



University
of Glasgow

School of Physics
& Astronomy

SAFETY REGULATIONS AND EMERGENCY PLAN

2022 Edition

Document version date 6/4/22

TABLE OF CONTENTS

Preface.....	3
Safety Policy of the School of Physics and Astronomy	4
School of Physics & Astronomy Health and Safety Plan	4
Safety Organization	5
General management responsibilities	5
Safety Committee specific responsibilities.....	5
Convenor of Safety Committee	5
Safety Co-ordinator	5
Area Fire Officer.....	6
Radiation Protection Officer	6
Laser Safety Officer.....	7
First Aid Co-ordinator.....	8
Heavy Lifting Supervisor.	8
Organizational Chart: Safety Committee	8
Safety Committee Members and contact details	8
First Aiders	9
Location of First Aid Boxes	9
Safety Regulations	11
Regulations for the Control of Substances Hazardous to Health	11
COSHH Regulations	11
Incident Reporting	11
Risk Assessments	11
Fire Prevention	12
Fire Alarm Testing	12
Working Outwith Normal Hours	12
Kelvin Building Fire Wardens.....	13
Safety & Travel	14
Working away from the University	14
Travel insurance	14
Research Furth of Glasgow	14
Duty of care.....	14
General Safety	15
Use of Display Screen Equipment	16
Equipment	16
Environment	16

Job Design	16
EMERGENCY PLAN	16
FIRE, POLICE, AMBULANCE	17
Accident or Illness.....	17
Burst pipes, electrical faults etc.	17
Fire.....	17
On Discovering a Fire:	17
On Hearing a Warning of Fire	18
Refuge areas	18
Working with Chemicals	19
Chemical Emergencies	19
Contact with Skin	19
Contact with Eyes	20
Ingestion of Chemicals	20
Optical Radiation	20
Electric Shock.....	20
Radiation Incidents/Emergencies	20
Working at Height.....	21
Maintaining portable electrical equipment	21
P&A Strategy	22
Implementation	23
Useful Telephone Numbers	23
Appendix.....	25
Risk Assessment Summary Form:	a
SEPS Risk Assessment form.....	b

The Health and Safety at Work Act 1974 (<http://www.hse.gov.uk/legislation/hswa.htm>) places responsibility on both employer and employee for health and safety. Two of the more important sections of the Act are given below:

Section 2 (1)

It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees.

Section 7

It shall be the duty of every employee while at work:

a) To take reasonable care for the health and safety of himself and other persons who may be affected by his acts or omissions at work; and

b) as regards any duty or requirement imposed on his employer, or any other person, by or under the statutory provisions, to co-operate with them so far as is necessary to enable that duty or requirement to be performed or complied with.

It must be emphasized that anyone who contravenes the above act is liable to be prosecuted in the event of an accident resulting from the contravention.

SAFETY POLICY OF THE SCHOOL OF PHYSICS AND ASTRONOMY

The School of Physics and Astronomy recognizes that its work can sometimes be hazardous. It is the philosophy and belief of this School that the maintenance of good health and safety standards will improve overall performance and cost effectiveness. Also, successful management of health and safety can only be effectively achieved through the concerted effort and active participation of every staff member. Its success relies entirely on the contribution each person makes towards health and safety.

The Head of School is responsible for putting into place effective arrangements for ensuring the health and safety at work of all staff and students so far as such matters are within his/her control. It is my intention that the health and safety of staff and students will not be compromised for the sake of expediency.

Each level within the School is accountable to its respective senior and at the same time responsible for its subordinates. Supervisors should lead, motivate and encourage their staff to report on hazards and to discuss openly all matters relating to safety.

Safety Policy is made, and safety performance is monitored, by the Head of School under the guidance and advice of the Safety Committee, comprising staff representatives from the various sections.

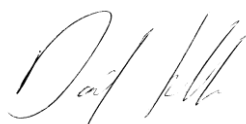
The School recognizes that safety requirements which are required by law set only a minimum standard. Safety standards are dynamic in nature, and the School underlines the significance of its commitment by constantly reviewing its own safety standards. As far as conditions and resources permit, the School is committed to continual and progressive improvement in safety standards.

All staff in the School are required to observe health and safety rules and standards, and senior staff are to set a good example. Deliberate deviation from the established rules and practices may result in disciplinary action.

This Policy Statement will be reviewed at least annually by the Safety Committee.

Finally, it is required that all persons working in the School should read these Safety Regulations and the accompanying Emergency Plan and ensure that their actions are in accord with the rules and guidelines laid down.

January 2022



Professor David Ireland

Head of School of Physics and Astronomy

SCHOOL OF PHYSICS & ASTRONOMY HEALTH AND SAFETY PLAN

The following items form the basis for an on-going School Health and Safety Plan. The main objectives of this plan are to provide a regular review of local safety procedures and regulations in line with the Safety Policy of the School Policy Statement (this document). To this end, the Safety Committee will undertake to:

- review the School Safety document (annually)
- review and update all COSHH risk assessments (on a regular basis, dependent on the nature of the risk)
- prepare of non-COSHH risk assessments
- ensure portable appliance testing (every 2-5 years, depending on the appliance)
- conduct safety inspections of all offices, labs, lecture theatres and public areas.

SAFETY ORGANIZATION

The Head of School is responsible to the University Court for health and safety in the School.

However, responsibility for formulating safety policy and advising on safety matters has been delegated to the Safety Committee, which meets frequently throughout the year.

GENERAL MANAGEMENT RESPONSIBILITIES

For each sector of activity¹ in the school (research group, teaching lab, support staff) the sector safety leader (for example, research group leader) is responsible for the following duties:

1. Ensuring appropriate Risk Assessment documents are up-to-date, relevant and available to all relevant personnel (and including undergraduates in a teaching lab)
2. Ensuring that appropriate training for sector personnel is undertaken, and a record of competences is maintained.
3. Ensuring that all new personnel joining that sector undergo appropriate induction training that addresses the relevant specific safety aspects of the sector activity
4. Ensure that portable electrical equipment deployed in that sector activity is maintained in a safe condition, consistent with HSE guidance (<https://www.hse.gov.uk/pubns/indg236.pdf>) and the School strategy, detailed in the section 'Maintaining Portable Electrical Equipment'.
5. Ensure that first aid boxes and/or spill kits that are located within areas allocated to that sector activity are maintained in full readiness. Supplies must be replenished as soon as possible after use, and each first aid box and spill kit must be checked at least annually.
6. Ensure competent and auditable records of all sector-specific training and safety checks.

SAFETY COMMITTEE SPECIFIC RESPONSIBILITIES

The duties of each member of the safety support committee are outlined below:

CONVENOR OF SAFETY COMMITTEE

- Chair all Safety Committee meetings.
- Appoint sub-committee to carry out annual building health and safety inspections.
- Together with the Safety Co-ordinator, provide advice to members of the School on matters of health and safety and advise the Head of School on the formulation and revision of the local Health and Safety Policy Statement and risk assessment and control procedures.
- Maintain a central record of all safety-related documentation

SAFETY CO-ORDINATOR

- Together with the Convenor of the Safety Committee, provide advice to members of the School on matters of health and safety and advise the Head of School on the formulation and revision of the local Health and Safety Policy Statement and risk assessment and control procedures.
- To monitor, on behalf of the Head of School, the duties and tasks carried out by the Safety Support personnel.
- To liaise with University Safety and Environmental Protection Services and other central advisors on health and safety matters.
- To be a member of the Safety Committee.
- To produce written systems of work for any significant risks which may be encountered in the work of the School, ensuring that these are brought to the attention of those who enter that area and that local management effect adherence to them.
- To co-ordinate and maintain records of annual health and safety inspections

The Safety Co-ordinator is available to advise on safe working practice, and to obtain expert advice where required. In the absence of the Head of School and the Convenor of the Safety Committee, the Safety Co-ordinator has the authority to halt any activity which they deem to be unacceptably hazardous.

