### **University of Mumbai**



Teaching Appointments Unit Room No. 113, First Floor, Fort, Mumbai 400 032.

No. TAU/Advt./ 95 /of 2012 4<sup>th</sup> April, 2012.

Associate Professor and Assistant Professor in National Centre for Nanoscience & Nanotechnology, University of Mumbai.

Ref :- Advertisement inviting applications for the posts of Professor,

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Copy forwarded with compliments for favour of publicity to :-

- i) The Directors/Heads, University Departments/Institutions/Centres, Principal, Sir J.J. College of Architecture.
- ii) The Director, Western Regional Instrumentation Centre.
- iii) The Director, Board of Colleges & University Developments.
- iv) The Principals, Affiliated Colleges.
- v) The Directors, Constituent Recognized Institutions.
- vi) University Employment Information and Guidance Bureau, Vidyapeeth Vidyarthi Bhavan, "B" Road, Churchgate, Mumbai 400 020.
- vii) Dr. Narendra Jain, Central Pool Data Base, University Grants Commission, 35, Feroze Shah Road, New Delhi 110 001.

Copy together with two spare copies, forwarded with compliments for favour of publicity to the Registrar, University of Pune, Pune, Shivaji University, Kolhapur, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Rastrasant Tukadoji Maharaj Nagpur University, Nagpur, Shrimati Nathibai Damodar Thackersey Womens's University, Mumbai, Amravati University, Amravati, North Maharashtra University, Jalgaon, Ramanand Tirth University, Nanded, Yashwant Rao Chavan Maharashtra Open University, Nasik and Solapur University, Solapur, all Universites of India.

### Copy forwarded to :-

- 1) The Finance and Accounts Officer,
- 2) The I/c. Controller of Examinations, Vidyanagari, Mumbai 400 098,
- 3) The Co-ordinator, Ratnagiri Sub-Centre, University of Mumbai, Ratnagiri,
- 4) The Deputy Registrars/ The Director of Students Welfare and Assistant Registrars,
- 5) The President, Bombay University Academic Staff Association,
- 6) The General Secretary, Mumbai University and College Teachers Union, Maharashtra Under privileged Teachers Association (MUPTA), Azad Nagar, Behind Apna Bazar, Andheri (West), Mumbai,
- 7) The P. A. to the Vice-Chancellor, P. A. to the I/c.. Registrar,
- 8) The Co-ordinator, University Computerisation Centre, Dr. Shankar Dayal Sharma Bhavan, (IDOL Building) Vidyanagari,
- 9) The Superintendent, Despatch Section,

(Record Section 10 Copies).

(Kumar Khaire) Registrar

Mumbai – 400 032, 4<sup>th</sup> April, 2012.

### **UNIVERSITY OF MUMBAI**

Applications are invited for the following posts in National Centre for Nanoscience & Nano Technology, University of Mumbai on tenure basis for a period of two years extendable upto three years on prescribed pay band from the reserved and open Categories within 30 days.

Post No.	Designation of the post	Department	Post to be filled					
			sc	ST	DT/NT (ABCD)	овс	SBC	Open
1.	Professor	Nanoscience and Nano Technology	1	ı	1	-	ı	ı
2.	Professor	do	-	1	-	-	-	-
3.	Professor	do	-	-	1	-	-	-
4.	Professor	do	-	-	-	-		3
5.	Associate Professor	do	1	-	-	-	-	-
6.	Associate Professor	do	-	1	-	-	-	-
7.	Associate Professor	do	-	-	-	-	-	3
8.	Assistant Professor	do	1	-	-	-	-	-
9.	Assistant Professor	do	-	1	-	-	-	-
10.	Assistant Professor	do	-	-	-	-	-	3

Qualifications and pay scales as prescribed by the UGC./State Government.

# The pay scales of the posts are as follows:-

Professor
Rs. 37,400-67,000
AGP-10,000/ 

Associate Professor,
Rs. 37,400-67,000
AGP- 9,000/ 

Assistant Professor
Rs. 15,600-39,100
AGP- 6,000/

In addition to pay, they are entitled for DA, HRA, CLA, etc. according to the University rules. Teachers of the University are permitted to take up outside work according to the University rules. Other conditions may vary depending upon the guidelines from the Government of Maharashtra.

#### The minimum qualification prescribed for the posts is as under :-

#### Professor:-

- A (i) An eminent scholar with Ph.D. qualification(s) in the concerned / allied/ relevant discipline and published work of high quality, actively engaged in research with evidence of published work with a minimum of 10 publications as books and/or research/policy papers.
  - (ii) A minimum of ten years of teaching experience in university/college and or experience in research at the University/National level Institutions/Industries including experience of guiding candidates for research at doctoral level.
  - (iii) Contribution to educational innovation, design of new curricula and courses and technology- mediated teaching learning process.
  - (iv) A minimum score as stipulated in the Academic Performance Indicator (API), based Performance Based Appraisal System (PBAS), set out as per UGC Regulations, 2010.

