

University Occupational Health and Safety Information Sheet

ARTIFICIAL OPTICAL RADIATION TRAINING INFORMATION

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1. PURPOSE

The aim of this document is to give details of the minimum expected level of training that all those involved in the use of hazardous light would be expected to undertake.

2. SCOPE

This document applies to all personnel within the University whose work will involve the use of any form of hazardous light, regardless of source.

3. ABBREVIATIONS

CAORW10	Control of Artificial Optical Radiation at Work Regulations 2010
DLPS	Departmental Laser Protection Supervisor
HoD	Head of Department
IR	Infrared
SHaW	Safety, Health and Wellbeing Team
URPO	University Radiation Protection Officer
UV	Ultraviolet

4. HAZARDOUS LIGHT USERS

Under CAORW10, there is a requirement for the University to provide all persons associated with work involving hazardous light, including their managers, with suitable information, instruction, training and supervision.

4.1 Induction

The University has a legal obligation to safeguard the health and safety of all persons it employs or hosts on its premises from harm from hazardous light sources.

All those who may be exposed to hazardous light as part of their work must be made aware of the potential risks associated with conducting work with these sources, and they must be given sufficient information to ensure that they work safely with these pieces of equipment.

4.1.1 Laser workers

All those who wish to work with laser-based devices or equipment must complete the University induction to laser safety. This induction will provide the trainee with information on the basic requirements of laser safety and University procedures.

[Basic Safety Induction for using Lasers and Laser based devices](#)

At the end of the induction, there is a short quiz to assess the participants understanding of the subject matter which must be passed prior to work commencing.

Should person being assessed not achieve a passing mark, they will be referred to the DLPS responsible for their work, who will ensure they undergo further instruction. They would then be required to attempt the induction assessment again.

Multiple failures to successfully complete the induction will result in a discussion between the DLPS, the Line Manager, Principal Investigator or Research Supervisor and the URPO.

4.1.2 Users of Non-Coherent Hazardous Light

Non-Coherent light sources are commonly used around the University. These can include, for example, IR heating lamps, IR tracker emitters or UV trans-illuminators. These devices may be capable of emitting sufficient levels of IR or UV light that they may cause harm to those persons working in the immediate area.

Given the variety of potential sources and applications of these sources, it is not practical to cover all the potential safety implications in a simple online course.

To ensure that all users of these sources are kept safe for any potential harm, departments are required to ensure the risks of potential exposures to the source of hazardous light is assessed and that all work involving these devices are covered by a suitable and sufficient general risk assessment using the [eRisk system](#) with the significant findings from the risk assessment being communicated to those who are working with the light source.

The department is also required to ensure that any workers making use of these devices are competent in their use. This can be recorded on the **Training and competency record for the safe use of hazardous light sources**.

4.2 Competency

It is the responsibility of a laser workers line manager to ensure that any person working with hazardous light is competent to do so.

Departments are required to ensure that all those working with hazardous light undergo specific training to ensure that they are competent to work with these devices safely. This training should include, but is not limited to, the following:

- Departmental procedures and protocols
- Practical skills training
- Emergency procedures

This training should be recorded on the relevant [Hazardous Light Training and Competency Record](#). This log should be completed for each worker, and a copy of to be kept by both the department and the worker.

Where the training is carried out locally by the department, the department must ensure that this is delivered by a person competent to do so. To ensure that the person conducting the training is competent to do so, they must be judged against the following criteria:

- **Skills** - being aware of what skills are required for the work that the person will be conducting.
- **Knowledge** - understanding the work being undertaken and the risks associated with the work.
- **Attitude** - having a suitable attitude in their approach to doing the work, and understands the benefits of doing the work safely, and the benefits that safe working practices can bring to the process and team.
- **Training** - having received the necessary training to ensure they understand the tasks being done.
- **Experience** - having the experience of the work, and be able to perform it ably.

4.3 Refresher training

University policy is that all training is refreshed every 3 years. This will allow for any changes in best practice or legislation to be passed on, and to maintain and improve the level of knowledge amongst those using these materials or pieces of equipment.

4.4 Supervision

All Line Managers / Research Supervisors / Principal Investigators are responsible for ensuring that all workers using any form of hazardous light as part of their work receive appropriate supervision, commensurate with their experience and skills.

5. ALL OTHER PERSONNEL

For each level of personnel involved in the use of hazardous light, there are specific training requirements. This training ensures that they are fully aware of the hazards presented by these materials or pieces of equipment, and to ensure that they are able to work safely whilst using them.

5.1 Heads of Department / Senior Managers

To ensure that senior personnel within each department are aware of their responsibilities, they are invited to contact the URPO for a discussion about what is required of them.

This will take the form of an informal meeting, and will allow the HoD or manager the opportunity to ask any questions they may have over their responsibilities.

5.2 Departmental Laser Protection Supervisor

Prior to their appointment, each new DLPS will be required to attend suitable and appropriate training courses, arranged by SHaW, to allow them to undertake their appointed duties.

The courses will cover the various hazards associated with lasers that they are likely to be involved in overseeing, calculations to determine various laser safety related factors and the expected minimum standard of control measures that will be required.

The appropriate training must be undertaken prior to assuming the position of DLPS. Bookings will only be made once a suitable person has been identified to hold this position.

5.3 Risk Assessor

Given the hazards associated with the use of hazardous light sources, whoever carries out the risk assessment must be competent to do so. To ensure that the risk assessor is able to complete a suitable and sufficient risk assessment, all risk assessors must complete the SHaW 'Principles and Practices of Risk Assessment' Course. This course will:

- Describe the legal requirements and benefits of a risk assessment;
- Detail the key stages in completing a risk assessment;
- Provide trainees the ability to identify hazards, assign appropriate risk ratings and determine appropriate control measures.

The person chosen to complete the risk assessment must be competent in the work being done, as this will allow them to