# Indian Institute of Technology (Banaras Hindu University) Varanasi-221005, India

#### Advertisement No. IIT(BHU)/FA/Conventional Advt./01/2024

IIT (BHU) Varanasi invites online applications from well qualified and meritorious Indian Nationals for faculty positions at the level of Associate Professor and Professor in its various Science & Engineering Departments and Interdisciplinary Schools. Persons of Indian Origin (PIO) and Foreign Nationals can apply for above faculty positions.

<u>Departments</u>: Architecture, Planning & Design\*, Ceramic Engineering, Chemical Engineering & Technology, Civil Engineering, Computer Science & Engineering, Electrical Engineering, Electronics Engineering, Mechanical Engineering, Metallurgical Engineering, Mining Engineering, Pharmaceutical Engineering and Technology, Chemistry, Mathematical Sciences, Physics and Humanistic Studies.

<u>Schools</u>: Biochemical Engineering, Biomedical Engineering and Materials Science & Technology.

## Preferred areas of specialization for the post of Associate Professor and Professor in the above mentioned Departments/Schools are attached as Annexure-A.

Minimum Qualification for all faculty positions is Ph.D with first class or equivalent (in terms of grades, etc.) at the preceding degree in the appropriate branch, with a very good academic records throughout. Additional required details on experience etc. are mentioned below:

Associate Professor: A minimum six years of Teaching/Industry/Research experience from the date of award of Ph.D (excluding the experience gained while pursuing Ph.D), of which at least three years' as Assistant Professor Grade-I in Pay Level 12 or Assistant Professor (Regular) with AGP of Rs. 8000/- (pre-revised) or Senior Scientific Officer/Senior Design Engineer in a reputed organisation as on the date of application. The candidate should have demonstrated adequate experience of independent research in terms of guidance of M.Tech and Ph.D students, strong record of publications in reputed peer reviewed journals of good impact factor, patents, laboratory/course development and/or other recognized relevant professional activities.

**Professor**: A minimum 10 years of Teaching/Industry/Research experience from the date of award of Ph.D (excluding the experience gained while pursuing Ph.D), of which at least four years' at the level of Associate Professor in IITs, IISc Bangalore, IIMs, NITIE Mumbai and IISERs or at an equivalent level in any such other Indian or foreign institution/institutions of comparable standards 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 & Ph.D students, strong records of publications in reputed peer reviewed journals of good impact factor, patents, laboratory/course development and/or other recognized relevant professional activities.

The candidates should have demonstrated strong research capabilities in terms of publications in reputed peer reviewed journals of good impact factor and/or patents.

**Probation**: Period of probation in regular appointment will be one year.

**Reservation**: GoI policy on reservation including EWS and Divyang will be followed for faculty positions.

# Candidates applying for a faculty position in the Department of Architecture, Planning and Design must have a valid Council of Architecture (COA) registration certificate.

The details of pay scale admissible at the time of joining are as follows:

Post	Pay Level of 7 <sup>th</sup> CPC	Entry Pay	
Associate Professor	13A2	139600	
Professor	14A	159100	

The pay carries all other allowances as admissible to a Central Government employee stationed at Varanasi. The fringe benefits, such as HRA, LTC, medical re-imbursement, education allowance for children, contribution towards New Pension Scheme (NPS), reimbursement of telephone bills, book grants, research initiation grant (up to Rs. 10 lakhs), financial support towards national and international conferences etc. shall be permitted as per the Institute norms. Relocation charges towards transportation of personal effects are also provided as per the Institute norms.

The applications for the above mentioned positions will be received through online portal only. The link is as under:

https://facultyrecruitment.iitbhu.ac.in.

#### Notes:

- (i) Mere eligibility will not entitle any candidate for being called for interview.
- (ii) The requirements of minimum qualification and/or experience may be relaxed in the case of candidates with outstanding credentials.
- (iii) Reservation as per Gol norms.
- (iv) The Institute reserves the right to fill or not to fill any or all the post(s) advertised without assigning any reason.
- (v) Applicants not found suitable for higher positions may be considered for lower positions in the same area.
- (vi) All correspondence should be addressed to the Office of the Faculty Affairs, Indian Institute of Technology (BHU), Varanasi-221005, India. E-mail: facultyrecruitment@iitbhu.ac.in. For any clarification, candidates may contact the Office of the Faculty Affairs on the above address.
- (vii) Contact details of Heads/Coordinators of the Departments/Schools are available at the Institute website <a href="http://www.iitbhu.ac.in">http://www.iitbhu.ac.in</a>. The candidates may also approach them for any specific clarification.
- (viii) The date of submission of online applications is from 05.04.2024 to 26.04.2024.

