## Advertisement No. IITRPR/FACRECT/103/2017

Indian Institute of Technology Ropar invites applications from qualified candidates for the faculty positions in the specific areas of specializations in the Departments of Chemistry, Civil Engineering, Chemical Engineering, Computer Science & Engineering, Centre for Biomedical Engineering, Center for Materials and Energy Engineering (proposed to be transformed into *Department of Metallurgical and Materials Engineering*), Electrical Engineering, Humanities & Social Sciences, Mathematics, Mechanical Engineering, and Physics.

For details regarding educational qualification, experience, areas of specialization, and other details please visit the institute website **http://www.iitrpr.ac.in/jobs/faculty-positions.**

**The last date for the submission of online applications is Dec. 15, 2017.**

कुलसचिव / **REGISTRAR**

### Advertisement No. IITRPR/FACRECT/103/2017

Indian Institute of Technology Ropar invites applications from qualified and motivated candidates for the following faculty positions in various Department(s) at the starting pay as per 7th CPC is as under:

| Department(s) | Position | Starting Pay as per 7th CPC | Tentative Minimum Emoluments at present |
|---|---|---|---|
| (i) Centre for Biomedical Engg.<br>(ii) Center for Materials and Energy Engineering (proposed to be transformed into Department of Metallurgical and Materials Engineering)<br>(iii) Chemical Engineering<br>(iv) Chemistry<br>(v) Civil Engineering<br>(vi) Computer Science & Engg.<br>(vii) Electrical Engineering<br>(viii) Humanities & Social Sciences<br>(ix) Mathematics<br>(x) Mechanical Engineering<br>(xi) Physics | Professor | ₹ 159100/- | ₹ 182579/- |
| | Associate Professor | ₹ 139600/- | ₹ 160864/- |
| | Assistant Professor Grade-I | ₹ 101500/- | ₹117999/- plus ₹10000/- (Top up salary) |
| | Assistant Professor Grade-II | ₹70900/- | ₹84893/- plus ₹10000/- (Top up salary) |

**Those who have already applied against the rolling Advt No. IITRPR/FACRECT/76/2016, need not apply again and their applications will be considered alongwith applications received against this advertisement.**

Assistant Professors Grade-I of IITs after having 3 years of experience (as Assistant Professor Grade-I) rendered in centrally funded technical institutions, AICTE approved institutions, and institutions under UGC, would be considered for upward movement to Pay level 13A1 – ₹ 131400/-. They will, however, continue to be designated as Assistant Professor Grade-I.

The applications shall be screened invoking the prescribed pre-requisites. The shortlisted candidates shall be required to appear for a seminar and subsequent interview on announced dates. Ordinarily, the candidates are required to appear in person for both of these interactions. However, for the overseas candidates one of the interactions (either seminar or interview) may be allowed via video conferencing but the other interaction has to be in person. Further, the interaction of the overseas candidates with the visiting IIT Ropar team in US/Canada/Germany during October 2017 may be deemed to be such a personal interaction and consequently both the seminar and the interview may be allowed via video conferencing.

**Reservations:** Without any compromise on qualification, experience and competence, reservations as per Government of India rules - 15%, 7½% and 27% for SCs, STs and OBCs, respectively are applicable at the entry level (Assistant Professors) in the Science and Technology departments. GOI policy on the reservation of faculty positions for persons with physical disability is also applicable. To avail any of these benefits, relevant certificate in latest format, must be produced at the time of the seminar.

**Qualified persons include:**

(a) Indian Nationals;

(b) Foreign Nationals, who are Persons of Indian Origin (PIO) or Overseas Citizen of India (OCI), in whose case if selected, permission will be sought from the Government of India before he/she can join the institute;

(c) Other Foreign Nationals in whose case if selected, an appointment will be made on a contract basis upto 5 years subject to the grant of permission from the Government of India before he/she can join the institute.

