# RAMAN RESEARCH INSTITUTE BANGALORE 560080

Advt. no. 4 / 2020

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** (**RA**) **on a temporary basis for the PROJECT Experiments on Ultra cold atoms and quantum gases** in the Light and Matter Physics (LAMP) Group of the Institute for a period of one year / extendable to second year depending upon the candidate's performance. The candidate will be associated with the **Quantum Mixture** (**QuMiX**) **Lab of the Institute.** We seek motivated individuals with an excellent academic background with an aptitude to master the functioning and use of scientific equipment and eagerness to learn new experimental techniques. The details of the required qualifications and experience are given below:

#### **Job Description:**

<u>Title:</u> To assist in the experiments involving Laser cooling and trapping of neutral atoms.

<u>Nature of the work:</u> The work involves laser cooling and trapping of neutral atoms and associated experimental work. There are various types of Lasers, ultrahigh vacuum systems, power supplies, RF-components, electronic devices, optics and optomechanical component in the laboratory and their regular maintenance in one of the main requirements as a part of the job. The candidate is also expected to work with a team of principal scientists and PhD scholars and hence being able to be part of a team and contributing in the scientific and technical developments is one of the critical aspects of the job.

#### **Desirable**

The candidate should be motivated and should have a flair for experimental work. The candidate should have experience in one or more of the following –

- Laser cooling of atoms
- Precision laser spectroscopy of atoms
- Control of instruments using LabVIEW
- Radio-Frequency (RF) and Microwave signal processing

Preference will be given to the candidates who have previously worked in optics and/or atomic physics experiments.

**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:**

M.Sc. (Physics / Engineering Physics/ Photonics) or B.E. / B.Tech (Engineering Physics/Electronics with a minimum of 70 % marks or 7.0 CGPA

M. Phil or equivalent degree with a thesis work will be given preference.

**Upper Age Limit:** The upper limit is **35** years as on the last date for closing of applications. The last date for receipt of applications is **22 January 2021.** Applications received after the last date will not be considered.

#### **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) Mere fulfilling the essential and desired qualifications will not entitle an applicant to be called for interview.
- (iv) The institute reserves the right to relax any of the above requirements in exceptional cases.
- (v) The Institute reserves the right, not to fill the post herein advertised.
- (vi) Canvassing in any form shall disqualify the candidate.

## How to apply:

Applications are to be sent in a sealed cover with "RA application to the QuMiX Lab" written clearly on the envelope to The Coordinator, Light and Matter Physics Group, Raman Research Institute, C.V Raman Avenue, Sadashivanagar, Bangalore – 560080, OR by email to savithamd@rri.res.in with Advertisement No. and "RA to QMix Lab" written in the subject line

**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 (please attach copies of certificates and marks cards); (8) 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, whom the Institute could contact for referral letters: and (10) Brief - not more than a page typed in double line spacing-as to what motivates you to apply for the above post.

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