## Addendum to the Advertisement No. K-15/2024-2025 dated 1st January, 2025

## **Areas for the Rolling Advertisement:**

Sr. No.	Academic Unit	Areas for Rolling Advt.
1	Computer Science & Engineering	Computer Systems: Operating Systems, Databases, Compilers and Programming Languages, Computer Networks, Distributed Systems, Cloud Computing; Computer Architecture; Software Engineering; Artificial Intelligence and Machine Learning; Visual Computing: computer vision, computer graphics, image processing; Speech and Natural language processing; Theoretical Computer Science; Formal Methods and Verification; Cryptography and Computer Security; Quantum Computing, High Performance Computing, Algorithmic Mechanism Design, Computational Biology and Bioinformatics.  Exceptional candidates from other areas of Computer Science & Engineering are also encouraged to apply.
2	Chemistry	(a) Metalloenzymes. (b) Main group inorganic chemistry.
		(c) Total synthesis (or isolation) of natural products with a focus on drug discovery.
		(d)Biosynthesis/Sustainability/ Biocatalysis/Synthetic Biology bearing translational potential.
		(e) Advanced spectroscopy and microscopy techniques with focus on any of the following: Multidimensional spectroscopy/ microscopy; Scanning tunnelling spectroscopy and Single-molecule electronics; Plasmonics, Surface-plasmon resonance imaging, Near-field scanning optical microscopy and Tip-enhanced (IR/Raman) microscopy/ spectroscopy; interferometric scattering microscopy, Chiro-optical and CPL imaging, Super-resolution fluorescence imaging and nanoscopy.
		(f) Multi-modal, time resolved spectroscopy/microscopy (not limited to) to probe reaction intermediates/products/ mechanisms at solid-liquid and solid-gas interfaces (heterogeneous catalysis and electrochemical reactions).
		(g) Cryogenic electron microscopy in biological/materials science.

Sr. No.	Academic Unit	Areas for Rolling Advt.
3	Energy Science and Engineering	Wind/Tidal/Hydro/Wave/ Geothermal energy  Exceptional candidates in all areas relevant to the academic unit will be considered.  Essential Qualifications:  1. Bachelors and Master's Degree in Energy or Mechanical Engineering  2. Ph.D. in area related to Wind/Tidal/Hydro/Wave/Geothermal energy with emphasis on structural mechanics and design analysis of relevant energy conversion devices  Desirable:  Combination of experimental and modeling experience is preferred.
4	Environmental Science and Engineering	The candidate must possess Ph.D. and M.Tech./ M.E./ M.S. with research focus in Environmental Science/ Engineering from reputed Institutes. Also, the candidate should have B.Tech./B.E./B.S. in Environmental/ Civil/ Chemical/ Mechanical Engineering/ Biotechnology and allied disciplines or M.Sc. in Environmental Science and allied disciplines. The candidate who has done a Ph.D. directly after completing B.Tech./B.E./B.S. must have undergone substantial course work in Environmental Science/ Engineering. The candidate should have demonstrated research and teaching expertise in one or more of the areas listed:  1. Environmental Ecology 2. Environmental Microbiology 3. Air Pollution and Greenhouse Gases Control Technologies 4. Environmental Systems Modelling: Contaminant Fate and 5. Transport; Informatics; Comprehensive Human Health Risk 6. Modelling; Greenhouse Gases Mitigation; Circular Economy In addition to the above specific areas, applications from candidates possessing exceptional credentials in other areas may also be considered.
5	Shailesh J. Mehta School of Management	1. Information Systems (IT/IS) 2. Accounting 3. Finance (Fintech, Computational Finance) 4. Organizational Behaviour, and Human Resources Management (HRM) 5. Marketing Management 6. Strategic Management (including competitiveness) 7. Technology Management 8. Operations Management

