INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS, NEW DELHI-110016

ADVERTISEMENT NO. IITD/2021/PDF-2

ADVERTISEMENT FOR THE POSITION OF POST DOCTORAL FELLOW

IIT Delhi invites applications from qualified persons for the position of Post-Doctoral Fellow (PDF) in its various academic units to further promote inter-disciplinary research activities, strengthen research culture, enhance research output of the Institute and groom potential faculty.

Who can apply?
• Indian Nationals of General/SC/ST/OBC-NCL/EWS category as well as with physical disability

Age Limit:
• Maximum age of candidate is 32 years (for male) and 35 years (for female). Age relaxation for reserved candidates as per Govt. of India guidelines.

Minimum Eligibility Criteria:
• Ph.D. with First class or equivalent grade in preceding degree with consistently good academic record
• Minimum two referred publications in Journals/Conferences out of which at least one should be in a reputed journal

Remuneration & Benefit:
• Fellowship of Rs. 75,000/- per month plus House Rent Allowance (HRA) at the Govt. of India rate for New Delhi. No Institute accommodation will be provided.
• Professional Development Allowance (PDA) of Rs. 1.00 lakh per financial year (April-March) available from the date of joining the institute. PDA is apportioned @ Rs. 25,000/- for every quarter from the date of joining. Unutilized PDA can be carried forward to the next financial year.

Duties & Responsibilities:
• To perform scholastic research in cutting-edge areas of academic units and support teaching activities by conducting practical and delivering tutorials. PDF should be attached to a research group, not to an individual faculty. PDFs are expected to publish research articles with IIT Delhi affiliation in peer-reviewed scientific journals and present research work at reputed conferences.

Tenure of Appointment:
• Initially one year (on contract, extendable for short term for candidates whose performance is assessed to be excellent).

Academic Units and their Specializations/Research Areas:

ACADEMIC UNITS: -

1. **APPLIED MECHANICS**: Solid mechanics, Fluid mechanics, Design engineering and interdisciplinary areas of mechanics including but not restricted to Biomechanics,
Nanomechanics, Multifunctional materials and structures, Structural health monitoring, Soft robotics, Machine learning in mechanics, Two-phase flows, Environmental fluid flows, Granular flows, Solid-fluid interactions, Naval Architecture, etc.

2. **BIOCHEMICAL ENGG. & BIOTECHNOLOGY**: "Bioprocess and metabolic Engineering (Mammalian Cell Technology, Enzyme bioreactors, Bio-separation Engg with specialization in Chromatography and Nano-filtration, Genome Engineering), Systems and Computational biology (Quantitative biology, Synthetic biology) and Molecular biology of disease, Diagnostics and Bio-nanotechnology (Nano-biosensors, Therapeutics/drug delivery)"


4. **CHEMISTRY**: All areas of Chemistry.


9. **HUMANITIES & SOCIAL SCIENCES:** Economics, English (Literature), Linguistics, Philosophy, Policy Studies, Psychology, Sociology.

10. **MANAGEMENT STUDIES:** Information Systems.


12. **MECHANICAL ENGINEERING:** All areas of Mechanical Engineering.

13. **PHYSICS:** Condensed Matter Experiments, Condensed Matter Theory, Computational and Statistical Physics, High Energy Physics, Plasma Physics, Physics of Quantum Matter, Optics and Photonics, Atomic and Molecular Physics

14. **TEXTILE AND FIBRE ENGINEERING:** Textile Engineering, Textile Technology, Textile Chemistry, Fibre Science & Technology, and other Engineering and Sciences (Such as Civil, Mechanical, Chemical, Electrical/Electronics, Materials, Polymers, Mathematics, Physics, Chemistry, Bio-Sciences and Management) with demonstrated research experience in areas relevant to textiles and fibres.
15. **APPLIED RESEARCH IN ELECTRONICS (CARE):** Microwaves and RF: Microwave components & Systems up to THz, active and reconfigurable antennas and antenna arrays, non-linear device modelling and MMIC, RFIC and RFMEMS; **Microelectronics:** MEMS and Microsystems, Micro sensors development for defense and space applications, THZ electronic devices, CMOS and III-V device simulation; **Signal Processing:** Underwater and Air Acoustics, Speech and Audio, Communications, Sensor Arrays, Multi-sensor Data Fusion, Machine Learning; **Multi-disciplinary:** Modern Radar Systems.

