

Institute Post-Doctoral Fellow in the area of Multi-Principal Element Alloys

The IDEAs research group is seeking a motivated post-doctoral research associate to work in the area of multi-principal element alloys (MPEAs).

Major duties/responsibilities

The selected candidate will be part of an inter-disciplinary team of researchers including experimentalists and theorists and is expected to work primarily on the project titled “*Phase Selection in Multi-Principal Element Alloys*”. The IDEAs research group has strong intra-group collaborations as well as external collaborations in the area of high temperature materials and MPEAs. The group is primarily interested in theoretical and experimental studies on phase selection, magnetic properties, processing, micro-structural evolution and oxidation behavior of MPEAs.

Basic qualifications and eligibility criteria –

The candidate should possess a PhD with doctoral research performed in one of the following areas – materials science and engineering, solid state physics, solid state/structural/inorganic chemistry, applied mathematics, mechanical engineering or chemical engineering. Candidates who have defended their thesis are also eligible to apply. PhD degree holders are eligible to apply within five years after completion of their PhD. Candidates completed PhD supervised/co-supervised by faculty members from IIT Ropar can apply after 3 years of completion of their PhD.

Preferred qualifications –

In addition to the basic qualifications listed above, demonstrated experience in at least one or more of the following areas will be strongly preferred.

- Atomistic simulations (Molecular Dynamics, Monte Carlo methods)
- Mesoscale modeling (phase-field modeling)
- X-Ray Diffraction and Electron Microscopy
- Solidification Processing and Physical Metallurgy

Shortlisted candidates will be invited for a presentation and interaction/interview. Due to the current Covid-19 situation, this process can be carried out online, if advised by the Post-Doctoral Selection Committee.

Tenure –

The selected candidate will be appointed for 12 months on a full-time basis. Subject to satisfactory progress, the position can be renewed further for a maximum of 24 months.

Benefits –

The benefits, salary and facilities for this position will be in accordance to the standard policies of Indian Institute of Technology Ropar for Institute Post-Doctoral Fellowships.

• Fellowship Amount	Rs. 40,000/- before viva Rs. 45,000/- to Rs. 55,000/- after completion of viva
• Accommodation	Suitable Hostel/Campus accommodation as per IIT norms will be provided if requested and if available.
• Medical benefits/Insurance	As applicable to Ph.D Scholars.
• Leave	Leaves will be similar to those of doctoral students.

Additional Information –

Information about the IDEAs research group can be found here – <https://ideaslab.iitrpr.ac.in>. Any queries may be addressed to pratik@iitrpr.ac.in.

Application Deadline: Candidates must apply before 29th September 2020.

How to apply: The candidates must apply by email to offdmme@iitrpr.ac.in, with cc to pratik@iitrpr.ac.in. The application must incorporate the following information –

- Cover letter
- Resume (less than 2 pages)
- List of references for recommendation letters (at least three references) with their contact information (email, affiliation and phone number)
- List of publications
- An abstract of your PhD thesis

The candidates should preferably collate the above information into a single **pdf** file.

Additionally, they must fill and attach the completed application form with their email –

http://www.iitrpr.ac.in/sites/default/files/ApplicationForm_3_0.pdf