**Educational qualification:**

Ph.D. with first class or equivalent at the preceding degree in the appropriate branch with a very good academic record throughout. Further,

1. The applicants for the faculty positions in Center for Materials and Energy Engineering (proposed to be transformed into Department of Metallurgical and Materials Engineering) must have an undergraduate degree (4 year B.Tech./B.E.) in Metallurgical Engineering / Metallurgical and Materials Engineering / Materials Engineering.

2. The applicants for the faculty positions in Civil, and Chemical Engineering Departments must have their undergraduate degree in respective discipline only. However, the requirement of the basic degree in Civil Engineering may be waived off in the case of exceptionally qualified candidates in the following areas:

   (i) Water Resources Engineering: Candidates having a basic degree in Agricultural Sciences/Agricultural Engineering or other allied fields having research orientation towards experimental, theoretical and numerical/modeling aspects of soil-water-plant interaction may also apply.

   (ii) Geomatics Engineering: Candidates having a basic degree in Earth Sciences and adequate exposure to Surveying and having research orientation towards Remote Sensing, GIS, etc. may also apply.

3. *The applicants for the faculty positions in Mechanical Engineering Department must have their B.Tech/BE degree in Mechanical Engineering/Aerospace Engineering/Production Engineering/ Automobile Engineering

**Experience Requirements:**

- **Professor:** A minimum of 10 years' experience of which at least 4 years should be at the level of Associate Professor in IITs, IISc Bangalore, IIMs, NITIE Mumbai and IISERs or at an equivalent level in any such other Indian or foreign institution / institutions of comparable standards as may be so decided by the institute.
  **Desirable experience:** The candidate should have demonstrated leadership in research in a specific area of specialization in terms of guidance of Ph.D. students, a strong record of publications in reputed journals and conferences, patents, technology transfer, laboratory / course development, and / or other recognized relevant professional activities.

- **Associate Professor:** A minimum of 6 years' Teaching / Research / Industrial experience, of which at least 3 years should be at the level of Assistant Professor / Senior Scientific Officer / Senior Design Engineer.
  **Desirable experience:** The candidate should have demonstrated leadership in research in a specific area of specialization in terms of guidance of Ph.D. students, a strong record of publications in reputed journals and conferences, patents, technology transfer, laboratory / course development, and / or other recognized relevant professional activities.

- **Assistant Professor Grade-I:** A minimum of 3 years' (Post PhD) Teaching / Research / Industrial experience, excluding however, the experience gained while pursuing Ph.D.

**Assistant Professor Grade-II:** Eligible candidates with less experience may be considered for this position which may be subsequently enhanced to Assistant Professor Grade-I, on completion of minimum experience requirement and satisfactory performance in teaching and research during the intervening period at IIT Ropar on the recommendations of an Assessment Committee.

**Preferred Specializations:**

| Department / Center | Position-Wise Preferred Specialization(s) (Outstanding candidates from other specializations may also be considered) |
|---|---|
| Centre for Biomedical Engineering | **For all positions:** Medical devices for hard and soft tissue replacements (implants / grafts); Biomaterial-tissue interactions |
| Center for Materials and Energy Engineering (proposed to be transformed into Department of Metallurgical and Materials Engineering) | **For all the positions:** Physical Metallurgy, Extractive Metallurgy, Mechanical Metallurgy, Bio Materials, Energy Materials, Transport Materials |
| Chemical Engineering | All specializations for all the positions |
| Chemistry | **For Professor:** All specializations<br><br>**For Associate Professor:** Organic and Inorganic chemistry<br><br>**For Assistant Professor:** Main Group Chemistry; Bio Inorganic Chemistry; Medicinal Chemistry; Physical Organic Chemistry |
| Civil Engineering | All specializations for all the positions |
| Computer Science & Engineering | **For all the positions:** Theoretical Computer Science; Hardware & Architecture; Machine learning & Artificial intelligence; Internet of Things and Distributed Computing; Formal methods, Programming languages, and Compilers. |
| Electrical Engineering | **For all the positions:** Computer technology: Computer architecture, embedded systems, computer networks; Power engineering: High voltage technology, power system protection; Communications: Information theory, Coding theory, Communication networks; Semiconconductor Devices; Circuits: RFIC, mixed signal circuit design; Electromagnetics; Control Engineering. |
| Humanities & Social Sciences | **For Professor:** All specializations<br><br>**For Associate Professor:** Economics: Banking & Finance, Econometrics; English: English Literature; Linguistics<br><br>**For Assistant Professor:** English, Sociology, Psychology |

