भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Indian Institute of Technology Hyderabad

Standing Advertisement No. IITH/2013/Faculty/5

This is a standing advertisement. There is no specific requirement on when a candidate can submit an application. Applications will be accepted throughout the year

IIT Hyderabad invites applications from Indian nationals who are exceptionally bright and motivated, with an established record of independent, high quality research and commitment to teaching for positions of Assistant, Associate and full Professors at IIT Hyderabad (www.iith.ac.in) in the following Departments.

- Bio Medical Engineering
- Biotechnology
- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science & Engineering
- Design
- Electrical Engineering
- Liberal Arts
- Mathematics
- Mechanical and Aerospace Engg
- Material Science & Metallurgical Engineering
- Physics

(for specializations required in these departments please see below)

Interested candidates may apply with their

- Curriculum Vitae, list of publications (with urls of important publications for online access)
- Proposed research and teaching plan.
- Department in which the candidate proposes to work
- Names and Addresses (with email addresses and fax numbers) of at least three referees.
- Template of the Application form can be downloaded from http://www.iith.ac.in/recruitment/faculty_recruitment.html

- Women candidates are especially encouraged to apply.

- Without any compromise on qualification, experience and competence, reservation as per Government of India rules – 15%, 7½ % and 27% for SCs, STs and OBCs respectively is applicable at entry level positions of Assistant Professor in Science and Technology departments. However, in recruitment of faculty posts in subjects other than science and technology, reservation shall also be applied in full including for the posts of Associate Professors and Professors. Necessary certificates must be enclosed with the application form. GOI policy on reservation of faculty positions also include persons with Physical disability.

- If a candidate is interested in applying to more than one department, she/he should submit separate application for each of the department of interest.

- Applications are welcome **throughout the year** and should be sent by e-mail to **fac_applications@iith.ac.in.**

- This is a standing advertisement. There is no specific requirement on when a candidate can submit an application. Applications will be accepted throughout the year, and will be taken up for screening for interview from time to time.

- Recruitment will be based on the need in given areas within the department. However, exceptionally meritorious candidates in any area of specialization pertaining to the said department will also be considered.

- Candidates who expect to receive their Ph.D within the next nine months may also apply. But their appointment to the post, if found suitable, will be subject to their receiving the degree.

- The institute reserves the right to fill or not fill any or all of the advertised posts.

- **Mere fulfillment of the qualifications and experience requirement does not entitle the candidate to be called for an interview**.

The Institute provides support to cover relocation expenses for a new faculty member, and also provides significant start-up research grant. In addition, the Institute provides Cumulative Professional Development Allowance (CPDA) of Rs.3 lakhs for every block of 3 years to meet the expenses for participating in international conferences, national conferences and paying the membership fee of various professional bodies and contingent expenses. The faculty and their families are covered by an attractive Contributory Health Services Scheme.

Description of posts and required qualifications (for all except applicants in the Department of Design, and Fine Arts applicants in the Department of Liberal Arts)

ASSISTANT PROFESSOR:

Pay Band 3 (Rs.15600-39100) with AGP of Rs.8000/-. For direct recruits, minimum pay in the PB-3 to be fixed at 30,000/- plus allowances. After completion of three years of satisfactory service in PB-3 they will be placed in PB-4 (Rs.37400-67000) with AGP of Rs.9000/- plus allowances.

Qualification: The candidate must have Ph.D with consistently good academic record.

Experience: At least 3 years industrial/research/teaching experience after completing Ph.D.

Assistant Professor (Contract) :

Candidates with insufficient experience for direct recruitment as Assistant Professor may be taken as Assistant Professor (Contract) in the pay band of Rs. 15,600 – 39,100, PB-3 with appropriate starting pay. Once selected in this position, the candidate will be considered for the post of Assistant Professor upon reaching the required work-experience.

For Assistant Professor (contract) and Assistant Professor positions the candidates preferably should be below 35 years of age.

ASSOCIATE PROFESSOR:

Pay Band 4 (Rs.37400-67000) with AGP of Rs.9500/- For direct recruits, minimum pay in the PB-4 to be fixed at 42,800/-

Qualification: The candidate must have Ph.D with consistently good academic record.

Experience: A minimum of six years teaching/research/professional experience of which 3 years should be at the level of Assistant Professor, Senior Scientific Officer/Senior Engineer in a research organization or industry, as on the date of application.