¹ Sectors of activity in Physics & Astronomy: Research, Teaching, Support (including Technical), Administration

The following items should be reported to the Safety Co-ordinator as soon as possible:

- a) Any injury - no matter how trivial.
- b) Any dangerous occurrence - even if it does not result in injury to anyone.
- c) Any existing or potential hazard - so that it can be dealt with before it causes an accident.

AREA FIRE OFFICER

- To liaise with University Fire Officer and other University safety personnel regarding fire protection requirements, and to maintain the building Fire Precautions Logbook.
- To carry out regular inspections of escape routes with the aim of ensuring that they are kept clear for emergency use
- Rectify or report faults via local management and/or SEPS/Estates
- Keep a check on existing fire protection equipment and report any missing or damaged items promptly
- Carry out regular fire alarm tests (weekly), and maintain a record of these within the building's Fire Precautions Log Book
- To arrange and monitor fire drills, at least twice a year.
- Coordinate the activities of the local fire warden team
- To ensure all new members of staff are given instruction on Fire Emergency Procedures.
- To be a member of and report to the Safety Committee.

RADIATION PROTECTION OFFICER

- to ensure the safe use of radioactive sources (isotopes) and ionizing radiation within the School of Physics & Astronomy
- reports to the Head of School and Safety Committee.
- Duties include the updating and dissemination of information on ionizing radiation relating to the School, in alignment with University Radiation Protection Policy

The Radiation Protection Supervisor is available to advise on all matters relating to ionizing radiation.

All work with ionizing radiation must be carried out in accordance with the procedures laid down in the "Local Rules for the use of Radioactive Materials and X-Rays" (see <https://www.gla.ac.uk/myglasgow/radiationprotection/hazardinformationsheets/informationsheets/> IR99 Local Rules). This document should be read in conjunction with Note No. 8 in the booklet "Health Physics Notes" issued by the University Radiation Protection Service. Copies of these documents may be obtained from the Radiation Protection Supervisor.

A full description of the legal requirements and the procedures to be employed is given in the documents mentioned, but some important points are noted below.

- 1) In all cases, radiation workers must not expose themselves or others to ionizing radiation to a greater extent than is reasonably necessary for the purpose of their work, and the recognized dose limits for each class of worker must not be exceeded.
- 2) Radioactive sources can only be ordered through the Radiation Protection Supervisor, and all users must co-operate in maintaining security of the sources. In particular, the record system which contains details of the location of each source must be kept up to date and all transfers of sources must be notified to the Radiation Protection Supervisor. Movement or transport of radioactive sources outwith the main laboratory is subject to stringent transport regulations, and the Radiation Protection Supervisor should be contacted before any arrangements are made for transporting sources.
- 3) The use of ionizing radiation in undergraduate teaching is governed by the recommendations contained in the International Commission for Radiological Protection, Publication No 36 (1983) "Protection against Ionizing Radiation in the Teaching of Science" (<http://www.icrp.org/publication.asp?id=ICRP%20Publication%2036>). The University Radiation Protection Service has a pamphlet which summarises the recommendations. The annual dose limit for an undergraduate is 1/10 of that for a member of the public and each experiment or demonstration must not result in a radiation dose

exceeding 1/10 of the undergraduate dose limit. Laboratory Class Heads should ensure that in any experiment involving ionizing radiation, the safety procedures are properly transmitted from the demonstrator to the student. This is particularly important where there may be a change of demonstrator.

- 4) All uses of X-ray equipment must be discussed beforehand with the Radiation Protection Supervisor.

Further information see: <https://www.gla.ac.uk/services/radiationprotection/>

LASER SAFETY OFFICER

- Coordinate laser safety arrangements in the school, including training requirements and dissemination of safety information to laser users in the school
- Ensure that each laser installation in the school has adequate and appropriate radiation protection arrangements to prevent users being exposed to potentially harmful laser radiation
- performs, together with the University Laser Safety Officer, an annual inspection of all class-III or IV laser facilities in both Schools.
- reminds the research group leaders annually of their laser-safety related responsibilities.
- Report to the Head of School and the Safety Committee

The Laser Safety Officer is available to advise on all matters of safety relating to lasers.

Staff must exercise the strictest control and take all necessary precautions when using lasers. The necessary precautions are summarized in the University Safety Handbook, although staff who are responsible for lasers should also be familiar with AURPO Guidance No. 7, "on the safe use of lasers in education and research", which can be downloaded at

https://aurpo.org.uk/wp-content/uploads/AURPO_Files/Guidance_Documents/2018-02-AURPO-GN7-Safe-Use-of-Lasers-in-Education-and-Research.pdf

The siting and use of lasers in the School should be discussed with the Laser Safety Officer, and all new laser equipment should be registered with him or her.

Research laboratory areas in which lasers are operating usually have illuminated warning signs outside them, and it is important that these are switched on when the lasers are in operation and are switched off when the lasers are inoperative.

In general, a laser should not be left operating in an unoccupied room unless an interlock system, which shuts off the laser in the event of an unauthorized entry, is installed.

Appropriate protective eyewear must be provided for each member of a laser group and must always be readily available.

For laser radiation in the visible and near infra-red regions, the tissue at risk is generally recognised to be the retina of the eye. Your attention is therefore directed to the recommendations laid down in AURPO Guidance No. 7, "on the safe use of lasers in education and research" for maximum exposure of the cornea of the eye to laser radiation.

<https://aurpo.org.uk/publications/guidance/>

In view of the exceptionally low maximum values for exposure, the following basic methods of protection must be considered:

- a) Complete containment of the laser installation.
- b) Screening of the operator.
- c) Direct protection of the eyes.
- d) Assessment of the installation for safety before the start of operations.
- e) The designation, instruction and medical control of staff for laser work.

Full recommendations for the safe operation of laser systems will be found in the Laser Rules on laser safety obtainable from the Laser Supervisor.

