

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

ROLLING ADVERTISEMENT NO. IITD/2019/POP&APOP-1

[FOR THE POSTS OF PROFESSOR OF PRACTICE (PoP)
AND ADJUNCT PROFESSOR OF PRACTICE (APoP)]

IIT Delhi invites applications from distinguished professionals with non-academic/ industrial background for faculty positions at the levels of **Professor of Practice (PoP) and Adjunct Professor of Practice (APoP)** in its various academic units, including Departments, Centres and Schools.

This is a rolling advertisement. There is no last date for receiving applications.

<u>POST</u>	<u>STATUS</u>	<u>REMUNERATION</u>	<u>AGE LIMIT</u>
Professor of Practice (PoP)	Full-time contractual position for 3-5 years, appraised and renewed annually	Honorarium of INR 1,50,000 to INR 2,20,000 per month plus 24% HRA	Maximum 70 years
Adjunct Professor of Practice (APoP)	Part-time contractual position for 3-5 years, appraised and renewed annually	Honorarium of INR 80,000 to INR 1,50,000 per month plus 24% HRA	Maximum 70 years

QUALIFICATION AND EXPERIENCE REQUIRED FOR POSITION OF PROFESSOR OF PRACTICE (PoP) AND ADJUNCT PROFESSOR OF PRACTICE (APoP) :-

Candidates should have received education from reputed institutions with good academic record throughout and have minimum 15 years of professional experience. They should have a track record of exemplary professional practice while serving in leadership positions and have a well-established, evidence-based reputation for superior accomplishments in their fields.

CONTRIBUTION EXPECTED FROM PROFESSORS OF PRACTICE OR ADJUNCT PROFESSORS OF PRACTICE :-

Teaching, Research and Development, and other Institutional Activities.

ACADEMIC UNITS OF IIT DELHI:

DEPARTMENTS :

1. **APPLIED MECHANICS** : Design Engineering, Solid Mechanics, Fluid Mechanics and Interdisciplinary areas of Mechanics including but not restricted to Biomechanics, Nanomechanics, Multifunctional materials, Solid-Fluid interactions, Naval Architecture, etc.

2. **BIOCHEMICAL ENGG. & BIOTECHNOLOGY**: Chemical Engineering or Biochemical Engineering. *Special consideration will be given to candidates specializing in Bioreaction Engineering or Metabolic Engineering & Bioseparations Engineering. Exceptional candidates in other areas will also be considered.*
3. **CHEMICAL ENGG.** : All areas in chemical or allied engineering disciplines.
4. **CHEMISTRY** : All areas of Chemistry (*including all branches of Chemistry (Physical, Organic, Inorganic, Biochemistry and related areas)*).
5. **CIVIL ENGG.** : **Environmental**: Water and Waste Water Engg. Air Pollution Control Engg. Solid and Hazardous Waste Engg. **Geotechnical**: Geotechnical Engg., geo-environmental Engg., Rock Mechanics and Rock Engg., **Structures**: Structural Engg. Construction Materials, Construction Management, **Transportation**: Transport and Traffic planning, Transportation and Traffic Engg., Pavement Engg., **Water Resources**: Water Resources Engg, and related areas.
6. **COMPUTER SCIENCE & ENGG.** : High Performance Computing and Visualization, Machine Learning and Artificial Intelligence, Wired and Wireless Networks, Mobile Computing Cyber –physical Systems & Internet of Things(IOT), Algorithms & Complexity, Logic & Verification, Information Management, Information Retrieval, Data Analytics and Data Sciences, Computer Vision, Graphics & Robotics, Programming Languages, Semantics, Analysis & Language Implementation, Distributed & Multicore Computing, Operating Systems and Cloud Computing, Cryptography and Cryptosystems, Systems and Information Security, Human Computer Interaction, Embedded Systems, Computer Architecture, VLSI and Design Automation.
7. **DEPARTMENT OF DESIGN** : Industrial Design, Product Design, Engineering Design, Creativity and innovation, Design Theory & Methodology, Applied Ergonomics and Human Factors in Design, Universal and Inclusive Design, Design for UX/UI, HCI; Graphic Design, Communication Design, Computer Aided Design and Manufacturing, Design Automation and Design Optimization, Design Computing and Design Informatics, Materials & Design, Design for Product Life-Cycle, Art & Design, Product Aesthetics, Digital Media & Design, Social and Cultural aspects of Design, Design Policy, Design Strategy, Design Management.
8. **ELECTRICAL ENGG.** : In all areas of Electrical Engineering including Electronics & Circuits, Control & Automation, Communication, Computer Engineering, Power Systems, Power Electronics, Machines & Drives.
9. **HUMANITIES & SOCIAL SCIENCES**: Economics, (specialization in Macroeconomics is desired. However, exceptionally good candidates in any other specializations in Economics are also encouraged to apply), English Literature, Linguistics, Philosophy, Psychology, Sociology.

10. **MANAGEMENT STUDIES**: Operations & Supply Chain Management, Marketing Management, Strategic Management, Technology Management, Telecom Systems Management, Human Resource Management, Corporate law, Finance, Economics, Information Systems, Business Analytics
11. **MATERIALS SCIENCE AND ENGINEERING** : Material synthesis, processing and characterization, Materials modeling, polymeric materials, Alloys, composites and structural materials, Functional materials, Nanostructured materials, Materials for sustainable technology.
12. **MATHEMATICS** : All areas of Pure and Applied Mathematics, Theoretical Computer Science, Probability and Statistics.
13. **MECHANICAL ENGG.** : All areas of Design and Production and Industrial Engineering, Energy, Transportation motive power, Micro and Nano-scale fluid mechanics and heat transfer, Thermal engineering of process (including technologies for food preservation and thermal engineering of manufacturing process). *Priority will be given to Production, and Industrial Engineering specializations.*
14. **PHYSICS** : All areas of Physics.
15. **TEXTILE AND FIBRE ENGINEERING** : Candidates having professional qualifications in Textile Engineering, Textile Technology, Textile Chemistry, Fiber Technology, Polymer Science & Engineering and other Engineering and Sciences with experience in areas relevant to textiles.