OR

B An outgoing professional with established reputation in the relevant field, who has made significant contributions to the knowledge in the concerned /allied/ relevant discipline to be substantiated by credentials.

# **Associate Professor:-**

- (i) Good academic record with a Ph.D. Degree in the concerned/allied/relevant disciplines.
- (ii) A Masters Degree with at least 55% marks (or an equivalent grade in a point scale wherever grading system is followed)
- (iii) A minimum eight years experience of teaching and/or research in an academic/research position equivalent to that of Assistant Professor in a University/ college or Accredited Research Institution/Industry excluding the period of Ph.D. research with evidence of published work and minimum of 5 publications as books and/or research/policy papers.
- (iv) Contribution to educational innovation, design of new curricula and courses and technology mediated teaching learning process with evidence of having guided doctoral candidates and research students.
- (v) A minimum score as stipulated in the Academic performance Indicator (API) based Performance Based Appraisal System (PBAS), set out as per UGC Regulations, 2010.

#### **Assistant Professor**

- (i) Good academic record as defined by the concerned University with at least 55% marks (or an equivalent grade in a point scale wherever grading system is followed) at the Master's Degree level in a relevant subject from an Indian University, or an equivalent degree from an accredited foreign University.
- (ii) Besides fulfilling the above qualifications the candidate must have cleared the National Eligibility Test (NET) conducted by the UGC/CSIR or similar test accredited by the UGC like SLET/SET.
  - Provided however that candidates who are or have been awarded a Ph.D. Degree in accordance with the University Grants Commission (Minimum Standard and Procedure for Award of Ph.D. Degree) Regulations, 2009 shall be exempted from the requirement of the minimum eligibility condition of NET/SLET/SET for recruitment and appointment of Assistant Professor.
- (iii) NET/SLET/SET shall also not be required for such Masters Programmers in disciplines for which NET/SLET/SET is not conducted.

Relaxation of the 5% marks from 55% to 50% of the marks shall be applicable to SC / ST / Differently abled (Physically and Visually differently abled) category candidate as per UGC rules.

5% relaxation from 55% to 50% of the marks to the Ph.D. Degree holders who have obtained their Master's Degree prior to 19 September, 1991.

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## Additional qualifications/ Specialization is as under:-

Excellent candidates in the field of nanoscience and nanotechnology with an added emphasis on nanomaterials (nanocrystals, nanoengineered membranes, nanocatalysts etc.) micro/nano instrumentation (nanospectrometry and microfluidics, to name a few) nanobiosystems, (nanomedicine, biomaterials etc.) and nanoelectronics (quaqntum structures, molecular electronics, among others).

# Details of research expertise for all positions:

- Synthesis of nanostructured and nanoscale materials including metals, polymers, ceramics, composites, electronic materials and biomaterials
- Synthesis of functionalized and hybrid nanomaterials as catalysts, drug delivery agents and vehicles for specific characteristics useful in materials science, chemical industry, medicine, food, agro and bio-industry
- Nanofabrication and processing of nanoscale materials and devices
- Atomic and nanoscale characterization of functional materials and bio-assemblies
- Nanoprobes, properties of nanoscale materials, nanocatalysis
- Nanocomposites, nanoparticles, nanocrystalline materials, and nanoclusters
- Superlattices, quantum dots, quantum wires, quantum wells, nanoscale thin films
- Fullerenes, nanotubes, nanorods, molecular wires, molecular nanotechnology
- Supramolecules, dendrimers, self-assemblies, low-dimension structures
- Nanophysics, nanoelectronics, nano-optics, nanomagnetism and nanodevices
- Atomic manipulation, computational nanotechnology, molecular nanoscience
- Nanochips, nanosensors and nano-integration, nanofluidics, nanomachining
- Structure analysis at atomic, molecular, and nanometer range
- Nanorobotics, nanotribology, and novel applications of nanostructured materials
- Nanobiotechnology, biochemical assemblies, biomedical nanostructures
- BioMEMS, biomimetic materials, biomimetic membranes
- Nanoscale genomics, DNA sequencing, nanomedicines, drug delivery, biomedical nanotechnology
- Hydrogen materials science and chemistry of carbon nanomaterials
- Modeling and simulation of synthetic, assembly, and interaction processes
- Characterization of size-dependant properties
- Realization and application of novel nanostructures and nanodevices

Five copies of the application in the prescribed form together with attested copies of certificates along with a crossed Demand Draft on a Nationalized bank for the amount of Rs. 500/- in the case of candidate belonging to Open category and Rs. 300/- in the case of candidates belonging to Reserve Categories drawn in favour of Finance and Accounts Officer, University of Mumbai should be sent in an envelop superscribed with names of the posts applied by the candidates so as to reach the I/c. Registrar, University of Mumbai, Teaching Appointments Unit, Room No. 113, First Floor, Fort, Mumbai 400 032, on or before 3<sup>rd</sup> May, 2012. Andaman and Nicobar Islands and Lakshadweep may send their applications so as to reach the I/c. Registrar on or before 18<sup>th</sup> May, 2012. Candidates who are already employed shall send their applications through the proper channel. Application received after last date will not be considered. The University shall not responsible for any postal delay. Incomplete application and application on plain paper will not be considered. Convincing direct or indirect will be disqualification.