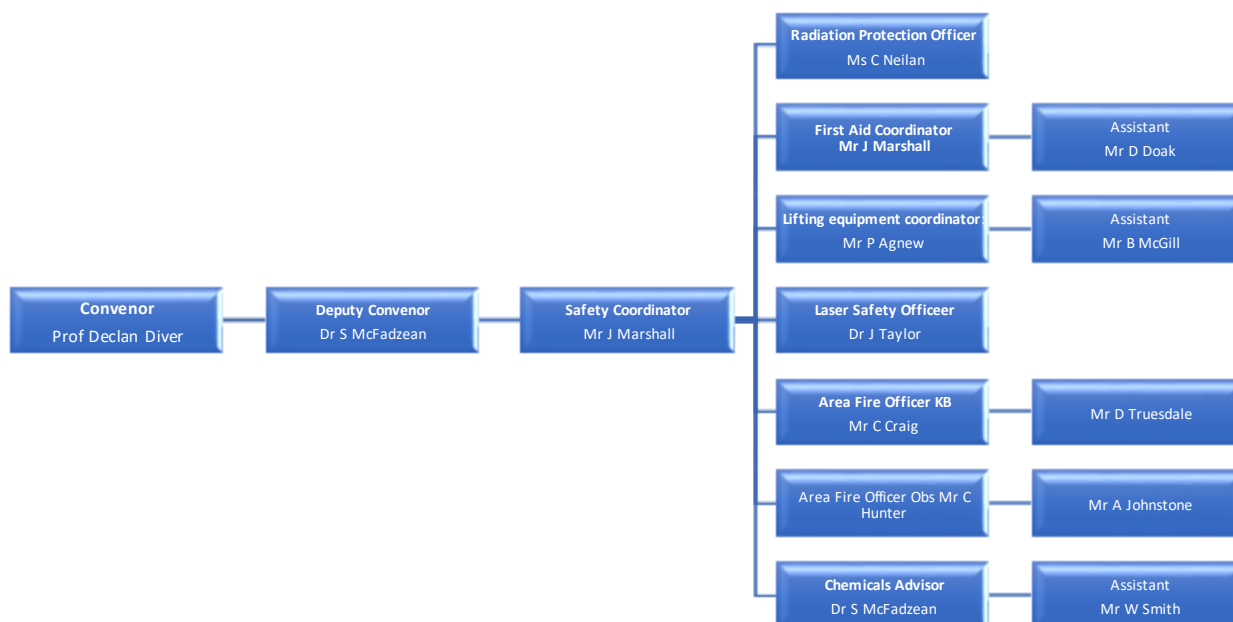
FIRST AID CO-ORDINATOR.

- To ensure first aid staff training is current.
- To order and maintain levels of first aid materials and equipment.

HEAVY LIFTING SUPERVISOR.

- To organize a task force to undertake and be responsible for all heavy loads which have to be slung, moved or lifted.
- To ensure test certificates for all lifting gear is current.
- To liaise with the University appointed insurance company’s test engineer on annual safety checks.
- To advise staff and students on safe working practices regarding heavy lifting.

ORGANIZATIONAL CHART: SAFETY COMMITTEE



SAFETY COMMITTEE MEMBERS AND CONTACT DETAILS

Committee Member	Contact details	sector
Mr P. Agnew	6409 Paul.Agnew@glasgow.ac.uk	Workshops
Ms L. Brand (minutes secretary)	Lindsay.Brand@glasgow.ac.uk	
Mr A. Clarkson	Ext 2113 Anthony.Clarkson@glasgow.ac.uk	NHP
Mr. C. Craig (Area Fire Officer, Kelvin Building)	Ext 5901 07748155509 Colin.Craig@glasgow.ac.uk	AFO
Prof D.A. Diver (Convenor)	Ext 5686 Declan.Diver@glasgow.ac.uk	Theory Groups, Admin
Mr F. Doherty	Ext 6423 Frederick.Doherty@glasgow.ac.uk	PPE
Mr. C. Hunter (Observatory)	Ext 8556 Colin.Hunter@glasgow.ac.uk	Observatories

Dr S. McFadzean (Deputy Convenor, Chemical Safety Advisor)	Ext 6397 Sam.McFadzean@glasgow.ac.uk	MCMP
Mr J. Marshall Safety Co-ordinator and Technical Manager	07791784719 John.Marshall@glasgow.ac.uk	P&A all
Ms C. Neilan (Radiation Protection Officer)	Ext 2807 Claire.Neilan@glasgow.ac.uk	RPO
Mx T. Queen	Ext 2807 Thomas.Queen@glasgow.ac.uk	Teaching labs
Dr J. Taylor (Laser Safety Officer)	Ext 6403 Jonathan.Taylor@glasgow.ac.uk	Optics Groups
Dr S. Webster	Ext 5884 Stephen.Webster@glasgow.ac.uk	IGR

FIRST AIDERS

Mr Stephen Craig	KB Room 203	Ext 5901
Ms Sophie Combs	KB Room 319	Ext 0386
Mr David Doak	KB Room 140	Ext 6412
Mrs Fiona Grant*	KB Room 339	Ext 6423
Ms Lucy Murray	KB Room 317	Ext 4717
Mr Peter MacMillan	KB Janitor	Ext 4465
Mr Colin Hunter	Acre Road Observatory	Ext 8556
Mrs Jane Foxall	KB Room 508	Ext 4709
Mx Tom Queen	KB Room 319	Ext 2807

*Wednesday & Thursday only

LOCATION OF FIRST AID BOXES

Acre Road Observatory: Janitor's Room and main dome.

Kelvin Building locations:

1A	1A02	Lab	IGR	Left of entrance
1	107	Stores	School	Next to photocopier
1	110	Stores	NPE	Next to printer
1	113A	Lab	Astronomy	Next to sink
1	114	Lab	MCMP	Wall-mounted above desk
1	116	Lab	MCMP	Mounted on wall to the right of the door
1	116C	Lab	MCMP	Mounted on wall to the right of the door
1	140	Workshop	School	On shelf to the left of the door
1	148	Workshop	School	Next to sink
1	149	Workshop	School	Next to sink
1	153A	Lab	NPE	In safe, left of door
1	141	Lab	Optics	On left-hand wall after entering room
1	162A	Lab	Optics	On window

1	165	Fume Cupboard	MCMP	Next to sink
2	204	Lab	IGR	On wall, right of the door
2	205	Lab	IGR	On wall, above blue cabinets right of the door
2	206	Lab	IGR	Back of door
2	209	Lab	IGR	Facing door, entrance facing towards corridor
2	210	Lab	MCMP	Above sink
2	211A	Lab	IGR	In changing area to right of entrance
2	215	Lab	IGR	Next to door
2	216B	Lab	IGR	Next to door
2	220	Lab	Teaching	Nearest one in 223A
2	223A	Lab	Teaching	Next to sink
2	234D	Offices	SUPA	Next to sink
2	243F	Lab	ICG	Next to sink
2	201	Stair A	School	Inside Janitor's booth
3	306	Lab	MCMP	Next to sink
3	314	Lab	IGR	Left of entrance
3	314A	Lab	IGR	Straight ahead of entrance from 314
3	319	Offices	Teaching	On workbench
3	320	Computer Cluster	Teaching	Nearest one in 319
3	323	Lab	Teaching	By sink
3	327a	Lab	IGR	On Steve O'Shea's desk
3	341	Lab	PPE	Next to door
3	341a	Lab	PPE	Top shelf, middle of room, next to sharps box
3	345	Lab	PPE	On desk immediately by door
3	346	Lab	PPE	In changing room on table
4	410	Lab	NPE	On desk ahead and to the right
4	417	Lab	NPE	Behind sink
4	418	Lab	NPE	Behind sink
4	423	Lab	Teaching	On technician's desk
4	425	Lab	Teaching	Next to sink
4	438	Kitchen Area	PPE	Next to sink
4	470	Common Room	School	Next to sink
5	508	Offices	School	In leftmost cupboard under reception desk
6	610	Kitchen Area	Astronomy	Next to sink

SAFETY REGULATIONS

REGULATIONS FOR THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH

The appropriate regulations can be found on the SEPS site: <https://www.gla.ac.uk/myglasgow/seps/>

It is the policy of this School that all members of staff, students, and all other persons using the School must comply with the above regulations - failure to do so is a criminal offence.

Anyone intending to introduce a chemical substance into the School should obtain as much information as possible concerning the hazards associated with the substance. Hazards resulting from the combination of the substance with others already in use should also be considered. If the hazards are considerable, the availability of a safer alternative substance should be investigated. Chemicals should not be ordered in quantities which greatly exceed the amount required for the task in hand, as the hazard increases with the quantity stored. It should also be remembered that the disposal of chemicals is very expensive and will be charged to the appropriate Research Group or Laboratory budget.

