

Training & Certification Course for RSO for CALIBRATION LABORATORIES FOR RADIATION SURVEY INSTRUMENTS & POCKET DOSIMETERS (IC)

Purpose

Monitoring & measuring instruments are used to measure and ensure safe radiation levels in & around the nuclear/radiation facilities. The instrument therefore, record correct and reliable figures within the acceptable limit of error. The manufacturers/suppliers, before supplying any unit to end users, calibrate each and every monitoring gadget and provide certificate of calibration. But with continuous use and/or change in working environment, the electronic component starts misbehaving and the calibration factor may/would change. The instruments, therefore, require regular checks for the performance and tests for the calibration. It is mandatory for institutions handling radiation sources to have functional and well calibrated monitoring/measuring instruments and a personnel trained in radiological safety, duly approved by competent authority. This programme provides necessary training to the sponsored personnel for the said purpose.

Eligibility

The candidate should possess Degree in science or Degree/Diploma in engineering. Sponsored candidates are given preference for admission to the course.

Duration

It is a 12 day programme including Saturday and Sunday which contains 27 lecture on different topics related to radiation safety and 3 practical demonstrations.

Frequency

Training programme are conducted on need-basis. It is normally scheduled when 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 also be arranged at user institution on request.*

TOPICS THAT ARE COVERED DURING THE TRAINING COURSE

Topic

1. Basic Radiation Physics : 1 h

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| 2. | Interaction of Ionising Radiation with Matter | : 1 h |
| 3. | Radiation Quantities & Units | : 1 h |
| 4. | Principles of Radiation Detection | : 1 h |
| 5. | Radiation Monitoring Instruments & Measurements | : 1 h |
| 6. | Biological Effects of Ionising Radiation | : 1 h |
| 7. | Operational Limits | : 1 h |
| 8. | Design & Operation of Calibration Exposure devices & QQA | : 2 h |
| 9. | Radiation Hazard Evaluation & Control | : 2 h |
| 10. | Planning & Requirement of Calibration Facility | : 2 h |
| 11. | Calibration Methods & Procedures | : 8 h |
| 12. | Regulatory Aspects of Calibration Laboratory | : 1 h |
| 13. | Radiation Accidents, Emergency Response Plans & Preparations | : 1 h |
| 14. | Transport of Radioactive Material & Disposal | : 1 h |
| 15. | Orphan Sources | : 1 h |

Group Discussion

Demonstration

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| 1. | Radiation Absorption Characteristics | : 3 h |
| 2. | Calibration of Personnel Monitoring Instruments & Badges | : 3 h |
| 3. | Standardization & Calibration | : 3 h |

Examination

Written examination and viva-voce will be conducted towards the end of the course. To be successful in the training one has to score minimum 50% in written and viva-voce each and 60% in aggregate. 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

The course fee is revised time to time. Rs 11,500/- (Rupees Eleven 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 to the course

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 the Candidate and Sponsoring authority

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 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 organisor, 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, incomplete applications are subjected to be rejected.