

## **Post-doctoral Fellowships at the Centre for Computation Modelling and Simulation at IISER-TVM**

### **About the Fellowship Program:**

Indian Institute of Science Education and Research Thiruvananthapuram (IISER-TVM) invites applications for Post-doctoral Fellowships/Research Associateships at the Centre for Computation Modelling and Simulation (CCMS, <http://ccms.iisertvm.ac.in/>). CCMS is a Centre of Excellence (CoE) in Frontier Areas of Science and Technology (FAST), supported by MHRD. It is a multi-disciplinary research centre based on High Performance Computing (HPC). Fellowship applications are invited for the following research areas at the Centre:

1) Quantum Chemistry:

<http://www.iisertvm.ac.in/faculties/swathi.php>

2) Computational Fluid Dynamics:

<http://www.iisertvm.ac.in/faculties/arun.php>

3) Genomics/Genetics:

<http://www.iisertvm.ac.in/faculties/nishantkt.php>

4) Computational Science

<http://ccms.iisertvm.ac.in>

### **Position Summary:**

The Postdoctoral Fellowship/Research Associateship is a full-time, contractual position for highly qualified young scientists to carry out research at CCMS, IISER-TVM. The positions are available for a period of one year. The Fellowship does not imply any commitment regarding any other position at IISER-TVM.

Regarding the position number 4 (“Computational Science”), the chief job requirement will be to serve as a system administrator of the HPC cluster in the centre. This position is open to candidates with PhD in any one of the areas mentioned under the qualifications listed below whose PhD work involves extensive use of numerical codes run on HPC machines. The candidate selected to this position is expected to function as the system administrator of the HPC cluster in the centre in addition to pursuing independent research using the HPC resources.

### **No. of positions available:**

4

**Age limit:**

35 yrs or below. A relaxation of 5 yrs will be applicable to candidates belonging to SC/ST/OBC and women candidates.

**Qualifications:**

PhD in Biology / Biophysics / Physics / Chemistry / Mathematics / Engineering (Mechanical/Aerospace).

Those who are in the final stages of their PhD thesis submission are also eligible to apply. However, those candidates must have submitted their thesis at the time of interview.

**Experience:**

Applicants should have peer reviewed publications in reputed journals and relevant experience in the research area they are applying for. In addition, the specific requirements for the individual projects are the following.

- i) The project listed under item 1 (Quantum Chemistry) consists of quantum chemical studies involving Graphynes and it is essential that the applicants have specialisation in theoretical chemistry or theoretical condensed matter physics.
- ii) The candidates applying for position 2 (Computational Fluid Dynamics) should have a strong background in applied mathematics, partial differential equations and fluid dynamics and a good knowledge of programming in C++/ Fortran.
- iii) The candidates applying for position 3 (Genomics/Genetics) should have significant experience in Bioinformatics / Genomics / High through-put genetics.
- iv) The applicants of position 4 should have a very good experience of running jobs in and managing/administrating Linux/Unix based HPC clusters. The candidates applying for this position should send a one page summary of their hands on experience with administering HPC machines, highlighting the cluster management tools, compilers etc. that they are familiar with.

**Salary:**

The Fellowship carries a remuneration of INR Rs. 5,18,000 - Rs. 5,76,000 per annum (including HRA). The postdoctoral fellowship may not be held concurrently with any other national or international fellowships. It is also not transferable to any other fellowship.

**How to apply:**

To apply for the position, please send the following:

1. CV with personal bio-data, degrees earned with dates, list of publications and names of at least three references.
2. Synopsis of the PhD work.
3. Experience statement relevant to the position applied for.
4. Brief research proposal (maximum 1000 words), which should include specific aims and a brief summary of work plans, and research groups/laboratories that the candidate would like to collaborate with.

Incomplete applications or those that do not meet the minimum criteria will not be considered. The position is purely temporary. Mere fulfilment of qualifications/experience requirements does not entitle a candidate to be called for interview. Only shortlisted candidates will be called for an interview. No TA/DA will be paid to attend the interview. Overseas candidates can be interviewed over Skype. Applications should reach the undersigned on or before **15 January, 2018** by e-mail to [ccms@iisertvm.ac.in](mailto:ccms@iisertvm.ac.in) by mentioning the research area name in the subject line. No further communications in this regard will be entertained from candidates.

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