Fire	Anyone in the Building	Rig currently is not developed for long term unsupervised testing. Additional safeguards against fire to be fitted in the event of long term testing. Heat detectors in chamber to isolate supply in the event of a fault.	5	1	5	yes
Legionnaires Disease	Anyone present in the building	Test Facility to be disinfected using dilute sodium hypochlorite solution as specified in cleaning method statement on a regular basis.	3	2	6	yes

Risk Assessment Matrix Likelihood (1-5) x Severity (1-5) = Risk (See attached matrix for guidance)	1 – 5: Low: Tolerable → monitor and manage
	6 – 8: Medium: Review → introduce further controls to reduce to as low as reasonably practicable
	9 – 25: High: Intolerable → do not commence work, further control measures required

RECORD OF CHEMICAL USAGE WITHIN EXPERIMENT

Chemical	Reason for use	Data sheet /COSHH attached?	Are hazards resulting from use described in the Risk Assessment Table?	Method of disposal

HAZARD CHECKLIST

You should indicate the hazards present in the experiment in the table below. If a hazard is present, control measures should be stated on the risk assessment. Note that this list is not exhaustive.

Hazard Type	Present	Not Present
Electric shock from high voltage (1 kV & Over)	<input type="checkbox"/>	<input type="checkbox"/>
Electric shock from low voltage (Under 1 kV)	<input type="checkbox"/>	<input type="checkbox"/>
Tripping hazards	<input type="checkbox"/>	<input type="checkbox"/>
Slipping hazards	<input type="checkbox"/>	<input type="checkbox"/>
Fire	<input type="checkbox"/>	<input type="checkbox"/>
High temperatures	<input type="checkbox"/>	<input type="checkbox"/>
Low temperatures	<input type="checkbox"/>	<input type="checkbox"/>
High pressure	<input type="checkbox"/>	<input type="checkbox"/>
Low pressure	<input type="checkbox"/>	<input type="checkbox"/>
Chemical spillage	<input type="checkbox"/>	<input type="checkbox"/>
Chemical contact (ingestion, eye & skin contact)	<input type="checkbox"/>	<input type="checkbox"/>
High noise levels	<input type="checkbox"/>	<input type="checkbox"/>
Working at height	<input type="checkbox"/>	<input type="checkbox"/>
Head height hazards	<input type="checkbox"/>	<input type="checkbox"/>
Production of dust & fumes	<input type="checkbox"/>	<input type="checkbox"/>
Manual handling	<input type="checkbox"/>	<input type="checkbox"/>
Production or use of radiation	<input type="checkbox"/>	<input type="checkbox"/>
Use of asphyxiating gases	<input type="checkbox"/>	<input type="checkbox"/>
Any other hazards (specify)	<input type="checkbox"/>	<input type="checkbox"/>

RISK ASSESSMENT SEVERITY MATRIX

SEVERITY VALUE = Potential consequence of an incident/injury given current level of controls.

- 5 Very High: Death / Permanent incapacity / Widespread loss
- 4 High: Major Injury (Reportable Category) / Severe Incapacity / Serious Loss
- 3 Moderate: Injury / Illness of 3 days or more absence (reportable category) / Moderate loss
- 2 Slight: Minor injury / Illness – Immediate 1st Aid only / slight loss
- 1 Negligible: No injury or trivial injury / illness / loss

LIKELIHOOD = what is the potential of an incident or injury occurring given the current level of controls.

- 5 Almost certain to occur
- 4 Likely to occur
- 3 Quite possible to occur
- 2 Not likely to occur
- 1 Almost certain not to occur

Risk Classification Value = Likelihood × Severity

		Severity				
		1	2	3	4	5
Likelihood	1					
	2					
	3					
	4					
	5					

Risk Classification Value

1–5: Low: Tolerable → monitor and manage
6–8: Medium: Review → introduce further controls to reduce to as low as reasonably practicable
9–25: High: Intolerable → do not commence work, further control measures required