

RAMAN RESEARCH INSTITUTE
BANGALORE 560080
Advt. No.9/2019

The Raman Research Institute, funded by the Government of India, is a premier institute engaged in research in basic sciences. More information about the Institute, the fields of research, and other details can be viewed at its website www.rri.res.in

Applications are invited for ONE POST of RESEARCH ASSISTANT on a temporary basis for the APSErA Project in RADIO ASTRONOMY; this is an experimental astronomy research in observational cosmology. The appointment is specifically for work with the group engaged in the measurements of spectral distortions in the cosmic radio background related to events in the early and evolving universe. The website of the group is at www.rri.res.in/DISTORTION and the physicist/engineer appointed as research assistant for this activity would be part of this group and participate in the research given in the website.

The appointment would be for a period of one year, extendable to second year, subject to satisfactory performance. We seek a motivated individual, with good academic background, proficiency and aptitude in experimental research, seeking 2-year internships with a research team engaged in cutting-edge research on an open problem in modern astrophysics. We prefer candidates seeking experience of observational/experimental activity in astronomy and astrophysics; with intent to pursue a research career in these fields. Ability to work with a team and in field trips to remote radio quiet observing sites is essential. The details of the required qualifications and experience are given below.

Job Description:

Research Assistant in APSErA project

The successful candidate would work on the project APSErA, which is aimed at the goal of detecting fine structure spectral distortions in the cosmic microwave background. The actual work would involve participating in the design, development, building, commissioning, field deployment, data analysis, and deriving implications for cosmology.

Remuneration: A consolidated remuneration of Rs.23,500/- per month at commencement + HRA (24% of consolidated remuneration) will be paid to the selected candidates. An increment of Rs.1000/- will be provided in the second year.

Essential Qualification:

BE/BTech degree in Electronics or Electronics & Communication Engineering, with at least 70% marks or 7.5 CGPA in the qualifying examination, or an MSc degree with Physics specialization with at least 70% marks or 7.0 CGPA in the qualifying examination. A valid JEST or CSIR-UGC NET or GATE score in respective specialization or a GRE score is essential.

The applicant is expected to provide documentary evidence of previous pursuits of interest in astronomy/astrophysics.

Ability to work in teams and in remote field stations is essential – although the positions and work will be based at the Raman Research Institute campus at Bangalore, it may be needed to make field trips with the team members for remote deployment of radio astronomy receivers and/or system tests and measurements.

Desirable

Demonstrated interest in pursuing a research career is desirable.

Domain knowledge and experience in practical night sky astronomy with telescopes, analog and digital electronics, and software coding in C and Python scripts, is desirable. Experience with use of electromagnetic simulation packages like CST, HFSS, and WIPL-D etc. would be an added advantage. The application may document examples of project work or experience in these domain areas.

The last date for receipt of applications is 15th May 2019. All applications received till the due date would be given due consideration. If no suitable candidate is subsequently selected by the screening and interview process, the position would be kept open in the Institute website till filled.

Upper Age Limit: The upper age limit is 30 years as on 30th April 2019. Applicants above 30 years may be considered if accompanied by commensurate experience and competency.

General Information:

- (i) Age relaxation will be applicable as per Govt. of India rules for the candidates belonging to SC/ST/OBC/PWD categories.
- (ii) The Institute reserves the right to restrict the number of candidates for test/ interview to a reasonable limit, on the basis of relevant qualification and experience higher than the minimum prescribed in the advertisement.
- (iii) Candidate should be self-driven, motivated and have leadership skills to manage the personnel working with him/her.
- (iv) Mere fulfilling the essential and desired qualifications will not entitle an applicant to be called for interview.
- (v) The Institute reserves the right to relax any of the above requirements in exceptional cases.
- (vi) The Institute reserves the right not to fill the post herein advertised.
- (vii) Canvassing in any form shall disqualify the candidate.

How to apply:

Applications are to be sent in a sealed cover superscribing the position applied for, on the envelope, to the

**DEPARTMENT OF ASTRONOMY & ASTROPHYSICS,
RAMAN RESEARCH INSTITUTE,
C. V. RAMAN AVENUE,
SADASHIVANAGAR, BANGALORE-560080.**

Each applicant would have to target the specific opening by making a case for their candidature for the research work.

Application format: (1) Name of the applicant; (2) Date of Birth; (3) Nationality; (4) Whether belonging to SC/ST/OBC; (5) Permanent Address; (6) Address for correspondence (please provide your mobile number and email-id); (7) Qualifications starting from SSC/X Std. upwards listing details such as the degree, percentage marks or CGPA obtained, year that degree was obtained (please attach copies of certificates and marks cards); (8) Score in JEST/CSIR-UGC NET/GATE/GRE or any other similar competitive examination. (9) Experience with details of organization, post held, duration of service, and emoluments drawn (attach certificates); (9) References of individuals who are familiar with you and your work, including contact email IDs and/or phone numbers, whom the Institute could contact for referral letters; (11) Statement of purpose – typically of length one page typed in double line spacing – as to what motivates you to apply for the above post and why you are the appropriate choice for the opening you are applying for; (12) Signature

Incomplete applications, particularly those without a Statement of Purpose, will not be considered.

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