



Safety Services

7. Registration of Personnel and Work

7.1 Postgraduate Work

7.1.1 Personnel Registration

All personnel wishing to undertake work involving exposure to sources of ionising radiations must register with Safety Services by completing a [personal registration form](#). Only those people who need to be Classified Radiation Workers are required to have blood counts and medical examinations prior to commencing their work with ionising radiations, although these facilities are available to any radiation worker, on request.

Personnel will be permitted to start work with ionising radiations after having been cleared by Safety Services; after having satisfied their Departmental Radiation Protection Supervisor of their appreciation of the hazards involved and the care that needs to be taken; and after receiving copies of any relevant Work Certificates, Systems of Work, Local Rules etc. As part of the information, instruction and training which we are obliged to provide for radiation workers, all new radiation workers are expected to attend the appropriate introductory lectures on the safe use of ionising radiations at the University. If possible, they should attend the lectures prior to commencing their work with ionising radiations.

Personnel intending to work with penetrating radiations will receive a body monitoring device and, depending on the nature of their work, finger TLD rings. See [personal monitoring guidance](#).

Any personnel who need to be designated as Classified Radiation Workers will have an annual review of health, which may entail their having to attend for additional blood counts and medical examinations. Arrangements for these examinations will automatically be made by Safety Services, and those concerned will be duly notified.

7.1.2 Work Registration

It is the responsibility of the academic supervisor/principal investigator to register all work with ionising radiations. This is done by completing the appropriate form:

- Workform 1e for unsealed source work
<http://safety.dept.shef.ac.uk/ir/workform1e.doc>
- Workform 2e for sealed source work
<http://safety.dept.shef.ac.uk/ir/workform2e.doc>
- Workform X for work with X-ray equipment or work with other radiation generators operated at over 5 kV.
<http://safety.dept.shef.ac.uk/ir/workformx.doc>

The work must not commence until a Certificate of Approval, endorsed by the Radiation Protection Adviser has been received. In certain circumstances, the Radiation Protection Adviser may approve a short term project or trial without such formal certificates, providing no novel procedures or materials are involved.

Permission for work with ionising radiations will only be given if adequate facilities are available. In some instances, approval may be required from the Environment Agency, or prior notification may have to be given to the Health and Safety Executive. It is, therefore, advisable to contact Safety Services at an early stage when planning a new line of research.

7.2 Undergraduate Work

7.2.1 Personnel Registrations

Undergraduates will not normally be required to register as radiation workers, unless they are carrying out project work involving one of the following:-

- (a) X-ray crystallographic work with the students operating the equipment;
- (b) sealed source work involving sources with activities in excess of 0.5 MBq , where the dose rates to which the students may be subjected could exceed $7.5\mu\text{Sv h}^{-1}$ see - [undergraduate work with sealed sources](#) ; or
- (c) unsealed source work where the students will be using more than the activity specified in column 2 of table 1 in the [undergraduate guidance notes](#).

Such students, registered as radiation workers by having completed form RPS/IR/3, will be issued with body badges, if appropriate, for the duration of their project and will be issued with copies of all relevant local rules, etc as for postgraduate students.

7.2.2 Work Registration

The Departmental Radiation Protection Supervisor should be aware of all undergraduate work with radioactive materials in his department, and should complete and return the [appropriate form](#) at the start of each academic year, and update it during the year if necessary. Formal registration of individual projects will not normally be necessary, but the Radiation Protection Adviser may wish to issue Work Certificates/Schemes of Work if the level of work warrants it.

For all undergraduate work with ionising radiations, remember that, prior to any demonstration or experiment, the students should be given:-

(a) instruction in the basic aspects of radiation protection as it affects their work, with the importance of keeping dose rates as low as reasonably achievable being stressed;

(b) reassurance with regard to possible health hazards; and

(c) in the case of an experiment, written instructions as to its conduct.

Adequate supervision of undergraduates is also essential, and is particularly important when they are inexperienced in work with ionising radiations.

Further information relating to undergraduate work with radioactive materials is available for Departmental Radiation Protection Supervisors and Academic Supervisors in: [undergraduate work with unsealed sources](#), and in [undergraduate work with sealed sources](#).