

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

ADVERTISEMENT NO. 01/2018 (E-1)

**ADVERTISEMENT FOR THE POSITIONS OF POST DOCTORAL FELLOWS**

IIT Delhi invites applications from qualified Indian Nationals, Persons of Indian Origin (PIOs) and Overseas Citizens of India (OCIs) for the Post Doctoral Fellows (PDF) in the various Departments/Centres/Schools (in the fields mentioned alongwith them).

The appointment will be made exclusively for research purposes and can be for a maximum period of three years.

Qualified persons include:-

- a) Indian Nationals,
- b) Foreign Nationals who are "Persons of Indian Origin" (PIO) or Overseas Citizens of India (OCI), in whose case, if selected, permission will be sought from Govt. of India before he/she can join IIT, or
- c) Other Foreign Nationals, in whose case, if selected, appointment will be on a contract basis for up to 3 years subject to permission from the Govt. of India before he/she can join IIT.
- d) Institute specifically encourages applicants from SC/ST/OBC category as well as persons with disability to apply for these positions.

**DEPARTMENTS :-**

1. **APPLIED MECHANICS** : Solid Mechanics, Fluid Mechanics, Metallurgy and Material Science, Design Engineering.
2. **BIOCHEMICAL ENGG. & BIOTECHNOLOGY** : Biochemical Engg., Industrial Biotechnology.
3. **CHEMICAL ENGG.** : Renewable and Conventional Energy Technologies, Bioprocessing for Pharmaceuticals, Interfacial Energy and Nanotechnology, Molecular to Process Scale Simulation, Advance Novel Materials.
4. **CHEMISTRY** : All areas of Chemistry.
5. **CIVIL ENGG. : Environmental:** Sustainable Built Environment, Risk Assessment of Emerging Contaminants from Water, Aerosol Climate and Health, Carbon Sequestration using Alkaline Waste Materials, **Geotech:** Geotechnical Engg./ Rock Engg., **Structures:** Structural Engg. and Construction Management, **Transportation:** All areas of Transportation Engg., Including (but not limited to ) Transport planning, Traffic Engg., and Pavement Engg., **Water Resources:** Water Resources and related areas.
6. **COMPUTER SCIENCE & ENGG.** : High Performance Computing and Visualization, Machine Learning and Artificial Intelligence, Wired and Wireless Networks, Mobile Computing and Machine-to-Machine, Algorithms & Complexity, Logic & Verification, Information Management, Data Science & Big Data, Computer Vision, Graphics & Robotics, Programming Languages, Semantics, Analysis & Language Implementation, Distributed & Multicore Computing, Cloud Computing, Cryptography and Systems &

Information Security, Human Computer Interaction, Embedded Systems, Computer Architecture, VLSI and EDA.

7. **ELECTRICAL ENGG.** : All areas of Electrical Engineering including Integrated Electronics & Circuits, Control & Automation, Communication & Radar, Computer Technology, Power Systems, Power Electronics, Machines & Drives.
8. **HUMANITIES & SOCIAL SCIENCES** : Economics, English (Literature), Linguistics, Philosophy, Policy Studies, Psychology, Sociology.
9. **MANAGEMENT STUDIES** : Operations & SCM, Finance, HR & Organizational Studies, Marketing, Information Technology, Economics, Technology Management and IPR, Telecom Technology Management, and Strategic Management.
10. **MATHEMATICS** : **Pure Mathematics:** Algebra, Dynamical System, Harmonic Analysis, Functional Analysis, Number Theory, Coding Theory, Cryptography, and Topology, **Applied Mathematics:** Numerical and Scientific Computing, Matrix Theory, Partial Differential Equations, and Wavelets and Applications. **Statistics and Operations Research:** Queuing Theory, and Optimizations, **Computer Applications:** Graph Theory, Statistical Classification and Clustering, Semantics and Language, Algorithms, and Combinatorics.
11. **MECHANICAL ENGG.** : All areas of Mechanical Engineering.
12. **PHYSICS** : Ultrafast Optics, Theoretical / Computational Physics, Plasma Physics.
13. **TEXTILE TECHNOLOGY** : Fibre Science, Yarn Manufacturing, Fabric Manufacturing, Textile Chemical Processing.