#### **ADDITIONAL INFORMATION**

- 1. Candidates applying for a faculty position in the Department of Architecture, Planning and Design must have a valid Council of Architecture (COA) registration certificate and a scanned copy of the same should be uploaded alongwith the documents.
- 2. Candidates applying for a position in more than one Department/School are required to fill separate online application forms.
- 3. The candidate is responsible for the correctness of the information provided in the application form. If it is found at a later stage that any information given in the

- application form is incorrect/false the candidature/appointment is liable to be cancelled/terminated.
- 4. Depending upon the exceptional qualification and experience, higher initial pay may be offered to deserving candidates as decided by the Selection Committee.
- 5. Candidates called for presentation will be paid second AC railway fare from the nearest Railway station of the place of duty or residence to Varanasi for an overnight journey. Air fare will be paid for travelling in Economy class by any Airlines within India only from the local airport of place of duty/residence/last duty station and the tickets must be purchased from the three Government of India Authorized Travel Agents viz. (i) M/s. Balmer Lawrie & Company Ltd. (ii) M/s. Ashok Travels & Tours and (iii) IRCTC. In addition, he/she will be paid Taxi fare from residence/place of duty to local Railway Station/Airport and back as well as Varanasi Railway Station/Airport to the Institute & Back. Also, his/her expenses related to boarding & lodging at the Institute Guest House / outside the campus will be reimbursed as per the Institute norms.
- 6. Applicants, who are employed in Government, Semi-Government Organizations or Institutions, should send their application form **THROUGH PROPER CHANNEL** else they will be required to produce a **NO OBJECTION CERTIFICATE** from their present employer at the time of interview.
- 7. The Institute reserves the right to restrict the number of candidates for interview to a reasonable limit on the basis of qualifications and experience higher than the minimum prescribed in the advertisement and other academic achievements.
- 8. No information will be sent to those candidates who are not short-listed for interview. No correspondence, whatsoever, will be entertained from the candidates regarding conduct and result of interview and reasons for not being called for interview or selection.
- 9. For availing reservation, the candidates must upload desired certificates in prescribed format with the application form.
- 10. Foreign Nationals who are Persons of Indian Origin (PIO), if selected, permission will be sought from Govt of India before he/she can join the Institute. Other Foreign Nationals, if selected, appointment will be on a contract basis for up to five years subject to permission from Govt of India before he/she can join the Institute.
- 11. Political and security clearance from Ministries of External Affairs and Home Affairs is necessary in every case for individuals with foreign passports.
- 12. The application forms received through any other mode shall not be entertained and the Institute does not take responsibility to inform such candidates.

### Annexure-A

## **Preferred Area of Specializations for Faculty Recruitment**

Sl	Name of the	Name of the Specialization		
No	Department/School	Professor	Associate Professor	
1.	Architecture, Planning & Design	<ul> <li>(i) Landscape Architecture</li> <li>(ii) Architectural History &amp; Theory</li> <li>(iii) Building Engineering &amp; Management</li> <li>(iv) Visual Design and Communication</li> <li>(v) Heritage and Conservation</li> </ul>	<ul> <li>(i) Landscape Architecture</li> <li>(ii) Architectural History &amp; Theory</li> <li>(iii) Building Engineering &amp; Management</li> <li>(iv) Visual Design and Communication</li> <li>(v) Heritage and Conservation</li> <li>(i) Artificial Intelligence, Computer Vision and Machine Learning</li> <li>(ii) High Performance Computing and Data Engineering</li> <li>(iii) Computer Networks</li> <li>(iv) Information Extraction/Retrieval and Data Analytics</li> <li>(v) Natural Language Processing</li> <li>(vi) Cyber Security, Cryptography, Cyber Physical Systems, Game Theory</li> <li>(vii) Computer Architecture</li> <li>(viii) Quantum Computing / Quantum Information Processing</li> <li>(ix) Theoretical Computer Science</li> <li>(i) B.Tech. or B.E. in Chemical Engg. with good academic record throughout</li> <li>(ii) Transport Processes, Thermodynamics, Modeling and Simulation, Energy and Environment, Chemical Engg Science, Electrochemical Engg, Process Dynamics and Control, Artificial Intelligence, Advance Materials</li> </ul>	
2	Computer Sciences	<ul> <li>(i) Artificial Intelligence, Computer Vision and Machine Learning</li> <li>(ii) High Performance Computing and Data Engineering</li> <li>(iii) Computer Networks</li> <li>(iv) Information Extraction/Retrieval and Data Analytics</li> <li>(v) Natural Language Processing</li> <li>(vi) Cyber Security, Cryptography, Cyber Physical Systems, Game Theory</li> <li>(vii) Computer Architecture</li> <li>(viii) Quantum Computing / Quantum Information Processing</li> <li>(ix) Theoretical Computer Science</li> </ul>		
3	Chemical Engineering & Technology	<ul> <li>(i) B.Tech. or B. E. in Chemical Engg. with good academic record throughout.</li> <li>(ii) Transport Processes, Thermodynamics, Modeling and Simulation, Energy and Environment, Chemical Engg Science, Electrochemical Engg, Process Dynamics and Control, Artificial Intelligence, Advance Materials</li> </ul>		
4	(i) Algebra (ii) Number Theory (iii) Topology (iv) Geometry (v) Probability Theory (vi) Statistics (vii) Differential Equation (viii) Numerical Analysis and Optimization  Note: OPEN means all areas of Mathematics, and with specialization in Probability Theory and Statistics, the		OPEN with preference to following areas –  (i) Algebra (ii) Number Theory (iii) Topology (iv) Geometry (v) Probability Theory (vi) Statistics (vii) Differential Equation (viii) Numerical Analysis and Optimization Note: OPEN means all areas of Mathematics, and with specialization in Probability Theory and Statistics, the candidate must have Mathematics in B. Sc. level.	
5	Metallurgical	<ul><li>(i) Computational Materials Engineering, Thermodynamics of Materials; Extractive Metallurgy</li><li>(ii) Extraction of Metals, Processing of</li></ul>	<ul><li>(i) Computational Materials Engineering, Thermodynamics of Materials; Extractive Metallurgy</li><li>(ii) Extraction of Metals, Processing of</li></ul>	