Sr. No.	Academic Unit	Areas for Rolling Advt.
6	Centre for Machine Intelligence and Data Science	Data Sciences; Machine Learning; Artificial Intelligence; Statistics; Systems and Computational issues in Al/ML/DS; Al/ML/DS in application areas including Finance, Health, Sustainability, Transportation, Mechanics, Sciences, Industry, Robotics and Autonomous Systems; Machine Learning theory; Social choice, Game theory, Multiagent systems; Data and information systems; Al/ML in Text, Speech, and Natural Language Processing; Computer Vision; Al and Society, Policies, Trust, Ethics; Any other significant Al/ML area.
7	Centre of Studies in Resources Engineering (CSRE)	<ol> <li>Computer Vision (CV) with focus on Satellite data processing.</li> <li>Microwave remote sensing</li> <li>Geospatial Applications in Hydrology, Hydroinformatics and water resources</li> <li>Geo Al with application to earth system sciences</li> <li>Geospatial Data Science</li> <li>Atmospheric Science</li> <li>Urban Remote Sensing</li> <li>Lithosphere study and mineral resources</li> <li>Photogrammetry, GNSS, GPS, LiDAR, Surveying and Geodesy</li> <li>Agro-informatics and precision agriculture</li> <li>Oceanography, Coastal and Marine studies</li> <li>Natural Hazards and Disaster Management</li> <li>Forestry and Ecology</li> </ol>

## **Eligibility Criteria for Assistant Professor**

Sr. No.	Academic Unit	Eligibility Criteria
1	Computer Science & Engineering	Candidates should have a minimum of TWO (2) publications during their Ph.D. in reputed conferences or journals in computer science and related areas, with at least one of these being in a top-tier forum*. In addition, candidates with more years of research experience after Ph.D. are expected to have correspondingly higher research achievements. In case of candidates who have spent some time in non-research industry jobs, this criterion may be relaxed, especially if they have additional publications during their Ph.D.  "Reputed" is defined as rank B or higher and "top-tier" is defined as rank A or higher in CORE portals OR in the Department Publication Ranking List.
2	Chemistry	Candidates should have a basic degree in Chemistry, should have a minimum of FIVE (5) publications in Scopus/SCI indexed internationally reputed journals, out of which at least TWO (2) publications must originate from post Ph.D. work.
3	Energy Science and Engineering	Candidates should have a minimum of THREE (3) publications in SCOPUS/SCI-E indexed journals in energy science and engineering related areas.
4	Environmental Science and Engineering	The candidate must possess Ph.D. and M.Tech./ M.E./ M.S. with research focus in Environmental Science/ Engineering from reputed Institutes. Also, the candidate should have B.Tech./B.E./B.S. in Environmental/ Civil/ Chemical/ Mechanical Engineering/ Biotechnology and allied disciplines or M.Sc. in Environmental Science and allied disciplines with consistently strong academic record throughout. The candidate who has done a Ph.D. directly after completing B.Tech./B.E./B.S. must have undergone substantial course work in Environmental Science/ Engineering. Candidates should have a minimum of THREE (3) publications in Scopus/SCI index reputed journals.  Each patent granted will be considered as equivalent to a quality publication in a reputed international journal.
5	Shailesh J. Mehta School of Management	For Assistant Professor  Educational Qualification:- Ph.D. with a first class or equivalent (in terms of Grades) in the preceding degree in the relevant discipline and a good academic record throughout. The candidates applying for a faculty position in Accounting should have a Ph.D. in Accounting or CA with Ph.D. in Accounting or Finance.  For Assistant Professor Grade I  Educational Qualification:- A minimum of three years of post-Ph.D. teaching / research / professional experience, excluding the experience gained while pursuing Ph.D. The candidate should have demonstrated research capabilities in terms of publications in reputed journals and conferences.

		For Assistant Professor Grade II Educational Qualification:- Candidates satisfying all criteria of Assistant Professor Grade I, except the post-Ph.D. experience criterion, may be appointed as Assistant Professor Grade II with appropriate pay based on the number of years of postdoctoral experience.
		Journal Paper Publications:- Candidate should have published a minimum of 3 papers in reputed journals, of which at least 1 in B or higher- level journals listed in ABDC, ERA or ABS journal list (level 2 and above), or Scopus Indexed Journals (CiteScore of 3 and above).
6	Centre for Machine Intelligence and Data Science	Candidates should have published a minimum of 3 papers in reputed journals or conferences in the area of Machine Intelligence and Data Science. Publications ranked at least A as per CORE Rankings will be considered as reputed; CMInDS will maintain an additional list of reputed journals and conferences on the CMInDS website. Additionally, the candidates are expected to have at least one publication in reputed venues per year of post Ph.D. experience. Up to 8 years of work in industry or other circumstances which do not offer scope for publication may be exempted from the additional publication requirements. In such cases, the candidate is expected to provide significant alternative evidence of technical leadership in the form of patents and/or software products.
7	Centre of Studies in Resources Engineering (CSRE)	The candidates should have research specialization in geoinformatics, remote sensing and their applications to earth system studies and related areas.  Candidates should have a minimum of THREE (3) publications in Scopus/SCI-indexed journals. Patent(s) granted and Book(s) published will be considered equivalent to journal publications.