CENTRES:

1. **APPLIED RESEARCH IN ELECTRONICS** : **Microwaves and RF**: RFIC and RFMEMS, Imaging and Surveillance, RF Digital Co-design, Active and Reconfigurable Antennas and Arrays, High Power Solid-State Systems, Non-linear Modeling and Measurements, Components & Systems up to THz, **Signal Processing**: Underwater Acoustics, Acoustics for Air and other Media, Speech Processing, Signal Processing for Communications, Sensor Array Signal Processing, Multi-sensor Fusion, **Microelectronics**: MEMS and Microsystems, Nanoelectronics, Microsensors development for defense, space, health and environmental monitoring, mm-wave and THZ devices and technologies.
2. **ATMOSPHERIC SCIENCES** : Ocean Modeling, Climate Modeling, Mesoscale Studies and Atmospheric dispersion.
3. **AUTOMOTIVE RESEARCH AND TRIBOLOGY (CART)** : Power Electronics, Electric drive train and controls for EVs, Battery, Battery management systems and other storage technologies for EVs, EV charging infrastructure and smart charging solutions, Ancillary services and Demand Side Management (DSM) with EVs. Standards, policies and regulations for EVs,

Connected and Autonomous EVs, Development of Tribo-materials and smart materials for EVs, Tribo-dynamics, Lubrication and lubricants, friction and wear control, studies of bulk material handling, NVH and condition monitoring, reliability and maintenance.

4. **BIOMEDICAL ENGG** : **Bio Instrumentation**; Electrical Engineering, Electronics, Medical Sensors, **Biomechanics**; Medical Implants, Mechanical Engineering, Design Engineering, Production Engineering, Material Science & Engineering, **Bio Imaging**; Electrical, Electronics, Optical.
5. **ENERGY STUDIES** : Bioenergy, Electrical Power Systems, Energy Storage, Experimental Plasma Science and Technology, Internal Combustion Engines and Alternative Fuels, Hydro Power, Solar Photovoltaic Systems, Wind Energy.
6. **NATIONAL RESOURCE CENTRE FOR VALUE EDUCATION IN ENGINEERING** : All areas of Value Education in Engineering.
7. **RURAL DEVELOPMENT AND TECHNOLOGY** : Bio resource technology for rural applications, Rural energy systems, Water and sanitation, Food Technology (processing, food quality and safety), Sustainable materials for rural housing & habitat, Engineering Design for products, processes & Rural systems, Rural resource planning & management. Rural and traditional Technologies and Industries.
8. **SENSORS, INSTRUMENTATION AND CYBER-PHYSICAL SYSTEM ENGINEERING (SeNSE)** : Candidates must have an ability to build world-class research facilities, and a proven/ demonstrated history of hands-on product and prototype development at the individual/ team level in- Optical Engineering (optical fabrication, laser systems and optical instrumentation), Precision mechanics, electronics systems and instrumentation, sensors, smart systems, cyber-physical systems. (more details at <http://bit.ly/SENSE-faculty-advertisement>)

SCHOOLS:

1. **BHARTI SCHOOL OF TELECOMMUNICATION TECHNOLOGY AND MANAGEMENT**: All areas of Telecom Technology and Management.
2. **AMAR NATH & SHASHI KHOSLA SCHOOL OF INFORMATION TECHNOLOGY**: Computational Neuroscience, Medical Applications of Information Technologies, Computational & Systems Biology, Embedded Systems & Sensor, Computer Security, Internet of Things (IOT).
3. **KUSUMA SCHOOL OF BIOLOGICAL SCIENCES**: Basic/ Fundamental research in Biological Sciences in the areas of Structural Biology, Infectious diseases & non-communicable disorders and cognitive & computational neurosciences.

4. **PUBLIC POLICY:** The applicants must have a demonstrated track record of research in the area of public policy with broad focus on Science, Technology & Innovation (STI) and Development, and expertise in one or more of the specific areas of (1) Energy & Environment (2) Health innovations & systems (3) Sustainable Habitats (4) Agriculture, Food & Water (5) Industry & Economy (6) Internet, Digital Information & Society (7) Innovation Systems & Processes, and (8) Technical Higher Education. For further details, please see <http://ssp.iitd.ac.in/>

NOTES:

- Since it is a rolling advertisement, all positions will remain open till filled.
- The Institute reserves the right not to fill up any / all position(s) / select any candidate without assigning any reason.
- A mere fulfillment of required qualification and experience does not entitle a candidate to be selected for PoP or ApoP.
- No correspondence whatsoever will be entertained from the candidates regarding conduct and result of selection and reasons for not being selected.
- Separate applications must be filled in, if a candidate is applying for a faculty position in more than one academic unit (Department/Centre/School).
- The Institute reserves the right to summarily reject the incomplete applications.

SELECTION PROCESS:

The academic units will scrutinize the applications at their end and recommend through Dean (Faculty) to the Director for selection through a Standing Selection Committee duly approved by Chairman, BoG, IIT Delhi.

ACCOMMODATION:

No on-campus accommodation will be provided to the selected candidates.

HOW TO APPLY:

Interested candidates fulfilling the above criteria may submit their applications in the prescribed format appended below along with the detailed CV and Proposed workplan/outline of activities to be carried out at IIT Delhi to the Heads of Academic Units.