Research Group Leaders are responsible for ensuring that formal risk assessments of the hazards of chemical substances are produced. The completed assessment forms should be signed by the Group Leader. Newly discovered hazards associated with a substance already in use should be brought to the Research Group Leader's attention immediately.

All staff, students and technicians must read and sign the Risk Assessment for the chemical they are using and abide by the techniques prescribed in the assessment.

Information on the hazards of specific chemicals can be obtained from the supplier, the Safety Co-ordinator, or the University Safety Co-ordinator. Disposal of chemicals can be arranged with the Chemical Safety Advisor or the Safety Co-ordinator.

Note: The legal requirements for risk assessment to be carried out now extends beyond COSHH and requires that all work is risk assessed.

COSHH REGULATIONS

New Approach to Good Practice and Exposure Limits in Control of Substances hazardous to Health (COSHH) is a starting point for guidance: the relevant documentation can be found here:

[https://www.gla.ac.uk/myglasgow/seps/az/chemical%20safety%20\(revised\)/](https://www.gla.ac.uk/myglasgow/seps/az/chemical%20safety%20(revised)/)

Detailed information is available on the Health and Safety Executive website:

<https://www.hse.gov.uk/coshh/index.htm>

INCIDENT REPORTING

All work-related accidents involving personal injury or damage to property must be reported to SEPS and the school Safety Co-ordinator; this includes 'near-miss' incidents. Incident reporting via the web form (<https://www.gla.ac.uk/myglasgow/seps/reportanincident/#d.en.411120>) will alert both SEPS and the Safety Co-ordinator simultaneously; if reporting using the paper form (downloadable forms available from the SEPS link) please ensure a scanned copy is sent to the Safety Co-ordinator as soon as possible.

RISK ASSESSMENTS

All laboratories in the School (research and teaching) must complete a Risk Assessment Form for each activity undertaken and submit these electronically to the safety officer for central storage. A copy of the standard form is appended to this handbook, and is available in from the SEPS website <https://www.gla.ac.uk/myglasgow/seps/forms/>

Moreover, a summary of the risk assessment per laboratory must be completed using the template form and displayed prominently close to the main entrance for each appropriate lab (this is to ensure that the emergency services can rapidly assess the hazards in each room). A copy of the form is appended to this handbook, and a downloadable version can be found at <https://www.gla.ac.uk/schools/physics/safety/>. The electronic version must be sent to Safety Co-ordinator as a central record.

FIRE PREVENTION

- Smoking, including electronic cigarettes, is forbidden inside the building.
- Do not store combustible or flammable materials on or near heaters.
- Do not leave electrical heaters switched on in unoccupied rooms.
- Switch off all electrical equipment when not in use.
- Close all windows at the end of the working day.
- Close all doors - including corridor fire doors.
- Restrict the use of flammable liquids to the absolute minimum and ensure that they are stored safely. Know the location of fire extinguishers and learn how to use them. Do not wait until a fire occurs before reading the instructions.

FIRE ALARM TESTING

The fire alarm will normally be tested on Monday mornings between 08.50 and 09.00.

WORKING OUTWITH NORMAL HOURS

There is detailed guidance on activity outside normal building opening hours, to be found on the SEPS website: <https://www.gla.ac.uk/myglasgow/seps/az/outofhoursactivity/>

You are strongly advised to use the SafeLink app for notifying Security when on the campus outside normal hours:

<https://www.gla.ac.uk/myglasgow/securityandoperationalssupport/>

It is important that you comply with the following instructions when working outwith normal hours:

- 1) Your arrival and departure at the out-of-hours door will be recorded by CCTV; you must comply with any additional instructions to record your presence in the building.
- 2) Plan what you are doing to reduce the risk of fire to a minimum.
- 3) Acquaint yourself with the whereabouts of the nearest exit, fire extinguisher, and light switches for corridors and stairs leading to the nearest exit.

Potentially dangerous operations must never be undertaken outwith normal hours unless a second responsible person is present. Such operations should be restricted to normal hours when medical and other services are readily available.

When assessing the hazards of an operation, you should bear in mind that a mistake could cost your life, so be very careful when making an assessment.

The greatest care must be taken to avoid starting a fire. The risk can be minimized by adopting the following safe working practice:

- a) Ensure that all equipment is in good working order - especially heating devices.
- b) Assess the consequences of equipment malfunction, and consider what action is necessary to
- c) cope with such an occurrence.
- d) Ensure that fire-fighting equipment is close at hand, and that you know how to use it.
- e) If flammable substances must be used, restrict the quantity to the minimum necessary for the job.

Research students who intend to work late must inform a senior member of the group and give details of the work they intend to do.

It is strongly advised that inexperienced personnel should be accompanied by experienced personnel when working late. If there is a serious injury in the Kelvin Building, dial 4444 and ask for an ambulance. If no First Aider is available in Kelvin Building contact Main Gatehouse Ext 4282 and First Aid trained Security Staff will attend. If the incident occurs at Acre Road Observatory, call Garscube security on 2222.

Area Fire Officer Mr Colin Craig. Ext 5901 or 07748155509

Deputy Fire Officer Mr David Truesdale Ext 6400

KELVIN BUILDING FIRE WARDENS

Basil Spence Building (New Building)

Fire Wardens	Area Covered	
Dr Nicolas Labrosse	All	Level 6*
Dr David Hamilton	Research Wing	Level 5
Ms Fiona Speirits	Penthouse	Level 5
Mr Tony Clarkson	Research Wing	Level 4 *
Mr Matt Trainer	Teaching Wing	Level 4
Ms Lucy Murray	Research Wing	Level 3 *
Ms Sophie Combs	Teaching Wing	Level 3
Mr Andrew Fraser	Computer Cluster	Level 3
Mr Stephen Craig	Research Wing	Level 2 *
Ms Claire Neilan	Teaching Wing	Level 2
Mr Billy Smith	MCMP upper rooms	Level 2 *
Mr Colin How	MCMP lower rooms	Level 1
Mr Alan Bowman	Stores	Level 1

*Exit via Crane Hall

James Miller Building (Old Building)

Fire Wardens	Area Covered	
Mr Mike Perreur-Lloyd	East Perimeter	Level 4
pending	West Perimeter	Level 4#
Mr Steven O'Shea	West Perimeter	Level 3#
Mr Calum Gray	East Perimeter	Level 3#
Dr Bryan Barr	East Perimeter	Level 2#
Dr Morag Casey	West Perimeter	Level 2#
pending	Computer Lab	2#
Mr Brendon McGill	West Perimeter	Level 1#
pending	East Perimeter	Level 1

Exit via Old Building (South Entrance)

Additional short-notice cover provided as necessary by Mx Tom Queen & Mr Paul Agnew.

Main Entrance	Area Fire Officer Mr Colin Craig/ Fire Warden Alan Bowman
#South Entrance	Mr John Marshall
*Crane Hall Exit	Fire Warden Mr Billy Smith

Acre Road Observatory

Fire Wardens	Area Covered	
Mr Colin Hunter	All areas	Levels 1 and basement

SAFETY & TRAVEL

WORKING AWAY FROM THE UNIVERSITY

General guidance on University policy on Travel Safety and Overseas Work is available on the SEPS website:

<https://www.gla.ac.uk/myglasgow/seps/travelfieldworkandplacement/>

When staff are working away from the University, RGLs are responsible for ensuring a safe working environment. In general, work will be carried out in another institution that the RGL is familiar with and has similar levels of safety to the University of Glasgow. The [Travel Process Flowchart](#) (pdf file) provides an overview of the travel risk assessment and approval process for low risk UK and international travel and for higher risk travel.

