



DEPARTMENT OF BIOMEDICAL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY, RAIPUR

Phone: 0771-2254200, Fax: 0771 – 2254600

No./NITRR/BMD/2026

Dated:12/01/2026

Applications are invited in the given format for 02 (two) positions in the Department of Biomedical Engineering, National Institute of Technology, Raipur, Chhattisgarh, India, under a sponsored research project. The details are given below.

Project File	IIRPSG-2025-01-05894
Project Title	A Digital Twin Approach for Personalized Assessment of Knee Osteoarthritis
Sponsoring Agency	Indian Council of Medical Research (ICMR) - Small Grant
Project Duration	3 years (initially for one year)
Position Titles and Number of Position	Project Technical Support – III (01 Post) and Project Research Scientist – I (Non-Medical) (01 Post)

Position 1: Project Technical Support – III (01 Post)

Educational Qualifications:

Essential: Graduate Engineering Degree in Biomedical Engineering/Computer Science/ IT/Electronics and Communication/ and related fields with a minimum of 60% marks of equivalent grade point. Post Graduate Degree will be preferred.

Desirable:

1. Minimum three years research experience in developing deep learning modules and working on patient medical imaging data.
2. Strong efficiency in computer languages like Python, C/C++.
3. Selected through a process described in any one of the following fields:
 - o Scholars who are selected through GATE and National Eligibility Tests -CSIR-UGC NET including lectureship (Assistant professorship)
 - o The selection processes through National Level Examinations conducted by the central Govt. Departments and their agencies and Institutions such as UGC/IIT/IISc./DST etc.

Job responsibilities: Major involvement in Deep Learning and AI-based framework development. Working with patient medical imaging data and biomedical signals.

Salary: Rs. 28,000/- + 20% HRA per month.

Age Limit: Maximum 35 years.

Position 2: Project Research Scientist – I (Non-Medical) (01 Post)

Educational Qualifications:

Essential: Postgraduate Degree (minimum of 60% marks of equivalent grade point) in Biomedical Engineering/Mechanical Engineering and related fields. Candidates with Ph.D. in Biomedical Engineering/Mechanical Engineering and related fields will be preferred.

Desirable:

1. Strong background in biomechanics and musculoskeletal modeling
2. Working knowledge of OpenSIM.
3. Working knowledge of AI / machine learning / deep learning

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Job responsibilities: Major involvement in Digital Twin development integrating Biomechanics and AI. Collecting motion capture data and processing the data. Integration of biomechanical models with data-driven AI frameworks and validation of digital twin models using experimental and clinical data.

Salary: Rs. 56,000/- + 20% HRA per month

Age Limit: Maximum 35 years.

Terms and conditions:

1. No TA/DA is permissible for appearing in the interview.
2. The above position is purely temporary, and the continuation of the fellowship is subject to satisfactory performance and review after every 4 months and availability of funds under the project.
3. The appointment shall be a co-terminus with the project and will be governed as per the Terms and Conditions of funding agency ICMR and Rules, Regulations and Norms of NIT Raipur.
4. In case of any discrepancy the decision of the selection committee would be considered final.
5. The applicant will be responsible for the authenticity of information, other documents and photographs submitted.
6. The Institute reserves the right to cancel the recruitment without assigning any reason.

❖ Interested applicants may send (e-mail), with the duly filled application form, mark sheets/ certificates/ other relevant supporting documents and CV to sgiri.bme@nitrr.ac.in on or before 10th February 2026. The eligible candidates will be interviewed (offline/online mode) on 20th February 2026 in the Department of Biomedical Engineering, National Institute of Technology, Raipur.

❖ In case of any queries, contact Dr. Shivangi Giri (PI) at **+91 9450666459**

Dr. Shivangi Giri
Principal Investigator



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Project: IIRPSG-2025-01-05894: A Digital Twin Approach for Personalized Assessment of Knee Osteoarthritis

Application for Junior Research Fellow

1. Name of Applicant:

Recent
Photograph

2. Father's Name:

3. Date of Birth:

4. Gender:

5. Marital status:

6. Nationality:

7. Category:

8. Address:

Phone:

Email ID:

9. Complete Academic Record (attach certificates):

S. No.	Exam/ Degree	Specialization/ Branch	Board/University/ Institute	Year of Completion	% Marks/CGPA and Division
1	10th				
2	12th				
3	B.E./B.Tech				
4	M.E./ M.Tech				
5	Any Other				

10. Areas of Interest:

11. Research Publications/conference participation (Enclose the first page of journal/conference papers):

12. Research experience (Attach proof):

13. Whether GATE/CSIR-UGC NET qualified (Attach proof):

14. Any Other Relevant Information:

UNDERTAKING

I understand that it is a contractual engagement on a purely temporary basis for the Project. I declare that the above-mentioned details are correct to the best of my knowledge and belief. I understand that action can be taken against me if these are found to be incorrect. I agree to all the terms and conditions of the associated advertisement, ICMR, India and NIT Raipur.

Date:

Place:

Signature of Applicant

Note: Attach the relevant self-attested copy of certificates/documents with the application