		Secondary Metals & Alloys, Iron & Steel Making Technologies, Management & Recycling of Metallurgical Wastes  (iii) Mechanical Metallurgy, Advanced Mechanical Processing Technologies, Foundry & Near-Net Shape Processing Technologies, Joining of Metals & Alloys, Surface Engineering, Corrosion	Secondary Metals & Alloys, Iron & Steel Making Technologies, Management & Recycling of Metallurgical Wastes  (iii) Mechanical Metallurgy, Advanced Mechanical Processing Technologies, Foundry & Near-Net Shape Processing Technologies, Joining of Metals &
		Surface Engineering, Corrosion Engineering  (iv) Physical Metallurgy, Structural Metallurgy, Complex Metallic Alloys, Advanced Materials, Energy Materials, Nanomaterials, Composite Materials, Design of Advanced Steels, Characterization of Materials, Nonequilibrium Processing of Materials, Design and Development of Novel Materials".	Alloys, Surface Engineering, Corrosion Engineering  (iv) Physical Metallurgy, Structural Metallurgy, Complex Metallic Alloys, Advanced Materials, Energy Materials, Nanomaterials, Composite Materials, Design of Advanced Steels, Characterization of Materials, Nonequilibrium Processing of Materials, Design and Development of Novel Materials".
6	Mining	(i) Rock Mechanics and Ground Control (ii) Mine Safety Engineering (iii) Mine Environment Engineering (iv)Mining Machinery (v) Coal Mining (Both surface & Underground) (vi)Mine Planning (vii) Mine Safety & Legislations	(i) Mine Environment Engineering (ii) Rock Fragmentation & Excavation Engineering. (iii) Mine Mechanization (iv) Mining Machinery (v) Coal Mining (Both Surface & Underground) (vi) Metalliferous Mining (Both Surface & Underground) (vii) Mine & Mineral Economics (viii) Mine Planning
7	Electronics	<ul> <li>(i) Digital Systems</li> <li>(ii) Microprocessors and Computer architecture</li> <li>(iii) Embedded systems</li> <li>(iv) Artificial intelligence</li> <li>(v) Machine learning</li> <li>(vi) Mobile communication and computing</li> <li>(vii) Digital communication and Information theory</li> <li>(viii) Digital and mixed signal processing</li> <li>(ix) Image processing</li> <li>(x) Speech signal processing</li> <li>(xi) Computer networks</li> <li>(xii) VLSI design and technology</li> <li>(xiii) VLSI for signal processing</li> <li>(xiv) VLSI architecture</li> <li>(xv) 3D IC Technology</li> <li>(xvi) Cyber Physical Systems</li> <li>(xvii) MEMS and RF MEMS.</li> </ul>	(i) Digital Systems (ii) Microprocessors and Computer architecture (iii) Embedded systems (iv)Artificial intelligence (v) Machine learning (vi) Mobile communication and computing (vii) Digital communication and Information theory (viii) Digital and mixed signal processing (ix) Image processing (x) Speech signal processing (xi) Computer networks (xii) VLSI design and technology (xiii) VLSI for signal processing (xiv) VLSI architecture (xv) 3D IC Technology (xvi) Cyber Physical Systems (xvii) MEMS and RF MEMS.
8	Ceramic Engineering	(i) Glass/ Traditional Ceramics (ii) Refractory (iii) Cement (iv) Structural Ceramics/ Composites/ Coating (v) Electro Ceramics (vi) Energy & Furnace Technology (vii) Bio Ceramics (viii) Computational Ceramics	(i) Glass/ Traditional Ceramics (ii) Refractory (iii) Cement (iv) Structural Ceramics/ Composites/ Coating (v) Electro Ceramics (vi) Energy & Furnace Technology (vii) Bio Ceramics (viii) Computational Ceramics

