

## Applications invited for a Research associate-I position

Applications are invited for one **Research Associate-I position** to work in a DST-SERB funded project entitled "Investigating the role of methyl ammonium ordering in opto-electronic properties of hybrid perovskite" of Prof. Dinesh Topwal. For information on the group: visit: <https://www.iopb.res.in/~dinesh.topwal/>

### **Essential and desirable qualifications:**

- (a) The applicant must have obtained Ph. D. in Physics/ Chemistry/ Material Science/nanotechnology/Engineering Physics/Chemical engineering from a recognized University. OR. Candidates who have submitted Ph. D. thesis and are waiting for defence can also apply.
- (b) Candidates having prior research experience working on hybrid perovskites will be preferred. It is preferable that candidate have experience in sample synthesis (through various chemical routes), x-ray diffraction, optical spectroscopy, and/or electron spectroscopy, etc.

### **Duration**

Initial appointment of the candidate will be for 1 year, extendable on annual basis depending on the performance of the candidate, up to two years or upon termination of the project, whichever occurs earlier. The project position is co-terminus with the above project.

### **Fellowship :**

Rs. 47,000/- ( RA-I fellowship as per IOP and DST norms. In case the thesis is submitted and is awaiting defence appropriate remuneration will be granted). Accommodation will be provided inside the campus subjective to the availability. Else, HRA would be given at applicable rate.

### **Project Description :**

Organic cation, MA<sup>+</sup> does not contribute directly to the electronic state of hybrid perovskites MAPbX<sub>3</sub>. However, dynamics and orientation of MA<sup>+</sup>(with temperature) has strong influence on optoelectronic properties, correlation between the same is the main goal of the project. Exploring low-dimensional and lead-free hybrid perovskites for photovoltaics (White LED and solar cell application) is other goal of the project.

### **Starting date :**

Candidate can join immediately after the selection. Exact date is negotiable.

Applications with complete bio-data comprising your research interest, expertise on sample synthesis and instrument handled/acquainted with along with your Marks/grades from 10<sup>th</sup> standard onwards and other necessary information should be sent by email to **[dst.topwal@iopb.res.in](mailto:dst.topwal@iopb.res.in)**. Candidates are also expected to submit a small writeup on how they can contribute to the project. Three recommendation letters in your favour should be directly sent by your referees to the stated email.ID before the last date.

**Last Date of receipt of application and recommendation letter : 20<sup>th</sup> February, 2021.**

Shortlisted candidates will be intimated by email and will have to make an online presentation and face interview panel.