UNIVERSITY OF MUMBAI - DEPARTMENT OF ATOMIC ENERGY CENTRE FOR EXCELLENCE IN BASIC SCIENCES Nalanda, University of Mumbai, Kalina Campus, Mumbai 400098 Web: www.cbs.ac.in



Ref: CEBS/Rolling Advt. No. 01/165/2024

April 22, 2024

# Advertisement for the post of Research Associates (RAs) in UM-DAE Centre for Excellence in Basic Sciences

## **Rolling advertisement**

University of Mumbai-Department of Atomic Energy Centre for Excellence in Basic Sciences (UM-DAE CEBS) has been established on the Kalina campus of the University of Mumbai to impart high quality education in Basic Sciences after the 10+2 (or equivalent) level of schooling, in a vibrant academic ambiance by distinguished teachers and scientists.

CEBS invites applications from eligible candidates for the position of Research Associates (RA) in Chemistry, Mathematics and Physics. The specifications are as follows:

### **School of Chemical Sciences**

Area: Ultrafast spectroscopy of luminescent materials using femtosecond time-resolved absorption and fluorescence spectroscopic techniques

OR

Main Group Inorganic Chemistry/Organometallic Chemistry/Material Sciences/Machine Learning and Artificial Intelligence in Chemistry

**Essential Qualifications**: Ph.D. in Chemistry or Physics. The candidate must have been awarded the Ph.D. degree or submitted Ph. D. thesis to any reputed organization.

**Experience:** Candidates should have extensive work experience in the above areas and should have published at least two papers in peer reviewed international journals.

**Desirable:** The candidate should be able to teach in the subject areas e.g., Photochemistry, Molecular Spectroscopy, Inorganic Chemistry, Organometallic Chemistry and Machine Learning etc. to Five-Year integrated M.Sc. students.

No. of Post: 01

### **School of Mathematical Sciences**

Area: Algebra, Topology, Analysis or Discrete Mathematics Essential Qualifications: Ph.D. in Mathematics with a strong background in at least one of the subjects viz., Algebra, Topology, Analysis or Discrete Mathematics No. of Post: 03

#### School of Physical Sciences

(a) Area: Theoretical Nuclear Physics/Mathematical Physics/Computational Plasma Physics Broad Area: 1) Structure and reaction properties of exotic nuclei

OR

2) Pseudo-Hermitian Quantum Mechanics in infinite dimensional Hilbert spaces and nonlinear Schrodinger equation etc.

OR

3) Development of computational tools for intense laser-plasma interaction

**Essential Qualification:** 1) Ph.D. in Physics (Theoretical Nuclear physics)/Applied Mathematics/ Computational Plasma Physics/ Engineering Sciences) with at least three publications in peer-reviewed research journals (of which at least one should be as first author).

No. of Post: 01

(b) Area: Experimental Condensed Matter Physics

**Broad Area:** Quantum Materials and quantum sensing- in particular low dimensional superconductivity or molecular electronics or quantum qubit applications of color centres in single crystal diamond

Essential Qualification: Ph.D. in Physics (Experimental condensed matter Physics / Materials Science / Device Physics) with at least three publications in peer-reviewed research journals (of which at least one should be as first author). No. of Post: 01

#### **Other Terms and Conditions:**

- Age: For applications to be processed in 2024 the candidates should not be above 32 years of age for appointment as RA-I and should not be above 35 years of age for appointment as RA-II, as on 31<sup>st</sup> December, 2023.
- Emoluments: Commensurate with post-Ph.D. research experience of the candidate is as follows:

Research Associate I - Rs. 58,000/- (+ HRA as per rule) per month.

Research Associate II - Rs. 61,000/- (+ HRA as per rule) per month.

Research Associate III - Rs. 67000/- (+ HRA as per rule) per month.

**Tenure:** The position is offered on an annually renewable basis (subject to successful review) and is tenable up to maximum three years.

**Duties and Responsibilities:** Candidate will be working at CEBS and will also need to teach at least one course and/or conduct laboratory sessions at CEBS as part of his/her duties.

Application form in the prescribed format (download from <u>https://www.cbs.ac.in/announcements/recruitment</u>) along with detailed curriculum vitae (CV), copies of degree certificates and should be submitted electronically through e-mail to <u>registrar@cbs.ac.in</u>

Note that **NO TA/DA** will be paid for the candidates short-listed for the interview. Candidates are encouraged to appear for interview in person, but interviews can also be held online.

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भू. कु. गंगराङे / B. K. Gangrade कुलसचिव /REGISTRAR मुंवि-पऊवि मौलिक विज्ञान प्रकर्ष केन्द्र UM-DAE Centre for Excellence in Basic Sciences सीईबीएस बिल्डिंग, मुंबई विश्वविद्यालय CEBS Building, University of Mumbai, विद्यानगरी परिसर, सांताक्रुज (पू.), मुंबई-400098. Vidyanagari, Santacruz (East), Mumbai-400098

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