9	Physics	(i) Condensed Matter Physics and Material Physics, (ii) Soft condensed matter, (iii) Nuclear Physics, (iv) High Energy Physics, (v) Optics, Photonics and Spectroscopy (vi) Quantum information and Quantum computing, (vii) Astrophysics and space sciences, (viii) Advanced Electronics and Communication (ix) Remote sensing			
	C 1 1 CNT 4 1 1			() Materials for Engage 9 Engineering	
10	School of Materials Science & Technology	<ul><li>(i) Magnetic Materials</li><li>(ii) Materials for Sensors and Actuators</li></ul>		<ul><li>(i) Materials for Energy &amp; Environment</li><li>(ii) Magnetic Materials</li></ul>	
11	Chemistry	(i) Computational and experimental approaches to adsorption/catalysis		(i) Physical Organic Chemistry with Specialization in fuel cell.	
12	Civil Engineering	<ul> <li>(ii) Green Synthetic Organic Chemistry</li> <li>(i) Hydraulics and Water Resources         Engineering Section</li> <li>(ii) Geo-informatics Engineering Section</li> <li>(iii) Structural Engineering Section</li> <li>(iv) Geo-technical Engineering Section</li> <li>(v) Transportation Engineering Section</li> </ul>		<ul> <li>(i) Hydraulics and Water Resources         Engineering Section</li> <li>(ii) Structural Engineering Section</li> <li>(iii) Geo-technical Engineering Section</li> <li>(iv) Transportation Engineering Section</li> </ul>	
13	Mechanical Engineering	Production Engineering  Machine Design	Micro-Nano Manufacturing, Additive Manufacturing, Unconventional Manufacturing, Data Driven Manufacturing, IOT, COBOT & Automation, Welding, Machining, Micromachining  Design Thinking, Sensors and Biotribology, Micro Electro- Mechanical System (MEMS), Robotics & Cybernetics, Design		
		Thermal & Fluid Engineering Decision Science and	Thinking, Sensors and Biotribology, Micro Electro-Mechanical System (MEMS), Robotics and Cybernetics.  Renewable Energy Technologies, (Hydrogen, Electric Mobility, PV and Fuel Cell Technology, Solar-Wind-Biomass-Geothermal etc.), Experimental and Numerical Thermal and Fluid Science.  Simulation and Data Driven Decision Making, Machine Learning		
14	Electrical	Engineering/Industrial   and Block chain Technology, Large Scale optimization.   (i) Power Systems,		chnology, Large Scale optimization.	
14	Electrical	(ii) Electrical Machines,	nd Control Systems		
15	Pharmaceutical Engineering & Technology	<ul><li>(iii) Power Electronics and Control Systems</li><li>(iv) Pharmaceutics</li><li>(v) Pharmaceutical Chemistry</li></ul>		(i) Pharmaceutics (ii) Pharmaceutical Chemistry (iii) Pharmacology (iv) Pharmacognosy	
16	School of Biomedical Engineering	<ul><li>(i) Biomechanics</li><li>(ii) Bioinstrumentation</li><li>(iii) Biomaterials</li></ul>		<ul><li>(i) Biomechanics</li><li>(ii) Bioinstrumentation</li><li>(iii) Biomaterials</li></ul>	
17	School of Bio- Chemical Engineering	<ul> <li>(i) Bioreactor Design and Scale-up/ Plant Design.</li> <li>(ii) Fermentation Technology</li> <li>(iii) Bioinstrumentation and Control</li> <li>(iv) Food Engineering</li> <li>(v) Metabolic Engineering</li> <li>(vi) Bioinformatics/Computational Biology</li> </ul>		<ul> <li>(i) Bioreactor Design and Scale-up/ Plant Design.</li> <li>(ii) Fermentation Technology</li> <li>(iii) Bioinstrumentation and Control</li> <li>(iv) Food Engineering</li> <li>(v) Metabolic Engineering</li> <li>(vi) Bioinformatics/Computational Biology</li> </ul>	
18	Humanistic Studies	(i) Cognitive Psychology (ii) Psychology (iii) Economics			