The prescribed forms of applications and details regarding additional qualifications and specialization etc. can be had free of charge from the Teaching Appointments Unit, Room No. 113, First Floor, Fort, Mumbai 400 032 either in person or by sending a requisition with self addressed envelope (31cm x 23 cm) bearing postage stamp to the value of Rs. 30/- to the University.

#### **INSTRUCTIONS**

- 1. The candidates belonging to the reserved categories should produce caste certificate and caste validity certificate issued by the competent authority in prescribed form, otherwise the application is likely to be rejected.
- 2. The principle of "Creamy Layer" is applicable to all categories except Scheduled Castes and Scheduled Tribes, i.e. "De-notified Tribes (A)" "Nomadic Tribes(B)" "Nomadic Tribes(C)" Nomadic Tribes(D)", "Special Backward category" and "Other Backward Communities" as per the orders regarding the implementation of the said provisions issued by the Government vide Circular of Social Justice, Cultural Affairs and Special Assistance Dept. No. I hchl 16/10@2006@i10/2-15@ekod&5 dated 30<sup>th</sup> June, 2006. Candidates belonging to said categories are required to submit caste and Non-Creamy Layer Certificates accordingly. The abovementioned Govt. Circular and proforma of certificate is available on Govt's. Web site at www.maharashtra.gov.in and its computer code (Unique Code) is 20060710122458001.
- 3. Candidates belonging to reserved categories domiciled outside the Maharashtra State will be treated as OPEN as per G. R. No.CBC-1084/54577(1813)BCW-5, dated 1<sup>st</sup> November, 1985 and Circular No.CBC-1688(2829)MAVAK-5, dated 29<sup>th</sup> July, 1988
- 4. Candidates from all categories can apply for open posts.
- 5. The candidate shall have to submit alongwith the application form a declaration in form 'A' as per the rules prescribed by the Government of Maharashtra in respect of small family vide Notification No.SRV.2000/CR(17/2000)XII, dated 28<sup>th</sup> March, 2005 and the eligibility of the applicant will be determined as provided under this rule.
- Candidates belonging to reserved category should also send one photocopy of their applications along with the attested copy of the caste certificate to the Deputy Registrar, Special Cell, First Floor, Room No.134, University of Mumbai, Mumbai-400 032.
- 7. Educational qualification, experience etc. mentioned in this advt./notification indicate the minimum eligibility for the relevant posts. However, if the number of prima facie eligible candidates applied for post is disproportionately large in comparison to the number of posts available, suitable criteria may be adopted for shortlisting candidates for interview . For adopting criteria candidates having higher qualifications and/or experience will be considered. Criteria so adopted will depend upon the circumstances prevailing on each occasion of recruitment. This may result in non-selection of candidates for interview, though they fulfill requirements prescribed in the Advt or who were called for interview for the same post on earlier occasion.
- 8. The appointee would be covered under new "Defined Contribution Pension Scheme" and that the existing Pension Scheme (i.e. Maharashtra Civil Services {Pension} Rules, 1982 and Maharashtra Civil Services (Commutation of Pension Rules, 1984) and General Provident Fund Scheme will not be applicable to them.
- 9. As per provisions under the section 76(6) of the Maharashtra Universities Act, 1994 for the post of Professor, the selection committee may recommend for appointment of other person, who may not have applied or appeared before it.
- 10. Number of posts advertised may increase/decrease depending upon the vacancies available at the time of interview.
- 11. Candidates should invariably fill the information regarding Court cases pending, Criminal cases, Disciplinary actions or equivalent etc. in the relevant column of the application Form. Any changes in this information as and when occurred after the submission of application Form till the completion of recruitment process should be brought to the notice of the University by the candidate, failing which the University reserves the right to cancel the candidature and to debar him/her from all selections.

- 12. The candidates should possess the required educational qualification, age and experience on or before 3<sup>rd</sup> April, 2012.
- 13. Application must be accompanied by copies of certificates regarding educational qualifications, prescribed experience and age, failing which it will be treated as incomplete and liable to be summarily rejected.
- 14. University reserves its right to fill-in any of the vacancies advertised. So also University reserves its right to appoint or not to appoint the candidates though recommended by the Selection Committee.
- 15. The persons working outside this University should produce "No objection Certificate" from their present employer though the application is received through the proper channel at the time of interview.

(Kumar Khaire) Registrar

16. Candidates having knowledge of Marathi will be preferred.

For details refer on Website :- www.mu.ac.in/Careers.html

Mumbai – 400 032, 4<sup>th</sup> April, 2012