## Associate Professor and Full Professor Eligibility Criteria

Sr. No.	Academic Unit	Criteria
1.	Computer Science & Engineering	Publications criteria: Candidates with more years of research experience are expected to have correspondingly higher research achievements. Candidates should have, in total, a minimum of 12 post-Ph.D. publications in reputed journals/conferences in computer science and related areas. Up to 2 granted patents can count as papers, but papers and patents representing the same work are not double-counted. Out of the above, candidates should also have a minimum of 6 publications in reputed journals/conferences during
		their position as assistant professor. Up to 2 granted patents can count as papers, but papers and patents representing the same work are not double-counted.  Ph.D. guidance: Candidates should be the supervisor of at least one Ph.D. student, who has either graduated or is in an advanced stage. (At IITB, a student is considered to be at an advanced stage, upon completing his/her pre-synopsis and thereby being ready to submit the thesis for external review). Co-guide counts as 0.5 student. Cases where the co-guide requests more credit than 0.5 will be dealt with by the department on a case by case basis. The criteria of Ph.D. guidance of students may be relaxed for candidates with excellent research records, if they are from industry/research labs/non Ph.D. granting academic institutions.
		Any other eligibility criteria:  If a candidate does not meet the above minimum requirements, then demonstrated Scholarship through the following avenues may be considered for at most one of the requirements. The department must strongly recommend the exemption(s). 1. High quality books (including textbooks),monographs, and book chapters can be counted towards scholarship. (Double counting to be avoided if said books are part of research papers). 2. High quality products developed by the applicant that are outstanding. 3.Exceptional quality papers, as evidenced by citation scores or feedback from top experts in the area. 4. Significant awards such as the Bhatnagar award, IEEE or ACM Fellows and so on.
		Publications criteria: Candidates with more years of research experience are expected to have correspondingly higher research achievements.

Candidates should have, in total, a minimum of 20 post-Ph.D. publications in reputed journals/conferences in computer science and related areas. Up to 2 granted patents can count as papers, but papers and patents representing the same work are not double-counted. Out of the above, candidates should also have a minimum of 8 publications in reputed journals/conferences during their assessment period. Up to 2 granted patents can count as papers, but papers and patents representing the same work are not double-counted.

#### Ph.D. guidance:

Candidates should be the supervisor of at least two Ph.D. students who have graduated. Co-guide counts as 0.5 student.

The criteria of Ph.D. guidance of students may be relaxed for candidates with excellent research records, if they are from industry/research labs/non Ph.D. granting academic institutions.

#### Any other eligibility criteria:

If a candidate does not meet the above minimum requirements, then demonstrated Scholarship through the following avenues may be considered for at most one of the requirements. The department must strongly recommend the exemption(s).

- 1. High quality books (including textbooks), monographs, and book chapters can be counted towards scholarship. (Double counting to be avoided if said books are part of research papers).
- 2. High quality products developed by the applicant that are outstanding.
- 3. Exceptional quality papers, as evidenced by- citation scores or feedback from top experts in the area.
- 4. Significant awards such as the Bhatnagar award, IEEE or ACM Fellows and so on.

#### Chemistry

#### Associate Professor

#### Publications criteria:

- 1. Candidates should have, in total, a minimum of 10 publications in Scopus/SCI indexed journals.
- 2. Candidates should also have a minimum of 5 publications at Assistant Professor level in Scopus/SCI indexed journals.

#### Teaching:

Candidates should have taught courses equal to two courses per year in the review period.

#### Ph.D. guidance:

Candidates should be the supervisor/ co-supervisor of at least one Ph.D. student, who is in an advanced stage. Advanced stage is when the student has completed minimum three years and has at least 2 publications produced from the doctoral work.

#### 2.

#### **Projects/Research Grants:**

Should have been awarded a minimum of one sponsored project from external agencies/Industry as Assistant Professor.

