

RAMAN RESEARCH INSTITUTE
BANGALORE 560080
Advt. No.6/2021

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.ri.res.in.

Applications are invited for **ONE POST of RESEARCH ASSISTANT (RA) on a temporary basis for the ULTRAFAST AND NONLINEAR OPTICS (UNO) lab** 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 **UNO 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. Details of the required qualifications and experience are given below:

Job Description:

Design and execution of experiments in one or more of the following areas: (i) nonlinear optics, (ii) ultrafast spectroscopy, (iii) laser-produced plasmas. Experiments will be followed by analysis of the results and preparation of manuscripts for publication. The RA will work in consultation with and under the direction of the UNO lab in-charge.

Brief Summary of the Projects

Nonlinear optics: Nonlinear Optical measurements will be carried out in novel materials. Applications include optical frequency conversion, generation of short and ultrashort laser pulses, and protection of sensitive light detectors from laser-induced damage.

Ultrafast spectroscopy: Pump-probe measurements in novel materials employing ultrafast (100 fs) laser pulses for investigating the excitation dynamics of molecules.

Laser-produced plasmas: Plasmas will be generated from suitable targets by irradiating them with powerful laser beams. The plasma thus formed will be investigated in detail using optical and electrical techniques. These studies lead to a number of applications including trace element analysis.

Remuneration: A consolidated remuneration of Rs. 23,500/- per month at commencement + HRA as applicable (presently HRA is 27%) will be paid to the selected candidate. An increment of Rs.1000/- will be provided in the second year.

Essential Qualification:

- Post-graduate science degree in Physics/Photonics with a minimum of 70 % marks or 7.0 CGPA.
- Six months' experience in doing experimental projects using lasers as light sources.

Desirable: It will be desirable if the candidate (i) has good computing and programming skills, and (ii) is familiar with spectroscopy experiments using pulsed or ultrafast lasers.

Upper Age Limit: The upper limit is **25** years as on the last date for closing of applications. The last date for receipt of applications is **16th December 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 may be sent in a sealed cover with “**RA application to the UNO 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 UNO lab”** written in the subject line.

Application format (1) Name of the applicant; (2) Age and 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) Research/Work Experience with details of organization, post held, duration of service, and emoluments drawn (attach certificates), (9) Names of three individuals (with phone number and email ID) who are familiar with you and your work, whom the Institute could contact for referral letters; and (10) a brief statement(not more than one page) typed in double line spacing, as to what motivates you to apply for the above post.