CORRIGENDUM

Advertisement No.: IITD/IRD/019/2023


This refers to the advertised post of "Principal Project Scientist" under the sponsored research project entitled "Material characterization of brain tissue and development of tissue-device interaction based neurosurgical simulation tool" (RP03981G) in operation under Prof. Sitikantha Roy, Department of Applied Mechanics of this Institute.

The above advertisement is hereby withdrawn and may be treated as cancelled.

This issue with the approval of the Competent Authority.

Distribution

1. Head of the Deptt./Centres/Units → It is requested that the corrigendum in respect of above Advt. be brought to the notice of the staff working in your Deptt./Unit

2. Notice Boards
3. Advertisement file
4. Prof. Sitikantha Roy, PI, Department of Applied Mechanics
5. Webmaster IRD → To put corrigendum at IITD website.
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.

Brief description: This project plans to develop a physics based surgical simulation platform that will incorporate a computational head model with anatomical details and realistic material properties/physics, to study the real-time deformation of the brain tissue during interventional neurosurgery inside the operation theatre. This involves in-vivo and in-vitro mechanical characterization of human brain tissue, MR elastography, computational mechanics and AI/ML based simulation platform development for virtual surgery and tissue-device interaction. The project will also explore brain mechanics and its subsequent application in brain phantom development for neurosurgical simulation and academic training.

Why you would like to join: 1. This is a one of its kind of its kind project first time in the country. You will have an opportunity to interact with an interdisciplinary team of scientists having background as diverse as in computational biomechanics, soft robotics, scientific computation, medical doctors, radiologists and physicists. 2. Two of the premier institutes in India, IIT Delhi and AIIMS Delhi are involved in this project. 3. This is cutting edge project where material characterization of human brain tissue, AI/ML based modelling, image processing and material physics get combined. You will be trained in computational science and modern Deep Learning based accelerated simulation techniques. 4. This is one of the highest funded projects in DHR’s history.

**Title of the Project**
Material characterization of brain tissue and development of tissue-device interaction based neurosurgical simulation tool (RP03981G)

**Funding Agency**
Department of Health Research, Ministry of Health & Family Welfare, Indian Council for Medical Research (ICMR)

**Name of the Project Investigator(s)**
Prof. Sitikantha Roy (IITD) & Dr. Ashis Suri (AIIMS, New Delhi)

**Deptt/ Centre**
Department of Applied Mechanics, IIT Delhi

**Duration of the Project**
Upto: 30/09/2023

<table>
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<tr>
<th>Post(s)</th>
<th>Consolidated fellowship / Pay-slab</th>
<th>Qualifications</th>
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<tr>
<td>Principal Project Scientist (1)</td>
<td>Rs.56,000-60,000-64,000-69,000-74,000-79,000/- p.m. plus HRA @ 24%</td>
<td>Ph.D./MD or equivalent degree in Mechanical Engineering/Biomedical Engineering/Applied Mechanics/Aerospace Engineering/computer Science 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 ME/MS/MTech in Mechanical/Biomedical/Aerospace/Applied Mechanics/Computer Science with first class (60%) or equivalent at all the preceding degrees and certificates, and having six years of research, teaching and computational code development along with at least one good publication in Science Citation Indexed (SCI) Journal. Essential: Person having a strong background in computational method (FEM/CFD), material constitutive modelling, computational solid or fluid mechanics with applications in biology/biomechanics, Knowledge of MATLAB/Python/C++ or any other quantitative tool. Desirable skills: Experience in computational biomechanics, knowledge in machine learning code development (TensorFlow/PyTorch). Willingness to learn medical physiology/biomechanics. Responsibilities: Designing a biomechanical simulation tool for brain biomechanics of stroke. We are planning to develop a combined data, as well as physics-based simulation platform to analyze, predict and study the severity of brain stroke.</td>
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</tbody>
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The candidates who are interested to apply for the above post should download Form No. IRD/REC-4 from theIRD 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 email 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) along with 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 दर्जान आईआरडी मानदंड के अनुसार तय किया जाएगा। The last date for submitting the completed applications by e-mail is 08/02/2023 by 05.00 p.m.

डिशरण

- Head of the Deptt./Centres/Units:
- Webmaster, IRD
- Notice Boards
- Advertisement file
- Prof. Sitikantha Roy, PI, Department of Applied Mechanics
- Copy to Chairperson, DRC/CRC

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