A flowchart describing the current process can be found on the SEPS website - <https://www.gla.ac.uk/myglasgow/seps/travelfieldworkandplacement/travelprocessflowchart/>

If staff are planning to undertake fieldwork or are going to a new institution, then they should undertake a risk assessment and discuss with their RGL. All personnel are encouraged to download and activate the SafeZone app: <https://www.gla.ac.uk/myglasgow/securityandoperationalsupport/>

TRAVEL INSURANCE

Staff and students are covered by University travel insurance.

All trips outside the UK, and any UK trips involving an overnight stay, or air travel, must be registered within the [Travel Approval Portal](#) (TRICAP). Registering of such trips is part of the University travel insurance conditions.

RESEARCH FURTH OF GLASGOW

If postgraduate students are going to work away from the University then “research furth of Glasgow” should be submitted. If postgraduate students are going to work at another institution for extended periods on a regular basis then the institute can be setup as an approved institution. This is done by application to the College. For further details contact the School Graduate Convener (Dr C Englert). Details can be found at:

<https://www.gla.ac.uk/services/postgraduateresearch/mobilityandcollaborationopportunities/research-furthofglasgow/>

DUTY OF CARE

(from: <https://www.gla.ac.uk/myglasgow/insuranceandrisk/>)

It is the responsibility of the line manager (or other identified member of staff) to ensure that the employee is as well prepared for the trip as possible. This can include many factors such as:

- Ensuring that the employee is fully briefed on the area they will be visiting
- Ensuring that an adequate risk assessment has been carried out by the employee and that action has been clearly identified which will help to reduce, as far as possible, any perceived risks
- Ensuring that travel insurance has been organised well in advance of the trip
- Ensuring that the employee is keeping up-to-date with the latest information on their destination by accessing the Foreign and Commonwealth Office (FCO) website – <https://www.gov.uk/foreign-travel->

GENERAL SAFETY

- Wear personal protective equipment (PPE) where necessary. (Glasses, protective clothing, safety shoes, etc).
- Do not wear contact lenses when working with chemicals as chemicals may be trapped between the lens and the eye.
- Do not pour your waste solvents or other chemicals down the drains. Ask the Technical manager/Safety Co-ordinator or the stores Administrator to arrange for disposal.
- Do not eat, drink, smoke or apply make-up in areas where chemicals are used or stored, this is forbidden by law.
- Do not inhale unknown chemicals or gases - they may be toxic.
- Do not store mercury in unsealed vessels. Mercury spillages should be reported immediately to the Technical manager/Safety Co-ordinator.
- If gas cylinders, liquid nitrogen or liquid helium containers, flammable solvents or dangerous chemicals are to be conveyed by lift, they must not be accompanied by passengers except in the case of a well-ventilated lift such as the goods lift. Such items should be placed in the lift, which can then be called from the appropriate floor by an assistant.
- Gas cylinders should be supported by a stand or fixed securely when in use. They should be transported on proper cylinder trolleys only and should have the gauge head removed before being transported.
- Highly flammable solvents must not be kept in rooms or laboratories in containers greater than 500ml, unless special permission has been given by the research supervisor. Up to 50 litres may be kept in a properly designed cabinet.
- Vessels containing chemicals must be labelled clearly and correctly - this includes waste chemicals.
- Broken glass, razor blades, etc. must not be disposed of in wastepaper bins. They should be sealed in a suitable, labelled container and put in clinical waste bins in the courtyard, unless they are contaminated in any way, in which case they should be given to the Technical manager/Safety Co-ordinator for disposal.
- To avoid cuts, and poisoning by contamination, broken glassware should be swept up not picked up.
- Machine tools must not be used unless permission has been obtained from the Workshop Supervisor or his deputy.
- Appropriate safety guards must be in place before machines are used.
- All persons with long hair must wear safety caps or hair net before using machines.
- Welding equipment, gas burners, etc., must not be used in the vicinity of flammable liquids or materials.
- Personal Electrical Equipment - Anyone who brings personal items of mains-operated equipment (Electric heaters, kettles, radios etc.), into the School, must ensure that they comply with the safety standards of the University, and that they are maintained to these standards. Owners of such items may have them tested by applying to the Technical manager/Safety Co-ordinator.
- All mains electrical supplies up to and including the outlets are the responsibility of the Estates and Buildings Department. No work may be carried out by School personnel on electrical supplies.
- All mains electrical equipment must be correctly wired
- (brown = live, blue = neutral, yellow/green = earth), and have the correct fuse fitted.
- All equipment - except double insulated - must be earthed.
- Wiring should be checked for safety at least once per year, using a Portable Appliance Tester where appropriate. Note that the testing frequency for appliances may vary with usage statistics – please check the section on electrical appliance testing.
- Power points must not be overloaded.
- Mains extension leads must not be connected together either to increase length of extension or to increase the number of sockets. An extension lead of the correct length or with the correct number of sockets must be obtained.
- Electrical heaters must not be left switched on in unoccupied rooms.
- Do not run cables across the floor unless they are protected by a suitable cover.

- Laboratory equipment must not be run overnight unless a risk assessment has been carried out by a competent member of staff. A risk assessment form should be attached to the room door and a copy sent to the Technical manager/Safety Co-ordinator.
- Water supplies to equipment must be provided via metal piping or reinforced nylon tubing which must be connected to the water supply by proper clips - not wired.

USE OF DISPLAY SCREEN EQUIPMENT

Health and Safety (Display Screen Equipment (DSE)) Regulations 1992 as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002 lay down requirements for the use of "display screen equipment" by "users".

<https://www.hse.gov.uk/pubns/indg36.htm>

In the context of the School of Physics & Astronomy "display screen equipment" can be equated with PCs, Macs, Workstations and VDUs.

Note that there is extensive guidance on working at home and on appropriate DSE training on the SEPS website:

<https://www.gla.ac.uk/myglasgow/seps/az/computersandhomeworking/>

However, the term "user" is less easily defined. It refers to employees whose work requires them to make use of display screen equipment for some significant but unspecified fraction of the working day.

The safety problems of using display screen equipment relate mainly to fatigue and strain associated with prolonged use. For the most part symptoms are only temporary.

EQUIPMENT

The chair must be safe and adjustable to meet the needs of the user.

The screen must be positioned suitably for the user and must be free of excessive glare and reflections - if necessary, by the addition of a hood or a filter to the screen and blinds to the windows. The image size and quality should be comfortable for the user.

The keyboard should be independent from the screen and be easy to use.

The desk should be of suitable dimensions to allow comfortable use - perhaps in conjunction with footstools, arm rests, screen stands and document stands.

ENVIRONMENT

The lighting provision in the environment should ensure that reflections from the screen surface do not make the image difficult and tiring to view. It is important that there is no excessive difference in light levels between the screen image and the background level from behind the screen e.g. from a window. Furthermore, it is best to avoid a large contrast between the illumination of any paper document being read and the light output from the screen image.

The noise level, temperature and humidity of the workplace should be satisfactory.

JOB DESIGN

The user's work schedule must include breaks from display screen use.