Candidates should be preferably below 45 years of age.

PROFESSOR:

Pay Band 4 (Rs.37400-67000) with AGP of Rs.10,500/- p.m. For direct recruits, minimum pay in the pay Band will be fixed at Rs.48,000/-

Qualification: The candidate must have Ph.D with consistently good academic record.

Experience: A minimum of ten years teaching/research/professional experience of which at least 4 years should be at the level of Associate Professor in a research organization or industry, as on the date of application. The candidate should have demonstrated leadership in research in a specific area of specialization in terms of guidance of M.Tech and Ph.D students, and have a strong record of sponsored research, publications in reputed journals and referred conferences, patents, laboratory/course development and other recognized relevant professional activities.

Candidates should be preferably below 55 years of age.

Description of posts and required qualifications for the Department of Design:

IIT-Hyderabad is looking for dynamic, bright and motivated faculty in the broad area of Design at the level of Assistant or Associate Professor.

Areas of Interest: Industrial Design, Animation, Visual Communication and Interaction Design.

Qualification for Assistant Professor: A Ph.D. in design-related discipline from a leading Institute / University is desirable. Nevertheless, candidates with Masters having at least 4 years of experience in Design are encouraged to apply. The position will be

Assistant Professor (Contract)	Minimum Qualification : Ph.D with less than 3 years experience or Masters with 4 to 7 years experience.
Assistant Professor	Minimum Qualification : Ph.D with at least 3 years experience or Masters with at least 7 years experience.

Qualification for Associate Professor: The candidate should have demonstrated adequate experience of independent research in terms of guidance of Masters and Ph.D students, publications in reputed journals and conferences, patents, and/or other recognized relevant professional activities. A minimum of six years teaching / research / professional experience of which 3 years should be at level of Assistant Professor / Senior Design Engineer on the date of application. A Ph.D. in design related discipline from a leading Institute / University is desirable. Nevertheless, candidates with Masters are encouraged to apply if they have at least 10 years of experience in Design, of which at least 3 years should be at the level of Assistant Professor / Senior Design Engineer on the date of application.

Pay scale of Assistant Professor (contract), Assistant Professor and Associate Professor will be as mentioned earlier.

For Assistant Professor (contract) and Assistant Professor the candidate should preferably be below the age of 35 years. For Associate Professor the candidates should preferably be below the age of 45 years.

Description of posts and required qualifications for applicants in Fine Arts (in the Liberal Arts Department):

IIT Hyderabad is looking for dynamic, bright and motivated faculty in the area of Fine Arts in the Department of Liberal Arts at the level of Assistant Professor.

Areas of Interest: Primary : Graphic Arts, Drawing and Painting, and Sculpture, Art History. Nevertheless, outstanding candidates in any area of Fine Arts may be considered.

Qualification: A Ph.D in Fine Arts from a leading Institute / University is desirable. Nevertheless, candidates with Masters having at least 4 years of experience in Fine Arts are encouraged to apply. The position will be :

Assistant Professor (Contract)	Minimum Qualification : Ph.D with less than 3 years experience or Masters with 4 to 7 years experience.
Assistant Professor	Minimum Qualification : Ph.D with at least 3 years experience or Masters with at least 7 years experience.

Pay scale of Assistant Professor (contract), Assistant Professor and Associate Professor will be as mentioned earlier.

For Assistant Professor (contract) and Assistant Professor the candidate should preferably be below the age of 35 years.

Particulars of specializations required in each department

Note: IITH reserves the right to focus on specific areas for its recruitment. The fields mentioned below are meant to be indicative of the departments' current requirements, which may change without notice. However, outstanding candidates in any field relevant to the department will also be considered.

Bio Medical Engineering: Candidates from all engineering and applied physics backgrounds who have done substantial and outstanding research work in bio-medical engineering in their doctoral thesis and thereafter will be considered. The areas for consideration are:

1. Biomedical Instrumentation, Devices, Imaging, and Image and Signal Processing
2. Experimental and Computational Biomechanics, Systems Biology
3. Neurophysiology, Neural Engineering, Cognitive Neuro Sciences

Biotechnology: Candidates with outstanding records in any area of Biotechnology may apply.

