

**Department of Physics**  
**Indian Institute of Technology Roorkee**

Advt. No. PHY/PDF/1474

Dated: 13-10-2020

**ADVERTISEMENT FOR THE POST DOCTORAL FELLOWSHIP (PDF) POSITION**

Department of Physics at the Indian Institute of Technology (IIT) Roorkee invites applications from outstanding and enthusiastic researchers for post-doctoral position under the mentorship of **Dr. Vivek K. Malik** (Associate Professor in Physics) and **Dr. Tulika Maitra** (Professor in Physics) on '**The electric field control of the magnetic switching in oxide heterostructures**'.

The prospective candidate is expected to have a strong background in the area of condensed matter physics. Candidate should be passionate about working on cutting edge research leading to high impact publications. Other research activities may include participating in research discussions, mentoring students and class-room activities.

**Last date for submission of application is November 15, 2020.**

**Minimum Qualification and Experience:**

The prospective candidate should have good publication record in SCI based journals. He/she should have

(a) Essential qualifications:

- (i) Ph.D. in Physics (experimental condensed matter) from a reputed Institute/University
- (ii) Experience in material preparation and characterization

(b) Desirable qualifications:

- (i) Knowledge and understanding of Raman spectroscopy/XPS/XAS
- (ii) Should have experience in low temperature electrical transport and magnetic measurements
- (iii) Knowledge of electronic structure calculation would be an advantage

Candidates who have recently submitted their Ph.D. thesis are also eligible to apply for the position. However, they will need to present the proof of award of Ph.D. at the time of interview.

**Duration and Fellowship Amount:**

The duration of the fellowship will be of two years. The candidate is expected to join the Department as soon as offer letter has been released. The fellow will receive a consolidated fellowship,

S. No.	Year	Amount of Fellowship (Rs.)	Contingency (Rs.)
1.	First year	55,000.00 p.m.	50,000.00 per annum
2.	Second year	55,000.00 p.m.	50,000.00 per annum



**How to Apply:**

Candidates can apply with cover letter, curriculum vitae, list of publications (with the most significant publications highlighted), research statement describing past research and plans for future research by both regular and e-mail, to:

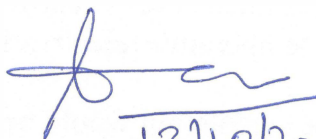
Professor and Head  
Department of Physics  
Indian Institute of Technology Roorkee  
Roorkee -247667  
INDIA

Email: [g.varma@ph.iitr.ac.in](mailto:g.varma@ph.iitr.ac.in) (and copy to [vivek.malik@ph.iitr.ac.in](mailto:vivek.malik@ph.iitr.ac.in) )

Phone: +91-1332-284348 (office)

**Notes:**

- (i) All the post-doctoral fellows (PDF) will be registered as IIT Roorkee students for availing the facilities of accommodation, hospital, medical insurance scheme, computer center, library sports, etc. They will also be governed by the leave rules as applicable to the post graduate students.
- (ii) The candidates called for discussion/interview will be paid II-AC train fare from their place of residence/work and back by the shortest route within India on production of train/bus tickets.

  
13/10/2020

### About the Department:

From a modest beginning in 1960, the Department has now grown into an active center of quality teaching and research. Our achievements in research have been well recognized by U.G.C. in selecting our department under Special Assistance Program in 1979 in the thrust areas of Solid State Physics (hereafter mentioned as Condensed Matter Physics), and Atomic and Molecular Collision Physics. The program was further extended in 1985, 1992 and 1999 respectively.

The Department organizes national and international conferences from time to time. The research activity in the Department is recognized by CSIR, AICTE, DST and ISRO etc. and a number of research projects funded by these agencies are always in progress in the department.

The faculty of Physics Department has been actively pursuing research in important areas like High-TC superconductivity, heavy fermions, transport in anisotropic fluids, magneto-optical properties of transition metal compounds, conducting polymers and device applications, smart electro ceramics and biomaterials, nano-physics, scattering of spin-polarized electrons with atoms and molecules, physics of super-deformed nuclei, Lightning, Auroral and airglow studies. The Department is presently running fourteen Research projects sponsored by various agencies like DST, ISRO, DAE, AICTE and CSIR.

The Department runs M.Sc., M.Tech. ( Solid State Electronic Materials), M.Tech (photonics) , B.Tech. (Engg. Physics), Integrated M.Sc., M.Sc. (JAM) courses and Ph.D. program in advanced topics of major branches of Physics. The Department has 140 Research Scholars.

For more details, please visit: <http://www.iitr.ac.in/~PH/>

### 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 in 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 Mussoorie and Haridwar from Delhi. IIT Roorkee has a beautiful green campus. Various sports facilities including Billiards, Swimming, Hockey, Football, and Yoga are available in the Campus. The Institute provides 100% accommodation to faculty members. A good C.B.S.E. School is available in the Campus which provides admission to the children of newly joining faculty members throughout the year.

For more details, please visit: [www.iitr.ac.in](http://www.iitr.ac.in)