The software must be appropriate to the task and suited to the needs of the user. Training in its use should be provided.

The user should receive information about the health and safety aspects of display screen equipment use.

Fuller details and advice on the safety aspects of the use of display screen equipment can be found in the booklet Display Screen Equipment (DSE) available from the University Safety Office or at web page

<https://www.gla.ac.uk/myglasgow/seps/az/computersandhomeworking/>

Note: Staff who wish to have an eye test should contact the Technical manager/Safety Co-ordinator.

EMERGENCY PLAN

Note that the SafeZone app

<https://www.gla.ac.uk/myglasgow/securityandoperationalsupport/>

is a key contact method for emergencies, and it is strongly recommended that all Kelvin Building and Acre Road Observatory users download this app.

FIRE, POLICE, AMBULANCE

DIAL 4444 if on Gilmorehill Campus (i.e. Kelvin Building)

DIAL 2222 if on Garscube Campus (i.e. Acre Road Observatory)

These numbers must not be used for other than the specified emergencies. Less serious incidents at the Observatory can be communicated to Garscube Security on 5799.

ACCIDENT OR ILLNESS

In the event of a serious accident or sudden illness you should

dial 4444 (Kelvin Building) or 2222 (Acre Road Observatory) and ask for an ambulance

- then summon a first-aider.

A list of first-aiders is given below.

If the accident involves chemicals, full written details should be sent with the patient.

In the event of a less serious accident or illness you should summon a first-aider. If the first-aider decides that hospital treatment is required then contact Main Gatehouse to call ambulance.

If no first-aider is available contact Main Gatehouse Ext 4282 and First Aid trained Security Staff will attend.

BURST PIPES, ELECTRICAL FAULTS ETC.

For emergencies such as burst pipes, electrical faults etc. which occur during normal working hours, contact one of the following:

Technical Manager/Safety Co-ordinator	07791784719
Handyperson	Ext 6400
Janitor	Ext 4465
Estates Central Enquiry	Ext 6000

For emergencies occurring outwith normal working hours contact:

Main Gatehouse Ext 4444

FIRE

All employees (and research students) have general duties to meet with regard to fire safety, namely to:

- Complete the online fire safety awareness training **at least once every 3 years**
- Familiarise themselves with the fire arrangements for those buildings in which they regularly spend time
- Follow any signing in and out procedures in operation in their building(s).
- Keep fire doors closed and report any obstructions on or blocked escape routes to the Area Fire Officer
- Make use of equipment provided to fight fire if trained and if it is safe to do so
- Respond appropriately to fire alarms sounding, ensuring that they leave the building promptly and gather at the appointed assembly points
- If in charge of a class or group, direct students, or visitors, to leave the building
- Make safe equipment/ processes they are working on before leaving the building, if practical, or, if this is not possible, ensure a responsible person/ Scottish Fire and Rescue Service are aware of a potentially unsafe condition on exiting the building.

ON DISCOVERING A FIRE:

- **Raise the alarm by operating the nearest Fire Alarm Call Point.**



An electronic sounder will then sound continuously.

- **Evacuate the building**



- **Proceed to the designated assembly point**

ON HEARING A WARNING OF FIRE

- Evacuate the building quickly and calmly
- Proceed to the designated assembly point

In all circumstances:

- **Do not delay your departure by collecting personal belongings**
- **Where possible close room doors behind you**

REFUGE AREAS

Areas suitable for disabled people to wait temporarily on upper floors for assisted evacuation have been identified within accessible buildings. These areas, typically stair landings, are marked by suitable signage. In the event of fire alarm activation or other circumstance that prevents exit by lift, those with a disability that prevents them leaving the building unaided should proceed to the closest Refuge Area. Two-way communications systems are installed in some Refuge Areas to allow users to communicate directly with Central Services staff. A rolling programme to provide further two-way communication links is ongoing on a prioritised basis.

Note that the SafeZone app (<https://www.gla.ac.uk/myglasgow/securityandoperationalssupport/>)

allows geolocation of the user when activated, and so is a valuable resource in this context.

Anyone who requires assisted evacuation is advised to carry a charged mobile phone and to ensure that the emergency number below is programmed into the phone memory.

Kelvin Building: 4444

Acre Road Observatory: 2222

Fire Wardens and other staff provide a further route for emergency communications.

- **Do not use lifts**

Do not re-enter the building until a Fire & Rescue Officer has stated that it is safe to do so.

Do not fight a fire if:

- It is dangerous to do so
- You are on your own
- There is a possibility of your escape route being cut off by fire or smoke
- The fire continues to grow
- The fire involves hazardous materials

If in doubt get out

In addition you should familiarize yourself with:

- The escape route from the premises:
- The position and operation of Fire Alarm Call Points
- The correct method of calling the Fire Brigade (dial 4444 and ask for the Fire Service) The evacuation procedure for the premises
- The location of assembly points:
 - Assembly Point 1: Chemistry Roadway;
 - Assembly Point 2: Gardens at rear of Bower Building
 - Assembly Point 3: Outside entrance to Old Building
- The position and operation of Fire Fighting Equipment
- The position of Fire Resisting Doors and the need to keep such doors closed when not in normal use
- Any specialised shut down procedures, together with security measures appropriate to the risk
- The position and content of Fire Action Notices
- The position and content of Safety Signs

Note that between 17.00 and 08.00 and at weekends it is possible to open the Old Building Door from the inside by pressing the silver push button switch located at the right-hand side of the door or pressing Break Glass

Escape Route for occupants of Level 6 is by the West Door then down main staircase or by East Door then down rear staircase at Goods Lift to Assembly Point 2.

Escape Route for occupants of the Penthouse is by main staircase at the north end of the corridor, or by the door at the south end of the corridor and down the Stair E leading to courtyard.

WORKING WITH CHEMICALS

Contact the Chemical Safety Advisor for advice on working with hazardous chemicals; disposal of chemicals is handled by TradeBe: <https://www.gla.ac.uk/myglasgow/seps/wastemanagement/chemicals/>, and research groups are responsible for paying disposal costs.

CHEMICAL EMERGENCIES

The following notes apply to most, but not all, dangerous chemicals. If in doubt consult

<https://www.gla.ac.uk/myglasgow/seps/az/chemicalsafety/chemicalsafety/chemicalemergencies/how-to-copewithachemical-emergency>

or a First Aider.

CONTACT WITH SKIN

Wash off contaminant with a gentle, but copious stream of cold water for at least twenty minutes. Remove contaminated clothing while flooding the injury (use gloves).

Obtain medical help for all but very minor burns.

Hydrofluoric acid burns must always be considered very serious - even if there are no immediate symptoms - and medical aid must be obtained as soon as possible.

CONTACT WITH EYES

Wash with a very gentle stream of cold water for at least ten minutes. It may be necessary to enlist the aid of a colleague to hold the eyelids open to ensure that the water enters the eye. Be careful that contaminated water does not splash the uninjured eye. Always take eye casualties to hospital.

INGESTION OF CHEMICALS

If chemicals are swallowed and lips and mouth are burned give sips of water or milk to drink, but do not induce vomiting. Call an ambulance.

Full resource on Chemical Emergencies is available at

<https://www.gla.ac.uk/myglasgow/seps/az/chemicalsafety/chemicalsafety/#d.en.35209>

Guidance on use of Cryogenic Substances please refer to

<https://www.gla.ac.uk/myglasgow/seps/az/cryogenicsubstances/>

Specific risk advice for working with nanotechnology is available from the Health and Safety Executive:

<https://www.hse.gov.uk/nanotechnology>

OPTICAL RADIATION

Lasers and UV sources are types of non-ionising radiation which come under the new Artificial Optical Radiation Directive (AORD). Other sources of optical radiation such as white light sources, strobe sources, blue light sources and welding equipment also come under the AORD directive.

