

## Raja Ramanna Centre for Advanced Technology

### Frequently Asked Questions:

- Que : What is the postal address of RRCAT?
- Reply : Raja Ramanna Centre for Advanced Technology, PO CAT, Indore -452013
- Que : What are the main areas of working of RRCAT?
- Reply : RRCAT is working in Research and development in mainly two areas viz., particle accelerators and lasers along with their allied technologies.
- Que : What is a Synchrotron Radiation Facility?
- Reply : It comprises the synchrotron radiation source and beamlines for various applications.
- Que : How the beam time is booked for Indus-1 and Indus-2?
- Reply : Requests are processed online regarding the utilisation of beam time. The link is [https://www.rrcat.gov.in/technology/accel/indus/ind\\_user\\_proc.html](https://www.rrcat.gov.in/technology/accel/indus/ind_user_proc.html)
- Que : Contact details for beamline booking related issues?
- Reply : A list beamline coordinators is available through the link given above.
- Que : Where is the irradiation facility for medical devices and industrial applications?
- Reply : Electron Beam Radiation Processing Facility (ARPF),  
Adjacent to Phool Mandi, Devi Ahilyabai Hekar Fruit and Vegetable Mandi,  
Nirbhay Singh Patel Marg, Indore- 4502001 (Madhya Pradesh)
- Que : Contact details of the incharge of the radiation processing facility?
- Reply : Sh Jishnu Dwivedi, Facility In-charge (jishnu(at)rrcat.gov.in)  
Sh V.C. Petwal, Radiation Processing In-charge (vikash(at)rrcat.gov.in)  
• Phone no.- 0731-2332001, 0731-2488587, 0731-2488564
- Que : How the irradiation processing facility be availed for industrial samples?
- Reply : Link as given below can be used for further details of the process and procedure:  
<https://www.rrcat.gov.in/technology/accel/mal/ebpf.html>

- Que : Where is the RRCAT Incubation Centre?
- Reply : RRCAT Incubation Centre is located in R&D Block C-1 inside Technical Area.
- Que : How to approach the RRCAT Incubation Centre?
- Reply : For details the link is given below:  
<https://www.rrcat.gov.in/organization/cat/incubation/index.html>
- Que : What opportunities does RRCAT offer for R & D?
- Reply : PhD programmes are run at RRCAT under HBNI. For details the link is given below:  
<https://www.rrcat.gov.in/hrd/ResearchOppor.html>
- Que : What are the training opportunities for ITI holders?
- Reply : A special on job training programme is conducted from time to time in the name of TASAR.  
Details can be seen on the home page of RRCAT.
- Que : What major items are planned for procurement in RRCAT?
- Reply : Major items planned for procurement in next three years can be seen on the link given below:  
[https://www.rrcat.gov.in/contact/procure\\_plan\\_rrcat\\_2023-26.pdf](https://www.rrcat.gov.in/contact/procure_plan_rrcat_2023-26.pdf)
- Que : What is a laser?
- Ans : Laser is an acronym for Light Amplification by Stimulated Emission of Radiation. Laser can be termed as a device that emits light through a process of optical amplification based on the stimulated emission of electromagnetic radiation. LASER is a device which produces an intense beam of light with the unique properties of coherence, directionality and mono-chromaticity as compared to ordinary light.
- Que : What are the safety standards for lasers?
- Ans : AERB safety Guidelines No. AERB/SG/IS-7 followed on Safety in design and application of laser (Refer <https://www.aerb.gov.in>).
- Que : What are the applications of lasers?
- Ans : Lasers find applications in industry, defense, medical and nuclear fields respectively.
- Que : What are the modes of operation of lasers?
- Ans : Lasers can operate in Continuous Wave (CW) mode or pulsed mode. Pulsed lasers can have pulse durations starting from milli seconds to femto seconds.

Que : Which laser is most suitable for processing of metals?

Ans : Nd:YAG and fiber lasers are more suitable for processing of metals.

Que : Which laser is most suitable for processing of non-metals such as wood and glass?

Ans : Carbon dioxide (CO<sub>2</sub>) laser is more suitable for processing of wood and glass.

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