#### **CENTRES:**

14. **APPLIED RESEARCH IN ELECTRONICS** : All areas of Applied Research in Electronics.
15. **ATMOSPHERIC SCIENCES** : Ocean Modelling, Climate Modelling, Meso-scale Studies, Atmospheric dispersion.
16. **BIOMEDICAL ENGG.** : All areas of Biomedical Engg.
17. **ENERGY STUDIES** : Renewable Energy, Internal Combustion Engines and Alternative Fuels, Electrical Energy System, Fuel Technology (Coal and Biomass), Plasma Science and Technology, Energy Efficiency and Conservation, Economic and Planning of Energy System.
18. **INDUSTRIAL TRIBOLOGY, MACHINE DYNAMICS & MAINTENANCE ENGG.** Maintenance Engineering and Reliability, Condition Monitoring, Lubrication, Tribological Materials.
19. **RURAL DEVELOPMENT AND TECHNOLOGY** : All areas Rural Development and Technology.
20. **NATIONAL RESOURCE CENTRE FOR VALUE EDUCATION IN ENGG:** All areas of Value Education in Engineering.

## **SCHOOLS:-**

21. **BHARTI SCHOOL OF TELECOMMUNICATION TECHNOLOGY AND MANAGEMENT:** All areas of Telecommunication Technology and Management.
22. **AMAR NATH & SHASHI KHOSLA SCHOOL OF INFORMATION TECHNOLOGY:** All areas of Information Technology.
23. **KUSUMA SCHOOL OF BIOLOGICAL SCIENCES:** All areas of Biological Sciences.

## **MINIMUM QUALIFICATIONS AND EXPERIENCE:**

- Ph.D with First class or equivalent grade in preceding degree in respective discipline, with a consistently good academic record.
- Maximum age is 32 years for male and 35 years for female candidates (to be relaxed by 5 years in case of persons with physical disability, SC and ST and 3 years in case of OBC-NCL).
- Atleast 2 referred conference/journal papers (of which at least 1 should be in reputed journals).

## **NOTES:**

- The 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 and 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 fulfillment of required minimum qualifications and experience does not entitle a candidate to be called for 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.
- The candidates called for presentation/discussion will be paid AC2-Tier by Train/Economy Class by Air or actual expenditure and AC Taxi by road (from Airport/Railway Station/ISBT and back) fare from their place of residence/work and back by the shortest route within India.

**FELLOWSHIP:-**The consolidated Fellowship amount is Rs.60,000/- per month. House Rent Allowance (HRA), in lieu of on-campus housing, will be @30% of the fellowship amount.

## **OTHER BENEFITS ETC.:-**

- The Post Doctoral Fellow will also be supported by the Institute with a Professional Development Allowance of Rs.1.00 lakh per financial year (April-March) and any unspent amount of which cannot be carried forward to the next financial year. The PDF can avail the PDA for attending national/ international conferences and related expenditure, viz., air travel, visa fees, registration fee, boarding and lodging, local travel at the place of the conference, medical insurance for international travel etc. for presenting a paper or chairing a session in his/ her area of specialization. The PDF can

also be availed for contingency that includes items like books, stationery, computer accessories, professional memberships, journal page charges, equipment such as Tablet, Laptop etc.

- In addition to research work, a Post Doctoral Fellow is also expected to contribute to some teaching activities of the concerned academic unit to the extent of about 20% of his/ her time. This could involve spending time in teaching laboratories and / or tutorial delivery. This is consistent with the status of an academic staff as well as an overall responsibility of this institute to groom potential faculty for other institutions.

**ACCOMMODATION:** Suitable residential accommodation as per Institute rules shall be provided on the Campus on joining the Institute (this is subject to availability).

**ABOUT THE CAMPUS:** Extending into an area of 320 acres, the campus is imaginatively laid out with a picturesque landscape with clean and wide roads. The campus provides all essential amenities for community living including Staff Club, Hospital, Shopping Centre, Banks, ATMs, Post Office, Community Centre, etc.

It is a requirement that candidates visit the Jobs Section of IIT Delhi website (<http://www.iitd.ac.in/jobs-iitd/index.html>), prepare and submit the completed application for appointment against the above position. The website also contains useful information on various aspects of working and living at IIT Delhi and 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.

However, **only in those cases where Internet access is not available**, an application form may be obtained from the Assistant Registrar (E-I) by sending a self-addressed envelope (26cm x 11cm) to the address given below. The completed application may be sent by postal mail to the address given below. In those cases where Internet access is available, the application must be submitted only through the website.

**All purpose Address:**

**Assistant Registrar (E-I)  
IIT Delhi, Hauz Khas,  
New Delhi-110016 (INDIA)  
Telephone: +91-11-26591716  
Fax: +91-11-26597216  
E-mail: ar\_e1@admin.ac.in**

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