

**INDIAN INSTITUTE OF TECHNOLOGY ROPAR**  
**Rupnagar, Punjab – 140 001 (INDIA)**

**Advertisement for Junior Research Fellow (JRF) Position**

**Last date for submitting the completed application form/Google form: May 22, 2025**

**Project Title:** *Enhancing Micro-EDM Precision with ML-Based Prediction and High-Fidelity Plasma Modeling*

**Funding Agency:** DST ANRF

**Principal Investigator:** Dr. Chandrakant K. Nirala (Associate Professor, Mechanical Engineering)

**Job Details:**

- **Position:** Junior Research Fellow (JRF) – 01
- **Location:** IIT Ropar, Rupnagar, Punjab
- **Project Area:** Micro Electro-Discharge Machining ( $\mu$ EDM)
- **Duration:** Up to 3 years or until project completion, whichever is earlier. The initial appointment will be for one year, with extensions based on performance.
- **Fellowship:** ₹37,000/month + HRA (first two years), ₹42,000/month + HRA (third year)

**Eligibility Criteria:**

- **Educational Qualification:** B.Tech/M.Tech in Mechanical/Manufacturing/Production /Mechatronics or relevant disciplines (minimum 65% marks or CGPA  $\geq 7$ ). Final semester students may also apply but must submit the provisional degree at the time of joining. Qualification in GATE/CSIR-UGC NET or any national-level examination conducted by Central Govt. Departments and their agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER, etc., is **mandatory**
- **Age Limit:** Not exceeding 28 years as of the application deadline (relaxation for various categories as per GOI norms).
- **Desirable Qualifications:**
  - Hands-on experience with Electro Discharge Machines (EDM) is advantageous.
  - Candidate with the experience of machine learning will be preferred.

**Job Responsibilities:**

- Conduct research on micro-EDM plasma analysis, modeling, and simulation under various dielectric conditions with ultrasonic assistance.

**Additional Benefits:**

- Selected candidates will be encouraged to register for a Ph.D. at IIT Ropar.

**Application Link:** [Google form](#)

*Alternatively, submit the following filled in form to the email: [nirala@iitrpr.ac.in](mailto:nirala@iitrpr.ac.in) on or before May 22, 2025*

**Note:** Please avoid submitting duplicate form

# Application Form – JRF Position (DST-ANRF Project)

## Personal Details

Full Name (in CAPITAL letters): \_\_\_\_\_

Date of Birth (DD/MM/YYYY): \_\_\_\_\_

Category (General/SC/ST/OBC): \_\_\_\_\_

Age (in years): \_\_\_\_\_

Gender (Male/Female/Other): \_\_\_\_\_

Marital Status (Single/Married): \_\_\_\_\_ Nationality: \_\_\_\_\_

Address for Communication:

\_\_\_\_\_  
\_\_\_\_\_

Permanent Address:

\_\_\_\_\_  
\_\_\_\_\_

Mobile/Phone No.: \_\_\_\_\_

Email: \_\_\_\_\_

Photo

## Educational Qualifications (Bachelor onwards)

Attach additional sheets if necessary. Also attach semester-wise mark-sheets and degree certificates.

S. No.	Degree	Discipline	University/Institute	Regular/Part-time	Year	% Marks / CGPA	Division

## Qualifying Examination (GATE/CSIR/UGC/NET etc.)

Exam Name & Subject: \_\_\_\_\_

Branch: \_\_\_\_\_

Year: \_\_\_\_\_

Valid Up to: \_\_\_\_\_

Percentile & Score: \_\_\_\_\_ All India Rank (if any): \_\_\_\_\_

### Professional Experience (Teaching/Research/Industry)

Name of Organization	Designation	Nature of Work	From	To

### Research Publications (if any)

---

---

---

### Awards / Patents / Prizes (if any)

---

---

---

### Any other Relevant Information

---

---

---

### Declaration

I hereby declare that I have carefully read the instructions and particulars supplied to me and that the entries made in this application form are correct to the best of my knowledge and belief. If selected, I promise to abide by the rules and discipline of the Institute. I understand that the Institute has the right to expel me at any time if any information is found false.

Place: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of the Applicant: \_\_\_\_\_