## इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी दिल्ली हौज खास, नई दिल्ली -110016

## (औदयोगिक अनुसंधान एवं विकास इकाई)

INDIAN INSTITUTE OF TECHNOLOGY DELHI Hauz Khas, New Delhi-110016 (Industrial Research & Development Unit)

No. IITD/IRD/RP04191G/ 273798

Dated:08/05/2024

Advertisement No.: IITD/IRD/112/2024

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. Your role is to design and develop learning-based control systems and musculoskeletal model simulations involving the modules from the above-mentioned disciplines for soft wearable robots.

Why you would like to join: 1. You will have an opportunity to interact with an interdisciplinary team of scientists with a background in mechanics, robotics, and controls. 2. This is a cutting-edge project in the field of soft robotics, and you will be working on design, modelling and development of smart material based novel soft actuators.

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	Prof. Sitikantha Roy (PI)	
Investigator	[emai 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.58,000/-p.m. plus HRA @ 24%	Ph.D./MD or equivalent degree in Mechanical Engineering/ Biomedical Engineering/ Aerospace Engineering / Applied Mechanics/ 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 six years of research, teaching experience in characterization and design of soft materials/actuators, computational mechanics, smart materials, or large deformation modelling, with at least one good publication in Science Citation Indexed (SCI) Journal.  Essential: Experience in computational biomechanics or musculoskeletal modelling Familiarity with programming languagein any of MATLAB/Python language is necessary. Desirable skills: Knowledge of open Sim software is desirable Some basic familiarity with large deformation analysis, soft actuators design/modelling or understanding ofsoft
		roboticswill be given high priority. Responsibilities:  The candidate will be responsible for the design of a wearable exosuit for assistive applications. The work will involve both modelling and proof-of-concept prototype. development

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 सेवानिवृत 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 23/05/2024 by 5.00 p.m.

सहायक कुल्सचिव, आईआरडी

## वितरण

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Prof. Sitikantha Roy, PI, Department of Applied Mechanics

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