

## **Short term training course on “Safety Aspects in the Research Applications of Ionizing Radiation (RA)”**

### **Purpose**

Now a days radionuclides have wide applications in the field of research. It is mandatory that the institutions which in possession of such radionuclides have to appoint a Radiological Safety Officer (RSO) who can take care of radiological safety in day to day application. A person, undergone this training can be nominated to work as RSO in the institution. Indian Association for Radiation Protection (IARP), conducts this training in collaboration with Radiological Physics & Advisory Division (RPAD), Bhabha Atomic Research Centre, Mumbai. It is a 9-day programme wherein about 20-30 candidates are admitted.

### **Eligibility**

The minimum qualification for the candidate is 'Degree in Science' with at least one-year experience in handling of radioisotopes. Sponsored candidates are given preference for admission to the course.

### **Duration**

It is 9 days programme including Saturday and Sunday which contains 18 lectures on different topics related to radiation safety and two practical demonstrations.

### **Frequency**

Training programme are conducted on need-basis. It is normally scheduled if sufficient applications (about 30-35) are received.

### **Venue**

Training programme is conducted normally at Radiological Physics & Advisory Division (RP&AD), Centre for Training & Certification in Radiological Safety (CT & CRS), Anushaktinagar, Mumbai-400 094. *Depending upon the availability of facilities and adequate number of participants, this training can be arranged at user institution on request.*

### **TOPICS THAT ARE COVERED DURING THE TRAINING COURSE**

### **Topics**

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| 1. Basic Radiation Physics                                  | : 1 h |
| 2. Interaction of Ionizing Radiation with Matter            | : 1 h |
| 3. Radiation Quantities and Units                           | : 1 h |
| 4. Principles of Radiation Detection and Monitoring Devices | : 3 h |
| 5. Biological Effects of Ionizing Radiation                 | : 1 h |
| 6. Operational Limits                                       | : 1 h |
| 7. Radiation Hazard Evaluation & Control                    | : 3 h |
| 8. Planning of Radioisotope Laboratories                    | : 1 h |

9. Regulatory Aspects of Radiological Safety	: 1 h
10. Disposal of Radioactive Wastes	: 1 h
11. Transport of Radioisotopes	: 1 h
12. Production of Radioisotopes and Labelled Compounds	: 1 h

### **Examination**

Written and viva-voce examinations will be conducted at the end of the course. The criteria for qualifying the examination are 50% of the marks separately in written and viva-voce examinations and 60% in aggregate. Qualified candidates would be issued Certificate of qualification. In case a candidate could not succeed in first attempt, he/she shall be given two more attempts for reappearing in examination. A gap of minimum three months between the examinations is necessary for re-appearance.

### **Course fee**

Course fee is revised time to time. Rs.7500/- (Rupees Seven thousand five hundred only) + Service Tax (ST) on fee @ the rate notified by Union Government. Each candidate has to pay total (fee+ST) before registering in the training programme. The sum is to be paid by crossed **Demand Draft (DD)** or **Multi-City cheque payable at par** in Mumbai. The DD or cheque should be drawn in favour of '**IARP Training Course**', payable at Mumbai.

### **How to apply for admission**

A candidate has to fill up an application form in a particular format. The format is available on this web site. It may be down loaded and used for the registration purpose. The duly filled form must be forwarded by the Head of institution. The application along with course fee may be posted at the address '**Course Coordinator, IARP, C/O Radiological Physics & Advisory Division, CT&CRS, Anushaktinagar, Mumbai – 400 094**'.

Each application must necessarily be forwarded by the Head of the institution. While forwarding the application it should be ensured that the application is complete in following respects:

1. Self-attested copies of the certificates in support of educational qualification are enclosed.
2. Application is duly signed and stamped by the sponsoring authority.

### **Instructions to candidates and the sponsoring institutions**

The candidates are admitted for training on the conditions listed below. Once the candidate confirms the participation in training, she/he and the sponsoring authorities have to agree and abide by these conditions and rules. The sponsors and/or candidates would be responsible for any violation of these conditions.

1. Duly filled in application form with a self-attested copy of final qualification certificate.
2. The course fee is non-refundable, if the candidate withdraws from the training or remains unsuccessful in examination.

3. No candidate would be permitted to participate in the training without payment of course fee & Service Tax in advance.
4. Participants will have to make their own arrangement for boarding, lodging and travel during the entire training period.
5. Participants will compulsorily be present physically all days during the entire training period.
6. The participants are required to abide by the rules and regulations stipulated / prevailing at the course venue. They will be required to display the temporary I-card, issued to them during their movement in and around the venue of training.
7. **Medical care** of the candidate will be sole responsibility of the candidate or sponsoring authority during the entire training course.
8. At the end of the course participant would participate in written and viva-voce examination(s) conducted by Radiological Physics & Advisory Division, Bhabha Atomic Research Centre, Trombay, Mumbai – 400 085 and successful candidates would be issued qualifying certificate.
9. Wherever possible e-mail ID / contact number of the participant / Fax number of sponsoring agency may be given for speedy communication.
10. Completed form in all respects must reach IARP office at '**Course Coordinator, IARP, C/O Radiological Physics & Advisory Division, CT&CRS, Anushaktinagar, Mumbai – 400 094**', for scrutiny at least 15 days prior to the commencement of training.
11. Once a candidate receives admission letter or intimation from organizer, she/he will have to confirm the willingness of participation before the last date mentioned therein. In the absence of receipt of willingness from admitted candidate, it would be presumed that she/he is not willing in participation and her/his candidature would be cancelled. The next candidate in waiting list would be admitted in her/his place.

**Kindly note, that incomplete applications are subjected to be rejected.**