A guide to the Artificial Optical Radiation Directive is available at

https://www.gla.ac.uk/media/media_164337_en.pdf

ELECTRIC SHOCK

In the event of an electric shock, switch off the equipment and if possible, unplug at the mains before trying to pull the victim clear.

If the victim is breathing, send for a first-aider immediately.

If the victim is not breathing call an ambulance and then attempt resuscitation.

RADIATION INCIDENTS/EMERGENCIES

All radiation incidents and emergencies must be reported at the earliest opportunity to the Radiation Protection Supervisor and the University Radiation Protection Service.

Where a radiation incident, possibly involving radioactive contamination occurs, treatment of any injury takes precedence over concerns regarding the risk from radiation. To call an ambulance, dial 4444. In the case of a contaminated casualty, the person accompanying the patient to hospital should, where possible, take with him a suitable contamination monitor and be able to give details of the circumstances of the accident.

In the event of fire in a laboratory where radioactive sources are stored or in use, a senior member of staff should inform the Fire Brigade of the significance of the radiation hazard warning signs. Teaching laboratories are "supervised" radiation areas where the risk from external radiation or radioactive contamination is very small and are safe for the Fire Brigade to enter in the event of a fire, without special precautions. The main

radioactive material store is a "controlled" radiation area and should only be entered by firemen wearing chemical suits and breathing apparatus.

NOTE: Loss of any radioactive material from the School is a very serious matter and must be reported immediately to the Radiation Protection Supervisor (ext 4466) and/or University Radiation Protection Service (ext 4471)

WORKING AT HEIGHT

Work at height means work in any place where, if there were no precautions in place, a person could fall a distance liable to cause personal injury. For example, you are working at height if you:

- are working on a ladder or a flat roof;
- could fall through a fragile surface;
- could fall into an opening in a floor or a hole in the ground.

Take a sensible approach when considering precautions for work at height. There may be some low-risk situations where common sense tells you no particular precautions are necessary, and the law recognises this.

There is a common misconception that ladders and stepladders are banned, but this is not the case. There are many situations where a ladder is the most suitable equipment for working at height.

Before working at height, you must work through these simple steps:

- avoid work at height where it is reasonably practicable to do so;
- where work at height cannot be avoided, prevent falls using either an existing place of work that is already safe or the right type of equipment;
- minimise the distance and consequences of a fall, by using the right type of equipment where the risk cannot be eliminated.

You should:

- do as much work as possible from the ground;
- ensure workers can get safely to and from where they work at height;
- ensure equipment is suitable, stable and strong enough for the job, maintained and checked regularly;
- make sure you don't overload or overreach when working at height;
- take precautions when working on or near fragile surfaces;
- provide protection from falling objects;
- consider your emergency evacuation and rescue procedures.

For further information on working at height please visit

www.hse.gov.uk/pubns/indg401.pdf

MAINTAINING PORTABLE ELECTRICAL EQUIPMENT

The law requires that electrical equipment must be maintained to prevent danger, but does not prescribe how this is done, or how often. There are two relevant HSE articles that explain how electrical equipment should be maintained in different contexts: HSG107 (<https://www.hse.gov.uk/pubns/books/hsg107.htm>) & INDG236(REV3) (<https://www.hse.gov.uk/pubns/indg236.htm>). These documents describe appropriate maintenance checks, including what to look for when assessing equipment, and should be used to guide inspections.

Definitions: *portable equipment* means equipment that is intended to be connected to a generator or fixed installation by means of a flexible cable and a plug and socket, or similar. This includes equipment that is either hand-held or hand-operated, or likely to be moved when connected to the supply. The electrical supply to the equipment is assumed to be at a voltage that can give a fatal electrical shock (i.e. more than 50Vac or 120Vdc)

Examples of portable and movable equipment: kettles, vacuum cleaners, portable heaters, fans, desk lamps, TVs, radios, projectors, phone chargers and other battery chargers, extension leads; larger items which are movable (but rarely moved) include PCs, printers. Note that battery-operated equipment is *not* included here. Equipment is classified as Class I (earthed) and Class II (double insulated). Class I equipment should have a formal portable appliance test (PAT) at agreed intervals (see below); Class II equipment is not earthed, and does *not* need to have a PAT.

The following table (taken from the HSE) gives appropriate guidance:

Equipment/environment	User checks	Formal visual inspection	Combined inspection and testing
Battery-operated: (less than 40 volts	No	No	No
Extra low voltage: (less than 50 volts AC): Telephone equipment, low-voltage desk-lights	No	No	No
Desktop computers, VDU screens	No	Yes, 2–4 years	No if double insulated, otherwise up to 5 years
Photocopiers, fax machines: Not hand-held. Rarely moved	No	Yes, 2–4 years	No if double insulated, otherwise up to 5 years
Double insulated (Class II) equipment: Not hand-held. Moved occasionally, eg fans, table lamps	No	Yes, 2–4 years	No
Double insulated (Class II) equipment: Hand-held, eg some floor cleaners, some kitchen equipment	Yes	Yes, 6 months – 1 year	No
Earthed equipment (Class I): Electric kettles, some floor cleaners, some kitchen equipment and irons	Yes	Yes, 6 months – 1 year	Yes, 1–2 years
Cables (leads and plugs connected to the above) and mains voltage extension leads and battery-charging equipment	Yes	Yes, 6 months – 4 years depending on the type of equipment it is connected to	Yes, 1–5 years depending on the type of equipment it is connected to

Notes for the table:

- Cables, leads and plugs connected to Class II equipment should be maintained as part of that equipment. Cables, leads and plugs not dedicated to an item of equipment should be maintained as individual items as appropriate.
- Over time, when you look at the results of user checks, visual inspections and, where appropriate, portable appliance tests, you will notice trends. These may tell you that you need to look at or test electrical equipment less (or more) often, depending on the number of problems being found. Some examples of how to do this are shown on our web-site (www.hse.gov.uk/electricity/faq-portable-appliance-testing.htm).
- If electrical equipment is grouped together for testing at the same time, you should use the shortest testing interval in the group rather than the longest. Alternatively, it may be appropriate to group your electrical equipment by testing interval.

P&A STRATEGY

The following actions are paraphrased from the HSE guidance to be relevant to Physics & Astronomy. In each case, sector leaders (for example, research group leaders) should:

1. encourage sector personnel to look at the supply cable to the electrical equipment before they use it (user check);
2. encourage sector personnel to look at electrical equipment before they use it (user check);
3. ensure that all portable equipment is visually inspected at initial intervals which could be between six months and four years, depending on the type of equipment, based on the table above and the next bullet point;

4. arrange for equipment that is *not* double insulated to have a portable appliance test (including leads) at initial intervals which could be between one and five years, depending on the type of equipment as follows:
 - a. **Portable but rarely moved Class I items (desktop PC, Printer, kitchen equipment (coffee machines, fridges): PAT on 5 year cycle;**
 - b. **Small class I (portable heaters, kettles etc) PAT on 2-year cycle;**
 - c. **Class II (double insulated – eg fans, desk lamps, not hand-held): visual inspection only, on each deployment (if stored) or on a 4-year cycle;**
 - d. **Class II hand-held equipment: visual inspection only annually**
5. ensure that damaged or faulty equipment is recognised, removed from use without delay and either:
 - a. repaired by someone competent (ie with suitable training, skills and knowledge for the task to prevent injury to themselves or others); or
 - b. disposed of to prevent its further use – consult your local authority about arrangements for disposing of electrical equipment;
6. review the maintenance system to determine whether a decrease or increase in the inspection and/or testing intervals is required;
7. arrange to keep records of all inspections and tests, and to label equipment with the result and date of the test or inspection – though there is no legal requirement to do either of these things, this helps audit good safety practice.