16. **ATMOSPHERIC SCIENCES (CAS):** All areas of Atmospheric and Oceanic Science.

17. **BIOMEDICAL ENGINEERING (CBME):** All areas of Biomedical Engg.

18. **RURAL DEVELOPMENT AND TECHNOLOGY (CRDT):** Rural Resources, Energy systems & Infrastructure; Resilience & Climate Change; Disruptive Technologies; Engineering Design, Artisanal/Agricultural Tools & Crafts; Indian Knowledge system, Skill Development & Entrepreneurship; Water resource management, Sanitation & Soil Health; Microbial & Biomass Technologies; Food science & Nutrition, Food processing & Technology (All above areas in rural context).

19. **NATIONAL RESOURCE CENTRE FOR VALUE EDUCATION IN ENGINEERING (NRCVEE):** All areas of Value Education in Engineering.

20. **CENTRE FOR AUTOMOTIVE RESEARCH AND TRIBILOGY (CART):** Power Electronics for EV applications, Battery management systems and other storage technologies for EVs, EV charging infrastructure and smart charging solutions, Vehicular Telematics and Embedded system for EVs, Connected and Autonomous EVs, Vehicle dynamics and control.

21. **BHARTI SCHOOL OF TELECOMMUNICATION TECHNOLOGY AND MANAGEMENT (BSITM):** All areas of Telecommunication Technology and Management.

22. **AMAR NATH & SHASHI KHOSLA SCHOOL OF INFORMATION TECHNOLOGY (ANSKSIT):** All areas of Information Technology.

23. **KUSUMA SCHOOL OF BIOLOGICAL SCIENCES (KSBS):** All areas of Biological Sciences.

24. **SCHOOL OF ARTIFICIAL INTELLIGENCE (ScAI):** In all areas of artificial intelligence, Subareas of interest include (but are not limited to) deep learning, reinforcement learning, probabilistic models, data mining, information retrieval, multi-agent systems, knowledge representation and reasoning, mathematical foundations of AI, ethics of AI, applied AI such as NLP, computer vision, robotics, AI on the edge, etc., and applications of AI to domain areas such as healthcare, agriculture, education, industry 4.0, etc. ScAI strongly encourages applicants with demonstrated track-record of working at the intersection of an application area and the AI fields. More details are found at [http://www.scai.iitd.ac.in](http://www.scai.iitd.ac.in)

**NOTES:**
- The specializations or research areas mentioned above against each Department/Centre/School are only indicative and not exhaustive. The Institute is open to receiving applications from candidates with specialization in these as well as in other related areas.
- The minimum requirement of qualifications and/or experience may be relaxed in respect of exceptionally outstanding candidates in certain areas.
• A mere fulfilment of required minimum qualifications and experience does not entitle a candidate to be called for presentation/discussion.
• The Institute reserves the right to fill or not to fill the posts advertised.
• Separate online application must be filled, if a candidate is applying for a Post-Doctoral Fellowship in more than one Departments/Centres/or Schools.

**How to apply?**

• It is a requirement that the candidate visit the Job Section on IIT Delhi website ([http://www.iitd.ac.in/jobs-iitd/index.html](http://www.iitd.ac.in/jobs-iitd/index.html)), prepare and submit the duly completed applications for appointment against the above position. The website also contains useful information on various aspects of working and living at IIT Delhi as well as on the recruitment process.
• As a precaution, after submitting the application through the website, please retain a printed copy of the application with you. Candidates employed with Government/Semi-Government Organizations or with Autonomous Bodies must print a copy of the electronic submission and submit the printed version through proper channel at the address given below.

**Address for Communication:**

Joint Registrar (E-I)  
IIT Delhi  
Hauz Khas,  
New Delhi – 110016  
INDIA  
Telephone: +91 11 26591716  
Fax: +91 11 26597216  
E-mail: fac_recruit@admin.iitd.ac.in

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