



PHYSICAL RESEARCH LABORATORY
Navrangpura, Ahmedabad - 380009, India



Advt. No.02/2024

Applications are invited for the position of Junior Research Fellow (JRF) for a period of three years. This position is for a Core Research Grant (CRG) project funded by Science and Engineering Research Board (SERB), Department of Science and Technology (DST), and the post is co-terminus with the project duration. Details are given below:

Name of the post	No. of vacancy	Age (as on last date of application)	Qualification	Scholarship (Consolidated)
DST- Junior Research Fellowship (JRF)	1	Maximum 26 years	1. M.Sc. in Chemistry or Environmental Science or Physics or Atmospheric Science, with minimum 60% marks. 2. CSIR-NET, UGC-NET including lectureship, or GATE, or JEST	Rs. 31,000/- per month for the first two years and Rs. 35,000/- per month for the third year, Plus HRA (as per prevailing rates)

Project description

Title: Size-resolved Sources, Composition, and Optical Characteristics of Brown Carbon Aerosols over two Indian Megacities through Chromophoric and Isotopic Measurements

Brief info: Brown carbon (BrC), the light absorbing fraction of organic carbon (OC), exerts vital effects on climate change owing to its light absorption characteristics in the wavelength ranging from near-ultraviolet to visible light. In India, studies linking sources, atmospheric processing, molecular composition and climate properties of BrC are rather limited, while those on size-segregated aerosol are non-existent till date. This project plans to collect size-segregated aerosol samples and characterize the effects of different emission sources and meteorological conditions. A variety of proposed chemical, optical, and isotopic measurements would provide deeper insights into the sources, composition, and optical characteristics of BrC aerosols over the study region, and offer the field-based estimates of size-resolved refractive index and mass absorption efficiency, which can be directly used in regional climate forcing models.

Application

Interested candidates may send their application in the prescribed format (see Annexure-I) through e-mail (with subject “DST-JRF”) to the project investigator:

Prof. Neeraj Rastogi
Geosciences Division
Physical Research Laboratory
Navrangpura, Ahmedabad - 380009
E-mail: nrastogi@prl.res.in

Last date of the receipt of applications: **9 February 2024**

Terms & Conditions:

1. The above position is purely contractual, and for a period of three years upon successful annual evaluation of the candidate.
2. Only shortlisted candidates will be intimated for an online interview.
3. Participation in selection process is subject to possessing relevant original documents substantiating online application submitted by the candidates.
4. Selected candidate may be encouraged to register for a Ph.D.