IMPLEMENTATION

Research labs & teaching labs: visual inspection to be carried out by designated researchers or support staff; PAT executed by appropriately trained personnel using official test equipment. In each case, a formal record of inspection should be maintained with the research or teaching group, in order to be able to demonstrate that this policy is being followed, though such records are not a legal requirement.

Office spaces and common areas: a commercial contractor will be engaged to carry out PAT of class I appliances at the frequency agreed in the strategy. The commercial contract may be extended to assist any lab activity for which there is no appropriately qualified researcher or support staff available; research groups and teaching groups are strongly encouraged to assist colleagues, if possible, in order to minimise costs.

USEFUL TELEPHONE NUMBERS

For Police, Ambulance or Fire Brigade:

calling **999** from a University desk phone will put you through to security, who will call the emergency services.

Security:

Gilmorehill: **ext 4444** (0141 330 4444)

Garscube: **ext 2222** (0141 330 2222)

University Radiation Protection Officer and Mr J Gray University Laser Safety Officer Ext 4471

Radiation Emergency Mob:07906311646

University Safety Officer Mr D McLean: Contact Security in first instance.

General Risk Assessment

Management Unit		Location (Site / Building / Room)		
Assessment Date		Review Date		Version
Assessor's Name		Job Title		
Description of Task				

Risk identification		Risk assessment				Risk management			
Hazard	Potential consequences	Inherent risk			Risk Control measures	Residual risk			Additional control measures and comments
		Likelihood	Impact	Risk rating		Likelihood	Impact	Risk rating	

Risk Rating Calculator

Likelihood that hazardous event will occur		Consequence of hazardous event	
1	Very unlikely	1	Insignificant (no injury)
2	Unlikely	2	Minor (minor injury requiring first aid only)
3	Fairly likely	3	Moderate (Up to three days absence)
4	Likely	4	Major (More than seven days absence)
5	Very likely	5	Catastrophic (Permanent injury or death)

Action Level Table

Risk Rating	Risk Level	Actions to be taken	
20 – 25	Very High Risk	STOP!	Stop the activity and take immediate action to reduce the risk, a detailed plan should be developed and implemented before work commences or continues. Senior management should monitor the plan.
15 – 16	High Risk	Urgent Action!	Take immediate action and stop the activity if necessary, maintain existing controls rigorously. The continued effectiveness of control measures should be monitored periodically.
8 – 12	Moderate Risk	Action	Moderate risks may be tolerated for short periods while further control measures to reduce the risk are being planned and implemented. Improvements should be made within the specified timescale, if these are possible.
3 – 6	Low Risk	Monitor	Look to improve at the next review or if there is a significant change. Monitor the situation periodically to determine if new control measures are required.
1 – 2	Very Low Risk	No Action	No further action is usually required but ensure that existing controls are maintained and reviewed regularly.

Some example hazards that may apply to the activity (not exhaustive)

Working at height	Noise	Lighting (including strobe lighting)	Fire and explosion
Falling objects	Vibration	Compressed air	Hazardous chemicals
Slippery, uneven or worn floors	Hand tools	Magnetic fields	Biological risks / disease
Obstructions and projections	Repetitive hand / arm movement	Pressure systems	Animals
Confined spaces	Machine operation	Needles and sharps	Compressed Air
Mechanical Lifting	Manual Handling	Lasers	Hydraulic systems
Poor housekeeping	Vehicle movements	Ionising and non-ionising radiation	Other (please specify on assessment)

RISK ASSESSMENT SUMMARY - Room xxx – GROUP xxx

The Responsible Person for this laboratory is: *Insert Full Name here*

 : *GU extension/mobile*

Description of laboratory use:

HAZARD	LIKELIHOOD OF RISK	CONTROL MEASURES
Electrical Shock <ul style="list-style-type: none"> ▪ Electrical equipment 	Low / Medium / High	
Fire <ul style="list-style-type: none"> ▪ Electrical failure ▪ Solvent fire 	Low / Medium / High Low / Medium / High	
Hazardous Chemicals <ul style="list-style-type: none"> ▪ Solvents ▪ Reagents ▪ Catalysts ▪ By-products 	Low / Medium / High Low / Medium / High Low / Medium / High Low / Medium / High	
Gas Cylinders	Low / Medium / High	
Lifting Equipment	Low / Medium / High	
Laser Radiation	Low / Medium / High	
Nuclear Radiation	Low / Medium / High	

Brief summary of activity undertaken in this laboratory

Signatures:

Research Group Leader: _____

Responsible person: _____

Date: _____

SEPS Risk Assessment form



General Risk Assessment

Management Unit		Location (Site / Building / Room)	
Assessment Date		Review Date	
Assessor's Name		Job Title	
Description of Task			

Description of the hazard (or hazardous event)	Who might be harmed?	How might people be harmed?	What risk controls are currently in place?	Current risk rating*			Identify any additional controls that may be needed	Timescale for additional controls and responsible person	Residual risk rating*		
				L	C	R			L	C	R

*Likelihood x Consequence = Risk

Risk Rating Calculator

Likelihood that hazardous event will occur		Consequence of hazardous event	
1	Very unlikely	1	Insignificant (no injury)
2	Unlikely	2	Minor (minor injury requiring first aid only)
3	Fairly likely	3	Moderate (Up to three days absence)
4	Likely	4	Major (More than seven days absence)
5	Very likely	5	Catastrophic (Permanent injury or death)

Action Level Table

Risk Rating	Risk Level	Actions to be taken	
20 – 25	Very High Risk	STOP! and the plan.	Stop the activity and take immediate action to reduce the risk, a detailed plan should be developed implemented before work commences or continues. Senior management should monitor
15 – 16	High Risk	Urgent Action!	Take immediate action and stop the activity if necessary, maintain existing controls rigorously. The continued effectiveness of control measures should be monitored periodically.
8 – 12	Moderate Risk	Action the risk scale.	Moderate risks may be tolerated for short periods only while further control measures to reduce are being planned and implemented. Improvements should be made within the specified time-
3 – 6	Low Risk	Monitor	Look to improve at the next review or if there is a significant change. Monitor the situation periodically to determine if new control measures are required.
1 – 2	Very Low Risk	No Action viewed	No further action is usually required, but ensure that existing controls are maintained and re-regularly.

Some example hazards that may apply to the activity (not exhaustive)

Working at height	Noise	Lighting (including strobe lighting)	Fire and explosion
Falling objects	Vibration	Compressed air	Hazardous chemicals
Slippery, uneven or worn floors	Hand tools	Magnetic fields	Biological risks / disease
Obstructions and projections	Repetitive hand / arm movement	Pressure systems	Animals
Confined spaces	Machine operation	Needles and sharps	Compressed Air
Mechanical Lifting	Manual Handling	Lasers	Hydraulic systems
Poor housekeeping	Vehicle movements	Ionising and non-ionising radiation	Other (please specify on assessment)