#### **Professor**

#### **Publications criteria:**

- 1. Candidates should have, in total, a minimum of 20 publications in Scopus/SCI indexed journals.
- 2.Candidates should also have a minimum of 15 publications from the previous two positions as Assistant and Associate Professor, in Scopus/SCI indexed journals.

#### Teaching:

Candidates should have taught courses equal to two courses per year in the review period.

#### Ph.D. guidance:

1.Candidates should be the supervisor/ co-supervisor of at least 2 Ph.D. (Viva Voce completed) awarded students.

#### **Projects/Research Grants [department option]**

Should have been awarded a minimum of three sponsored projects from external agencies/Industry in the previous two positions as Assistant and Associate Professor.

# 3. Energy Science & Engineering

#### **Associate Professor**

**Publications criteria:-** Candidates should have, in total, a minimum of 9 publications in journals listed in SCIE or Scopus. Candidates should also have a minimum of 4 publications in journals listed in SCIE or Scopus as Assistant Professor.

**Ph.D. guidance:-** Candidates should have supervised at least one Ph.D. student.

#### **Professor**

#### **Publications criteria:**

Candidates should have, in total, a minimum of 20 publications in journals listed in SCIE or Scopus. Candidates should also have a minimum of 11 publications in journals listed in SCIE or Scopus as Associate Professor.

#### Teaching:

Candidate should have taught on average two courses per year during his academic career.

#### Ph.D. guidance:

Candidates should have supervised/co-supervised at least three Ph.D. students (with at least one as main supervisor).

#### **Projects/Research Grants:**

At least 1 Project/Research grant at the level of Associate Professor.

# 4. Environmental Science & Engineering

#### **Associate Professor**

The candidate must possess Ph.D. and M.Tech./ M.E./ M.S. with research focus in Environmental Science/ Engineering from reputed Institutes. Also, the candidate should have B.Tech./B.E./B.S. in Environmental/ Civil/ Chemical/ Mechanical Engineering/ Biotechnology and allied disciplines or M.Sc. in Environmental Science and allied disciplines with consistently strong academic record throughout. The candidate who has done a Ph.D. directly after completing B.Tech./B.E./B.S. must have undergone substantial course work in Environmental

#### **Publications criteria:**

Science/ Engineering.

Candidates should have, in total, a minimum of 8 publications in Scopus/SCI index reputed journals. Out of the above, candidates must have a minimum of 5 publications in Scopus/SCI index reputed journals during their assessment period. Each patent granted (not applied/filed) will be considered as equivalent to a quality publication in a reputed international journal. Candidates with more years of research experience are expected to have

correspondingly higher research achievements.

#### Ph.D. guidance:

Candidates should be the supervisor of at least one Ph.D. student.

#### **Projects/Research Grants:**

Minimum 1 research grant in the assessment period.

#### Any other eligibility criteria:

Minimum 1 Continuing Education Program or 1 consultancy or 1 other relevant professional activity in the assessment period.

#### **Professor**

The candidate must possess Ph.D. and M.Tech./ M.E./ M.S. with research focus in Environmental Science/ Engineering from reputed Institutes. Also, the candidate should have B.Tech./B.E./B.S. in Environmental/ Civil/ Chemical/ Mechanical Engineering/ Biotechnology and allied disciplines or

M.Sc. in Environmental Science and allied disciplines with consistently strong academic record throughout. The candidate who has done a Ph.D. directly after completing B.Tech./B.E./B.S. must have undergone substantial course work in Environmental Science/ Engineering.

#### Publications criteria:

Candidates should have, in total, a minimum of 16 publications in Scopus/SCI index reputed journals. Out of the above, candidates must have a minimum of 8 publications in Scopus/SCI index reputed journals during their assessment period. Each patent granted (not applied/filed) will be considered as equivalent to a quality publication in a reputed international journal.

Candidates with more years of research experience are expected to have correspondingly higher research achievements.

#### Ph.D. guidance:

Candidates should be the supervisor of at least two Ph.D. students who have graduated.

#### **Projects/Research Grants:**

Minimum 1 research grant in the assessment period.

#### Any other eligibility criteria:

Minimum 1 Continuing Education Program or 1 consultancy or 1 otherrelevant professional activity in the assessment period.