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|---|---|
| Mathematics | **For Professor:** All specializations |
| | **For Associate Professor:** Non-linear Dynamics, Differential equations, Statistics and Theoretical Computer Science |
| | **For Assistant Professor:** Differential Equations; Analysis; Numerical Analysis; Probability and Statistics; Theoretical Computer Science : Algorithms, Data Structure, Logic & Complexity; Operating System and Networking |
| Mechanical Engineering | **For all the positions:** |
| | Machine Design: Mechatronics; Robotics; Dynamics and Control; Biomechanics |
| | Manufacturing: Micro & Nano Manufacturing; Additive Manufacturing; Industrial Engineering; \*\*Manufacturing with Advanced Materials; Sustainable Manufacturing Technologies |
| | Thermal and Fluid: Fluid Structure Interaction; Propulsion/Combustion; Experimental Microfluidics; Fuel cell/Electrical Automobile/Hybrid Automobile; Inverse heat transfer |
| Physics | **For Professor:** All specializations |
| | **For Associate Professor:** Low-dimensional materials, Quantum Information Theory |
| | **For Assistant Professor:** Experimental physicists in any of the following areas - Quantum Computing and Information; Semiconductor Integrated Optics/Terahertz Spectroscopy/Laser Spectroscopy; |
| | Low-temperature Physics: spintronics /magnetism/strongly correlated systems/areas relevant to other branches of Physics |
| | \*\*\*Nuclear Instrumentation. |

**Candidates possessing the requisite qualifications and experience may apply online on the following link: http://www.iitrpr.ac.in/recruitments**

**The last date for the submission of online applications is Dec. 15, 2017.**

## Know about IIT Ropar

Indian Institute of Technology Ropar, an Institute of national importance, is one of the eight IITs set up by the Government of India, Ministry of Human Resource Development (MHRD), in 2008. It is located just about 40km from Chandigarh, the dream city. Presently, it is operating from its transit campus and will be shifting to its permanent location (about 5 km away) soon. The new campus is surrounded by rivers and agricultural fields. It is spread over 500 acres of land and the design has been bestowed a 5 Star rating under GRIHA LD.

IIT Ropar provides an exciting academic environment and is close to premier educational and research institutes such as PGI (Chandigarh), IISER (Mohali), IMTECH, CSIO, SCL, NIPER, Panjab University. Within its short span of existence, IIT Ropar has emerged as the leader in quality of research publications (*highest number of citations per publication*) amongst the new eight IITs. It

has been ranked very high, amongst the engineering institutes of India, by MHRD. Historically, Ropar city was a part of the Indus valley civilization and it provides a unique experience to the quality of life due to ever supporting nature of people of Punjab.

Who would not like to be a part of the rich culture of Punjab and contribute to its success story when liberal pay and perks are on offer!

**GENERAL INFORMATION:**

- **Applications by e-mail or hard copy will not be considered. Copies of certificates should not be appended along with the application.**
- Mere fulfillment of the above mentioned qualifications and experience does not entitle a candidate to be called for an interview.
- The Institute reserves the right to consider and to fill or not to fill positions in any of the above specialization(s) / Department(s).
- The candidate should fill separate applications if he/she is interested in applying to more than one department/ position.
- Recruitment would be based on the need in a given area within the department.
- For a regular faculty position, the candidate must present himself/herself personally at least once; either for research-cum-teaching seminar or for the interview.

