



भारतीय प्रौद्योगिकी संस्थान रुड़की Indian Institute of Technology Roorkee

DEPARTMENT OF PHYSICS

Advt. No.: IITR/PHY/PDF/20-21/ 1666

Dated: October 7, 2021

ADVERTISEMENT FOR POST DOCTORAL FELLOWSHIP POSITION

The Department of Physics at the Indian Institute of Technology Roorkee invites applications from outstanding and enthusiastic researchers for a postdoctoral position under the mentorship of **Dr. Ajay Y. Deo** focused on “**Nuclear Structure Investigations around the $A \sim 140$ & 220 Mass Regions**”.

The prospective candidate is expected to have a strong background in the area of experimental nuclear physics. In particular, experience with high-resolution gamma-ray spectroscopy, g-factor and fast-timing measurement technique is preferable. The candidate should have publications in peer reviewed journals. Other research activities may include the development of analysis codes using ROOT data-analysis framework and participating in research discussion with research centers. Apart from research, the candidate will be entrusted with other academic responsibilities as deemed fit by the department.

Last date for the submission of application is **October 28, 2021 (5:00 PM)**. *Applications received after this date will not be considered.*

Minimum Qualification and Experience:

(a) Essential Qualification*:

Ph.D. in Physics/Nuclear Physics. Experience at conceiving and executing experimental research projects, data analysis, physics interpretations, and reporting of the results. A strong background in the field of Experimental Nuclear Physics, with in-depth understanding of gamma-ray spectroscopy.

*Candidates who have recently submitted their thesis are also eligible to apply subject to the condition that they will furnish the proof of the award of Ph.D. degree at the time of interview at IIT Roorkee, if shortlisted.

(b) Desirable Qualification:

- Experience in particle and gamma-ray detectors and associated electronics
- Experience with Monte Carlo based particle/gamma-ray simulation tools, ROOT, RADWARE etc.
- Experience with digital data acquisition system and analysis-code development using C/C++, Python
- Experience with g-factor and fast-timing measurements

Duration and Fellowship amount:

The duration of the fellowship will be 2 years extendable by one more year. The Fellowship may be terminated by either side by giving one month notice. A consolidated fellowship of Rs. 55,000.00 per month for the first 2 years and Rs. 60,000.00 per month for the third year and a contingency of Rs. 50,000.00 per annum will be awarded to Post Doctoral Fellows.

P.T.O.

How to Apply:

Candidates should clearly mention Advt. No. and date with title of the position applying for with a covering letter, curriculum vitae, list of publications (**highlighted with the most relevant publications for the post**), research statement describing past research and plans for future research in the context of the focus for which the post is being advertised (mandatory) all in a single PDF file by e-mail, to:

The Head,
Department of Physics,
Indian Institute of Technology Roorkee
Roorkee – 247667, Uttarakhand, INDIA
email: physics_office@iitr.ac.in (and copy to: ajay.deo@ph.iitr.ac.in)
Phone: +91-1332-285248 (office)

Notes:

- (i) Post Doctoral Fellows will be registered as students and may avail facilities of hostel accommodation, library, computer centre, available hospital facilities etc. Depending upon the availability, they may get shelter accommodation also. They will be entitled to 2.5 days of leave per completed calendar month. No carry forward for leave will be allowed beyond a calendar year. PDF positions are purely temporary.
- (ii) The screened candidates will be called for online discussion/interview.

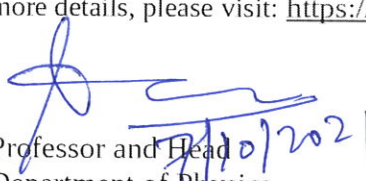
About the Department:

The Department of Physics from its modest beginning in 1960 has now grown in to an active center of quality teaching and research. Today it stands as one of the leading departments in the country, well known for its excellence in teaching and research. The Department runs five year integrated M.Sc. (Physics), four year Engineering Physics, two year M.Sc. (Physics) and M. Tech. (Solid State Electronic Materials), M. Tech (Photonics) programs apart from catering the teaching of core Physics courses to undergraduate engineering students. The faculty of the Department are actively engaged in different areas of research viz. Atmospheric and Space Physics, Atomic and Molecular Physics, Condensed Matter Physics, Nuclear Physics, Optics and Theoretical High Energy Physics.

For more details, please visit: <https://www.iitr.ac.in/departments/PH/pages/index.html>

About the Institute:

IIT Roorkee has its roots in the Roorkee College, which was set up in 1847. It was renamed as the Thomason College of Civil Engineering in 1854. The College laid the foundation of modern engineering education and the use of Civil Engineering practices in the infrastructure development of the country. The irrigation infrastructure in the form of dams and canals, roads and highways, railway, bridges, etc. in the country, all have been the outcome of the engineering education imparted in this, the only engineering institution in the country, at that point of time. It got elevated as the first technical University of the country in 1948 through the University of Roorkee Act, 1947 passed by the United Provinces Legislature. University of Roorkee also became the first institution in the country to offer postgraduate programs engineering and technology in 1955. On September 21, 2001, the University was converted into an IIT by the Government of India through an Act of Parliament and recognized as an Institution of National importance. Roorkee is the entry point of Uttarakhand state. It is on the way to Haridwar from Delhi. For more details, please visit: <https://www.iitr.ac.in>.


Professor and Head
Department of Physics
Head, Physics Department
I.I.T., Roorkee