# 5. Shailesh J. Mehta School of Management (SJMSoM)

#### Associate Professor

**Educational Qualification:** Ph.D. with a first class or equivalent (in terms of Grades) in the preceding degree in the relevant discipline and a good academic record throughout. The candidates

applying for a faculty position in Accounting should have a Ph.D. in Accounting or CA with Ph.D. in Accounting or Finance.

#### Post Ph.D. Experience:

A minimum of 6 years post-Ph.D. teaching/research/professional experience of which at least 3 years should be at the level of Assistant Professor Grade I in IIMs, IITs, IISc, IISERs or at an equivalent level in any other Indian/Foreign Universities/Institutions/Industries of comparable level.

#### **Journal Paper Publications:**

Candidate should have published a minimum of 8 papers in reputed journals, out of which at least 4 in B or higher-level journals listed in ABDC, ERA or ABS journal list (level 2 and above), or Scopus Indexed Journals (CiteScore of 3 and above).

#### **During Assessment period:**

Minimum 3 publications in B or higher-level journals listed in ABDC, ERA or ABS journal list (level 2 and above), or Scopus Indexed Journals (CiteScore of 3 and above). Assessment period is the period since the candidate was employed as Assistant Professor.

#### Ph.D. guidance:

Candidate should be the supervisor of at least one Ph.D. student, who has graduated or is in an advanced stage. The candidates with industry experience are exempt from this.

#### **Teaching Scores:**

The candidates should have taught core and elective courses in the MBA programme, and should be able to teach doctoral (Ph.D.) courses in management. The candidates with industry experience are exempt from this.

#### Desirables:

The following criteria may be taken into account when considering the case of candidates applying for the position of Associate Professor and Professor. This is a desirable criteria and NOT the essential criteria for shortlisting. Contribution to outreach activities such as MDP/CEP courses/programmes, conducting workshops, conferences, activities of professional organizations, consultancy projects, membership of boards of organizations, etc.

#### **Professor**

#### **Educational Qualification:**

Ph.D. with a first class or equivalent (in terms of Grades) in the preceding degree in a relevant discipline and a good academic record throughout. The candidates applying for a faculty position in Accounting should have a Ph.D. in Accounting or CA with Ph.D. in Accounting or Finance.

#### Post Ph.D. Experience:

A minimum of 10 years post-Ph.D. teaching/research/professional

experience of which at least 4 years should be at the level of Associate Professor in IIMs, IITs, IISc, IISERs, or at an equivalent level in any other Indian/Foreign Universities/Institutions of comparable level.

#### **Journal Paper Publications:**

Candidate should have published a minimum of 12 papers in reputed journals, out of which at least 6 in B or higher-level journals listed in ABDC, ERA or ABS journal list (level 2 and above), or Scopus Indexed Journals (CiteScore of 3 and above). During Assessment period: Minimum 3 publications in B or higher-level journals listed in ABDC, ERA or ABS journal list (level 2 and above), or Scopus Indexed Journals (CiteScore of 3 and above). Assessment period is the period since the candidate was employed as Associate Professor.

#### Ph.D. guidance:

Candidate should be the supervisor of at least two Ph.D. students, who have graduated (defense viva-voce successfully completed).

#### **Teaching Scores:**

The candidates should have taught core and elective courses in the MBA programme, and should be able to teach doctoral (Ph.D.) courses in management. The candidates with industry experience are exempt from this.

# 6. Centre of Studies in Resources Engineering (CSRE)

#### **Associate Professor**

#### Publications criteria:

Candidates should have, in total, a minimum of 8 publications in Scopus/SCI indexed journals. Patent(s) granted and Book(s) published will be considered equivalent to journal publications.

#### Ph.D. guidance:

The candidate should have graduated one Ph.D. student. If the candidate is a co-supervisor of a student who has graduated, it will be counted as guiding 1/2 a student. The count will be treated as 1 for the main supervisor, even if there is a co-supervisor.

#### **Projects/Research Grants:**

The applicant is expected to have sponsored/consultancy project(s) with a total sanctioned grant of approximately Rs. 20 lakhs. For candidates from industry: the candidate should be involved in execution of projects related to geoinformatics and earth observation.

