



Radiation of the Year – Motivation and Objectives

1 Motivation

Radiation, particularly ionizing radiation (sometimes wrongly equated with "radioactivity" in the public), arouses fears and anxieties in large sections of the population. This is often independent of the type and level of exposure. The main reason for this is widespread lack of knowledge about the properties of the respective radiation, the resulting dangers and the possibilities for protection against it. Another reason is that radiation is seen as something artificial, alien and even hostile to nature and especially to humans, although there are many types of radiation with benefits due to associated applications in medicine, technology and other areas. Personal practical experience with many types of radiation, which has also been consciously experienced and remembered, is rather rare. One reason for this situation is due to the inadequate treatment of types of radiation in schools, especially the frequent lack of clear communication through experiments. Another reason is the mostly emotional, danger accentuated and sometimes scandalizing presentation in the media.

By naming a type of radiation "Radiation of the Year" and the associated campaigns and publications, the Swiss German Radiation Protection Association wants to help draw the public's attention to the many aspects associated with radiation. The Radiation of the Year is intended to arouse curiosity and encourage people to take a closer look at radiation and radiation protection.

2 Objectives

Even if not every type of radiation will be related to all of the following objectives (e.g. cosmic radiation is not generated technically – but can be used (measurement-)technically), the "Radiation of the Year" is intended to contribute

- to inform about a specific radiation by
 - describing characteristic properties of the radiation and (where applicable) its technical production,
 - mentioning resulting uses of radiation (e.g. in medicine and technology),
 - describing the occurrence of this radiation in nature,
 - presenting their identification and measurement,
 - showing dangers posed by this radiation and ways of protecting against harmful effects.
- to embed the radiation presented and its use in a context that is also interesting for laypeople:
 - How was the radiation discovered?
 - How can I notice the radiation today?
 - How has the radiation been used over time?
 - What uses are there for the radiation today and how does it benefit us?
 - What risks can result from not using the radiation?
 - What role does the radiation play in everyday life?
- to illustrate the responsible handling of radiation:
 - How do people work with the radiation?
 - What experiences do they have?
 - What options are used for protection (e.g. legal regulations, behaviour patterns, technical precautions)



- What role do the Swiss German Radiation Protection Association and other organizations play in this?
- To reduce prejudices and unjustified fears by
 - recalling previous, possibly unconscious experiences with radiation,
 - describing experiences of others,
 - people who deal with radiation have their say
 - making possible own experiences
- to stimulate interest in working in radiation protection by
 - information on education and training possibilities
 - description of possible fields of activity

3 Target groups

The campaigns and publications on “Radiation of the Year” are primarily aimed to the general public. However, individual campaigns should be tailored to specific target groups. This applies to the type of campaign, means of distribution, scope and level of detail of the presentation, the assumed knowledge, the style of speech, the graphic and technical realization and the target group’s opportunities to participate. Possible target groups include:

- general public
- pupils of different age groups
- trainees
- students
- people with previous scientific knowledge
- professional groups that deal with this radiation
- groups of people who come into contact with the radiation

4 Implementation

The focus is on factual information about a specific type of radiation, its scientific significance, its use, but also possible dangers and protection against them. The purpose of the “Radiation of the Year” is to draw public attention to a phenomenon that is related to radiation protection and to focus on the fascination of the phenomenon. The representations are intended to help realistically assess the benefits and potential dangers of radiation. One way of achieving this is through stories, for example about the discovery of radiation, its naming, the discoverers, scientific and technical consequences or even the personal experiences of current users of radiation. The benefits of radiation can be illustrated by everyday, comprehensible and descriptive reports. Visual representations in the form of drawings, photos and videos are intended to support this. Furthermore, an attempt should be made to make radiation “experienceable”. In addition to reports of experiences, this can be achieved through demonstrations of radiation and its effects virtually, through videos and in real life, for example at open days. Where possible, everyday experiments (possibly virtual) and enabling people to take their own measurements can also deepen this experience.

Since communication only works if it is two-way, i.e. not only information is conveyed, but the experiences and emotions of the target groups are also included through intensive listening by the “experts”, interactive forms of communication are sought.



The contributions and actions are spread throughout the year and are intended to repeatedly draw attention to the radiation of the year. References to current events and anniversaries are good starting points. Possible means of implementation are listed in Appendix 1.

In connection with the “Radiation of the Year”, radiation protection and its components will also be presented:

- risk assessment
- avoiding unjustified exposure
- minimization of exposure
- considerations on the de minimis limit
- role of Radiation Protection Experts
- role of the Swiss German Radiation Protection Association and other institutions in radiation protection

In order to achieve a broad impact, it is necessary and desirable to involve other organizations, institutions and companies in public relations work. This public relations work will also be extended to Austria through cooperation with the Austrian Radiation Protection Association. An extension to other countries via their radiation protection associations is conceivable. The possible cooperation partners should be persuaded to participate. The modalities of participation will be agreed in detail and ranges from participation in the working group on the radiation of the year to the cooperation partners' own publications and campaigns (e.g. open days, guided tours).



Appendix 1: Possible means of public relations for the “Radiation of the Year”

For the Swiss German Radiation Protection Association:

- press releases
- articles in StrahlenschutzPRAXIS and other journals
- articles in general newspapers and magazines
- contributions to radio and television
- social media posts
- StrahlenschutzKOMPAKT
- website of the Swiss German Radiation Protection Association
- lecture at the annual meeting of the Swiss German Radiation Protection Association and other events
- baptism of the Radiation of the Year
- minisymposium in person or webinar
- videos
- virtual experiments
- references to books and other publications
- competition for stories, photos, graphic representations

Opportunities for interaction with target groups:

- invitation to ask questions
- obtaining feedback
- participatory activities
- surveys
- quiz
- live chats

Tools:

- arouse interest through striking headlines
- adapt the language style to the target group
- appeal to emotions
- establishing a regional connection
- personalization of the display
- building on current discourses

These means can be used in a similar way by the cooperation partners via their distribution channels. In addition, there are the following possibilities:

- Open House
- Long Night of Science
- guided tours
- exhibitions in their own rooms
- demonstrations
- possibilities for measurement
- cooperation with schools
- presentation at trade fairs and exhibitions