Chemical Engineering: Mass & Heat Transfer, Process Intensification, Refining processes, Process design and Particle Technology. Candidates with outstanding records in other areas of Chemical Engineering may also apply.

Chemistry: Organic Chemistry: Bio-Organic Chemistry/ Organic Electronics. Candidates with outstanding research work in other areas of Chemistry may also apply.

Civil Engineering: Transportation Engineering/ Construction Management/ Structural Engineering/ Geotechnical Engineering/ Water Resources/ Environmental Engineering. Candidates with outstanding records in other areas of Civil Engineering may also apply.

Computer Science and Engineering: Invites applications in all areas of computer science, especially in the following ones: Theoretical Computer Science, Information security, VLSI, Embedded systems, Data Science, Networks and Mobile systems, HPC, Cloud Computing, Distributed systems, Programming languages and Software Engineering.

Design: Particulars are given above on page 5.

Electrical Engineering: The Department of Electrical Engineering at IIT Hyderabad invites applications from Indian national who are exceptionally bright and motivated, with an established record of independent, high quality research and commitment to teaching for positions of Assistant, Associate Professors at IIT Hyderabad (www.iith.ac.in) in the following Areas:

Electromagnetics, RF and microwaves, VLSI (analog, mixed signal, digital mm-wave, bio-inspired, communication), queuing theory, control engineering, systems theory, robotics, energy systems, microsystems and nanodevices, photonics, power electronics.

The Department is especially interested in candidates with multidisciplinary collaborative research skills and expertise.

Liberal Arts: Cultural Studies, Economics, English, Sociology, Anthropology and Fine Arts (Fine Arts particulars are given on page 6) Outstanding applicants from other areas may also be considered.

Mathematics: Probability/Statistics, Partial Differential Equations (theoretical), Algebra and Complex Analysis. Outstanding applicants from other areas may also be considered.

Mechanical and Aerospace Engineering: Combustion/Propulsion/ Engines/ Turbines, Composite Materials, Computational Aerodynamics/

1. Physical Metallurgy: Diffusion – dislocation dynamics Compressible flow, Computational/ Theoretical/Experimental Solid Mechanics, (experimental/computational) – experimental thermodynamics – shape, emory Dynamics/Controls/Flight mechanics, Experimental Fluid Mechanics, Metrology, alloys – and other relevant areas of physical metallurgy. Micro-Manufacturing, Multibody Dynamics, NDE/Structural Health Monitoring

2. Mechanical Metallurgy: creep and superplasticity – fatigue and fracture – Tribology. Candidates with outstanding records in other relevant areas may also Deformation at small length scales (experimental/computational) – crystal apply plasticity – high strain rate deformation – other relevant areas of mechanical metallurgy

Materials Science & Metallurgical Engineering:

1. **Functional Materials**
   Fabrication of optoelectronic materials and devices
   PVD/ CVD based inorganic photovoltaic devices – structure-property relations
   Band gap engineering and phonon studies of semiconductor devices
   Metamaterials, magnetic nanostructures and devices
   Relaxor ferroelectric thin film and devices
   Solid state hydrogen storage materials

2. **Computational Materials Science**
   First principles method development and applications to materials phenomena
   Atomistic modeling of defects and deformation in materials
   Modeling of deformation in materials - continuum plasticity, discrete dislocation plasticity, damage mechanics

3. **Extractive and process metallurgy**

4. **Physical Metallurgy**
   Defect structure/interface analysis using advanced microscopy techniques
   Experimental thermodynamics and CALPHAD
   Surface engineering and advanced coatings

5. **Structural polymers** – Mechanical behavior and structure-property relations

6. **Materials in extreme environments**

Candidates with exceptional academic background irrespective of the areas of specialization will be considered

Physics: "Condensed Matter Physics (Theory)/ Plasmonics/ Nano Electronics/ Quantum Electronics/ BEC/ Ultra Cold Dynamics/ Integrated Photonics/ Silicon Photonics/ High Energy Density Science/ Quantum Optics & Quantum Information/ Nonlinear Dynamics & Chaos/ Accelerator Physics/ Experimental High Energy Physics/ Astroparticle Physics/ Gravitation & Cosmology/ Nuclear Physics/ Radiation Physics".

For further information, please visit the website of IIT Hyderabad www.iith.ac.in