#### **Professor**

#### Publications criteria:

Candidates should have, in total, a minimum of 14 publications in Scopus/SCI indexed journals. Out of the above, the candidate

must have a minimum of 6 publications in Scopus/SCI indexed journals as Associate Professor. Patent(s) granted and Book(s) published will be considered equivalent to journal publications.

#### **Teaching Criteria:**

Candidates should have taught at least one course per semester as Associate Professor.

#### Ph.D. guidance:

The candidate should have graduated two Ph.D. students. If the candidate is a co-supervisor of a student who has graduated, it will be counted as guiding 1/2 a student. The count will be treated as 1 for the main supervisor, even if there is a co-supervisor.

#### **Projects/Research Grants:**

The applicant is expected to have sponsored/consultancy project(s) with a total sanctioned grant of approximately Rs. 50 lakhs. For candidates from industry: the candidate should be involved in execution of projects related to geoinformatics and earth observation.

# 7. Centre for Machine Intelligence and Data Science (CMInDS)

#### Associate Professor

#### **Publications:**

A minimum of 12 post-PhD publications in reputed journals or conferences; up to 2 granted patents can count as papers, but papers and patents representing the same work will not be double-counted. Candidates applying from academic institutions should have a minimum of 6 publications in reputed journals or conferences during their position as assistant professor. Up to 2 granted patents from this period can count as papers, but papers and patents representing the same work will not be double-counted. Candidates with industry experience should have at least 6 publications in high reputed journals or conferences and there should be at least one granted patent for every year of industry experience. Each year with a provable lead role in the design and development of a cutting-edge product or application can be used to provide a relaxation of 1 paper or patent per year for the assessment period.

#### Ph.D. guidance:

Candidates should be the supervisor of at least one Ph.D. student, who has either graduated or is in an advanced stage. (At IITB, students are considered to be at an advanced stage when they complete their pre-synopsis and are ready to submit the thesis for external review). Being a coguide will count as 0.5 student. This criterion of Ph.D. guidance of students may be relaxed for candidates with excellent research records, if they are from industry/research labs/non-Ph.D. granting academic institutions.

#### Other criteria:

If a candidate does not meet the above minimum requirements, then demonstrated scholarship through the following avenues may be considered for at most one of the requirements. The Centre must strongly recommend the exemption(s).

- 1. High quality books (including textbooks), monographs, and book chapters can be counted towards scholarship. (Double counting to be avoided if said books are part of research papers).
  - 2. High quality products developed by the applicant.

Exceptional quality papers, as evidenced by citation scores or feedback from top experts.

This criterion has to be used very sparingly.

Candidates with more years of research experience are expected to have correspondingly higher research achievements.

#### **Professor:**

#### **Publications:**

- 1. A minimum of 20 post-PhD publications in reputed journals or conferences; up to 4 granted patents can count as papers, but papers and patents representing the same work will not be double-counted.
- 2.Candidates applying from academic institutions should have a minimum of 8 publications in reputed journals or conferences during their position in the assessment period. Up to 2 granted patents from this period can count as papers, but papers and patents representing the same work will not be double-counted.
- 3. Candidates with industry experience should have at least 6 publications in reputed journals or conferences and at least one granted patent for every year of industry experience. Each year with a provable lead role in the design and development of a cutting-edge product or application can be used to provide a relaxation of 1 paper or patent per year.

#### Ph.D. quidance:

Candidates should be the supervisor of at least two Ph.D. students who have graduated at least one of which is solely guided by the candidate. Being a co-guide counts as 0.5 student. This criterion of Ph.D. guidance of students may be relaxed for candidates with excellent research records, if they are from industry or research labs or academic institutions that do not grant PhDs.

#### Other criteria:

If a candidate does not meet the above minimum requirements, then demonstrated scholarship through the following avenues may be considered for at most one of the requirements. The department must strongly recommend the exemption(s).

1. High quality books (including textbooks), monographs, and

book chapters can be counted towards scholarship. (Double counting to be avoided if said books are part of research papers).

- 2. High quality products developed by the applicant that are outstanding.
- 3. Exceptional quality papers, as evidenced by citation scores or feedback from top experts. Highly prestigious research awards like IEEE or ACM Fellows, Swarna Jayanthi and Bhatnagar Fellowship.

This criterion has to be used very sparingly.

Candidates with more years of research experience are expected to have correspondingly higher research achievements.