**OTHER SUPPORTS FOR PROFESSIONAL ADVANCEMENT OF FACULTY:**

- **Medical Coverage:** Members of the faculty and their dependent family members, may use facilities and services available in its on-campus dispensary. In case the dispensary is not in a position to provide necessary medical care, patients are referred to other dispensaries and empanelled hospitals in and around Ropar / Chandigarh / Mohali. The expenses incurred on such treatment are reimbursed as per CGHS rates.
- **Leave Travel Concession:** As with other Government employees, members of the faculty are entitled to "Leave Travel Concession", wherein the institute underwrites the travel expense to one's Home Town every year for the first eight years of service as per Govt. of India LTC rules. This travel support is provided to all dependent family members as well.
- **Relocation Expenses**: The Institute will reimburse expenses incurred by a faculty to travel to join IIT Ropar by shortest route. Expenses incurred on travel by him (her), his(her) family and for transportation of household goods shall be restricted to ₹ 1,00,000/- for the faculty joining from abroad and ₹ 50,000/- for the faculty joining from within India as the case may be. The mode of travel/transportation etc. is however subject to Government of India guidelines.
- Depending upon the qualification and experience, a higher start / salary may be offered in deserving cases.
- Reimbursement of telephone bills ranging from ₹800/- to ₹1800/- p.m. as per institute rules.
- A Cumulative Professional Development Allowance (CPDA) of ₹3.00 lac (under revision) for every block period of 3 years (Rupees one lac per year) is made available to every year member of the faculty on reimbursable basis to meet the expenses for participation in national and international conferences, payment of membership fee of professional bodies and contingent expenses for any other professional activity.
- No limit on attending the International Conferences without Institute financial assistance.
- **Accommodation:** On arrival, the faculty may stay in Guest House upto a month on concessional rates and allotment of single bed room quarter on spot allotment basis subject to availability.
- The Institute encourages interaction of the faculty with industry, other research and professional institutions. Consultancy is encouraged at IIT Ropar and liberal consultancy policies are in practice.
- Professional visits can be undertaken during vacation period for carrying out scientific research work.

- Facilities for Research and Development activities exist in all the Departments. These are being continuously modernized with contemporary equipment and services. Good central facilities also exist for computing and research. The Institute has a well stocked library.
- Most of the day-to-day facilities are available on the Campus including banks, post office, crèche for children, well equipped dispensary, sports facilities, cafeteria etc.

## ADDITIONAL INFORMATION:

- Permanent faculty positions are open to Indian Nationals, Persons of Indian Origin (PIO) and Overseas Citizens of India (OCI). Appointment of foreign nationals for fixed period not exceeding 5 years on contract basis is permissible.
- Political and security clearance from Ministries of External Affairs and Home Affairs is necessary in every case for individuals with foreign passports.
- Candidates serving in Government or Quasi-Government or Government-aided Institutions including Universities, are requested to send their applications through proper channel or produce a No Objection Certificate from their employer. Online application should also be filled.
- The Institute reserves the right to restrict the number of candidates for interview to a reasonable limit on the basis of qualifications and experience higher than the minimum prescribed in the advertisement and other academic achievements.
- The Institute reserves the right to screen and call only such candidates as are found prima-facie suitable for being considered by the Selection Committee. Thus, just fulfilling the prescribed conditions would not entitle one to be called for interview.
- No correspondence whatsoever will be entertained from candidates regarding reason for not being called for interview / outcome of interview.
- The Institute may consider candidates whose area of specialization lie outside those stated herein, provided these persons have an outstanding record.
- The candidate is responsible for the correctness of the information provided in the application. If it is found at a later date that any information given in the application is incorrect / false the candidature / appointment is liable to be cancelled / terminated.
- The candidates may get in touch with the Head of the relevant Department / Centre for additional information.
- Any corrigendum / addendum or modification, if any, would appear only on the institute website and not be published in any Newspaper.

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