

Working with ionizing radiation outside the University of Groningen

If you, as part of your research, are going to work with radioactive material or ionizing radiation emitting equipment at the institute you are visiting the University of Groningen wants to guarantee an adequate level of radiation protection for you.

In general we assume that your personal dose due to radiation exposure during your visit will be small or negligible, i.e. less than 1 milliSievert (mSv) – the usual annual radiation dose limit for members of the public. However, if your annual dose is or might be more than 1 mSv, you are categorized as ‘exposed worker’. In our institute this implies that you have to pass the examination of the ‘level 5’ radiation protection course and that you receive a personal dosimeter that is read out periodically.

Before you visit the outside institute the following general rules apply:

1. Ask the outside institute for a declaration stating that you will not be exposed to more than 1 mSv.
2. In case the outside institute reports an expected exposure of more than 1 mSv, and you are not an ‘exposed worker’ yet, you must be categorized as ‘exposed worker’. Contact the local radiation protection officer (RPO) of your group, or, if your group doesn’t have any applications of ionizing radiation, contact the radiation protection expert (RPE) of your entity. He or she will inform you about the requirements for becoming an exposed worker. Note that this might take a few months in case you need to pass the level 5 Radiation Protection examination!
3. In case the outside institutes reports an expected exposure of more than 6 mSv, you will also be subject to medical surveillance. You must contact the RPE of the RUG immediately. You will also need a radiation passbook (see below)
4. If you are in doubt whether you will be provided a personal dosimeter at the outside institute you should apply for a ‘guest’ dosimeter at the RUG – contact the RPE of the RUG. Note that it is not allowed to bring your personal dosimeter from the RUG to the outside institute.
5. In case no data on your (potential) exposure are available, contact the RPE of your entity or the RPE of the RUG for a global estimate.

During your visit at the outside institute you should

1. ask for instruction on radiation protection aspects upon arrival at the institute;
2. follow the instructions given by the radiation protection officer (RPO) or radiation protection expert (RPE) of the outside institute; in particular:
 - a. wear the personal dosimeter provided by the outside institute if you are an ‘exposed worker’ or if this is required by the outside institute, and;
 - b. notify in that situation the RPO or the RPE of the outside institute to send the results of the personal dosimeter to the RPE of the RUG;

3. notify the RPO or RPE of the outside institute in case of any question or incident concerning radiation exposures.

Regardless of the aforementioned, some institutes do require from you a radiation passbook and/or a declaration stating you are categorized as an exposed worker. If this happens, the following general rules apply:

1. If you need a declaration and are already an exposed worker:
 - a. Contact the radiation protection expert (RPE) of the RUG for the declaration
2. In all other situations:
 - a. If you have not taken a level 5 Radiation Protection course yet, you should contact the RPE of the RUG for this level 5 course.
 - b. If you need a declaration:
 - i. After passing the level 5 exam contact the local radiation protection officer (RPO) of your group or the RPE of your entity for becoming an exposed worker.
 - ii. Subsequently contact the RPE of the RUG for the declaration.
 - c. If you need a radiation passbook:
 - i. After passing the level 5 exam, you contact the RPE for application for a radiation passbook.
 - ii. You will be invited to fill in an inquiry concerning various health aspects – based on your answers the radiation physician of the RUG will determine whether you are fit to be categorized as exposed worker category A. Only if this medical declaration states ‘fit’ you will be handed over the radiation passbook.
 - iii. Upon receiving the radiation passbook read and follow the instruction for using this passbook carefully.

Note that your group will in principle be liable for all expenses that come with the application for the declaration and/or radiation passbook.

Entity Radiation Protection Experts:

- KVI-CART: dr Hans Beijers, j.p.m.beijers@rug.nl, phone 8850
- Physics and Chemistry: dr Robert Klein-Douwel, r.j.h.klein-douwel@rug.nl, phone 4931
- Life Sciences: dr Maarten Linskens, m.h.k.linskens@rug.nl, phone 7290
- Medicine and Pharmacy: Rick Havinga, h.havinga@umcg.nl, phone 2066

Radiation Protection Expert of the RUG:

- dr Hielke Freerk Boersma, h.f.boersma@rug.nl, phone 6124

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Approved by the Board of Governors RUG, April 20th, 2015

dr Hielke Freerk Boersma, RPE – University of Groningen

dr Frank Jungbauer, Radiation Physician – University of Groningen