

इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी दिल्ली
हौज खास, नई दिल्ली -110016
(औद्योगिक अनुसंधान एवं विकास इकाई)
INDIAN INSTITUTE OF TECHNOLOGY DELHI
Hauz Khas, New Delhi-110016
(Industrial Research & Development Unit)

No. IITD/IRD/RP04191G/ 373256

Dated:03/03/2025

Advertisement No.: IITD/IRD/055/2025

Applications from Indian nationals are invited for Project Appointment under the following project. Appointment shall be on contractual basis with consolidated pay, renewable yearly or upto the duration of the project, whichever is earlier. निम्नलिखित परियोजना के तहत भारतीय नागरिकों से आवेदन आमंत्रित किए जाते हैं। अपॉइंटमेंट, अनुबंधित आधार पर समेकित वेतन, नवीकरणीय वार्षिक या परियोजना की अवधि तक, जो भी पहले हो, के साथ होगा.

Brief description: This project involves the design and development of an exosuit, a soft wearable robotic device, for upper limb augmentation. The work is interdisciplinary and brings together researchers from various disciplines including control, brain-machine interface, biomechanics, materials, machine learning and human physiology and wearable electronics. Your role is to design and fabricate flexible/stretchable electronic circuits for distributed sensing, edge computing and application towards soft wearable robots. Mostly we will be requiring circuit design for bio-signal acquisition and multisensory fusion for motor intention mapping, which is an essential component wearable soft robot.

Why you would like to join:

1. Work on cutting-edge wearable robotic systems and be part of something path breaking which may eventually bring some technological revolution.
2. Collaborate with leading researchers and engineers in the field.
3. Be part of an innovative and fast-paced research environment and enhance your skill sets.
4. Work in an interdisciplinary team for personal growth.
5. Learn new areas of research like human-in-loop optimization, AI/ML for intention mapping, generative design etc

Title of the Project	Wearable soft robotics for Upper Limb Muscle Power Augmentation with BMI interface (DRDO JATC Project) (RP04191G)	
Funding Agency	DRDO, Ministry of Defence, New Delhi	
Name of the Project Investigator	Prof. Sitikantha Roy (PI) [email of PI: sroy@am.iitd.ac.in]	
Deptt./Centre	Department of Applied Mechanics	
Duration of the Project	Upto:16/12/2025	
Post (s)	Consolidated fellowship / Pay-slab	Qualifications
Research Associate (1)	Rs.58000/-p.m. plus HRA @ 27%	Ph.D./MD or equivalent degree in the area of Mechanical Engineering/Biomedical Engineering/ Applied Mechanics/Aerospace Engineering/ Instrumentation Engineering with first class (60%) or equivalent at all the preceding degrees and certificates along with good publication record in Science Citation Indexed (SCI) Journal. OR MSc/ME/MS/MTech in Mechanical/Biomedical/ Aerospace/Applied Mechanics/ Instrumentation Engineering with first class (60%) or equivalent at all the preceding degrees and certificates, and having three years of research, teaching and soft tissue mechanical characterization experience. Essential: Person having a strong background in Electronics Designer, the candidate will be responsible for the design, fabrication, and system integration of electronics for wearable robotics applications. They should work on cutting-edge projects, developing compact, high-performance, and energy-efficient electronic systems. Prior experience of PCB design for biosignal acquisition (EMG etc), stretchable electronics.

		<p>Responsibilities: Design and develop electronic circuits for wearable robotic systems, Fabricate and assemble custom PCBs and sensor-integrated systems,</p> <p>Integrate electronics with mechanical and software components for seamless system performance, Work with power management solutions to optimize efficiency and battery life, collaborate with interdisciplinary teams, including mechanical engineers, control specialists, and software developers. Perform system testing, debugging, and validation to ensure robust performance.</p> <p>Desirable skills: Strong understanding of signal processing and power electronics for wearable applications. Experience in system integration, testing, and troubleshooting. Knowledge of flexible and stretchable electronics is a plus.</p>
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The post may be downgraded as per discretion of the Selection Committee if none of the candidate is found suitable for the post.

The candidates who are interested to apply for the above post should download Form No. IRD/REC-4 from the IRD Website (<http://ird.iitd.ac.in/rec>) of IIT Delhi and submit the duly filled form with complete information regarding educational qualifications indicating percentage of marks/division, details of work experience etc. by e-mail with advertisement No. on the subject line to Prof. Sitikantha Roy at email id: recruitment.jatc@gmail.com and cc it to sroy@am.iitd.ac.in

IIT Delhi reserves the right to fix higher criteria for short-listing of eligible candidates from those satisfying advertised qualification and requirement of the project post and their name will be displayed on web link (<http://ird.iitd.ac.in/shortlisted>) **alongwith the online interview details. Only short-listed candidates will be informed for online interview.** In case any clarification is required on eligibility regarding the above post, the candidate may contact **Prof. Sitikantha Roy at email id: sroy@am.iitd.ac.in**

5% relaxation of marks may be granted to the SC/ST Candidates. In case of selection of a retired/superannuated government employee, his/her salary will be fixed as per prevailing IRD norms. अनुसूचित जाति / अनुसूचित जनजाति के उम्मीदवारों को अंकों की 5% छूट दी जा सकती है। एक सेवानिवृत्त सरकारी कर्मचारी के चयन के मामले में उसका वेतन वर्तमान आईआरडी मानदंडों के अनुसार तय किया जाएगा। **The last date for submitting the completed applications by e-mail is 18/03/2025 by 5.00 p.m.**

AP 3/03/2025
उप कुल्सचिव, आईआरडी

वितरण

- Head of the Deptt./Centres/Units : It is requested that the contents of the Above Advt. be brought to the notice of the staff working in your Deptt./Centre/Unit
- Webmaster, IRD : To put advertisement at IITD website.
- Notice Boards
- Advertisement file
- Prof. Sitikantha Roy, PI, Department of Applied Mechanics
- Copy to Chairperson, DRC/CRC