

Dr GS MAHOBIA, ASSOCAITE PROFESSOR, DEPARTMENT OF METALLURGICAL ENGINEERING, IIT(BHU), VARANASI-221005

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Applications are invited for the following positions in a Gas Turbine Research Establishment (GTRE) - Bangalore, DRDO, Govt. of India Sponsored Research Project (CARS Project) entitled "Effect of Temperature and Mean Stress on Fatigue Strength of Turbine Aerofoil Alloy" (Project No. R&D/SA/DRDO/Met/21-22/03/295) sanctioned for a period of 4 years (2021-2025). The post is purely temporary and co-terminus with the project. The details are as follows:

1. Research Associate (RA) (L-III): One post, @ Rs. 54,000 + 8640 HRA per month for four years.

Age: Upper Age limit—35 years: (5 years' relaxation for Female/SC/ST/ Physically Handicapped Candidate) whereas 3 years in case of OBC (Non-Creamy Layer candidates). Age limit may be further relaxed for well qualified, experienced and deserving candidates. All other factors being equal, SC/ST candidates will be preferred as per GOI rules.

Essential Qualification: PhD in Metallurgical / Mechanical engineering or three years of research, teaching experience after M. Tech in Metallurgical / Mechanical Engineering with at least one research paper published in Science Citation Indexed (SCI) journal. The candidates who have submitted their Ph.D. thesis and having consistently good academic records are also eligible for the RAship.

Desirable qualifications: The candidates should possess the basic knowledge of fatigue testing, materials characterization by X-Ray Diffraction (XRD), Scanning Electron Microscopy (SEM) and Transmission Electron Microscopy (TEM). PhD work in the area of fatigue and fracture will be preferred.

Key capabilities: Excellent written and verbal communication skills, including the ability to produce high quality reports. Demonstrated high level of self-motivation, initiative and an ability to plan and organize work to meet competing deadlines and work independently with minimal supervision.

Key responsibilities: Under the leadership of the Investigators and within existing restraints, manage the project work. Planning and execution of fatigue testing as per project test matrix. Microstrucral characterization and analysis of the fatigue failed/ tested specimens. Timely preparation of reports of high standard. Supervision and mentoring of team members and master/doctoral students. Other duties as directed by the Principal Investigator, with respect to the constraints of the Project.

P.I. GTRE Project Code No. R & D/SA/DRDO/Met./2021-22/03/295 Metallurgical Engg. IIT (BHU) Varanasi-221005 **2. Junior Research Fellow (JRF)**: One post, @ Rs.31, 000 + 4960 HRA per month for four years.

Age: Upper Age limit – 30 years: (5 years' relaxation for Female/SC/ST/Physically Handicapped Candidate) whereas 3 years in case of OBC (Non-Creamy Layer candidates). Age limit may be further relaxed for well qualified, experienced and deserving candidates. All other factors being equal, SC/ST candidates will be preferred as per GOI rules.

Essential Qualification: First class in Bachelor's/Master's degree in Metallurgical/Materials/Mechanical engineering. The candidate must have qualified GATE score.

Desirable qualifications: Basic knowledge of mechanical testing such as fatigue and tensile testing, materials characterization by X-Ray Diffraction (XRD), Scanning Electron Microscopy (SEM) and Transmission Electron Microscopy (TEM).

Key capabilities: Excellent written and verbal communication skills, ability to produce high quality reports. Demonstrated high level of self-motivation, initiative and an ability to plan and organize work to meet deadlines and work independently with minimal supervision.

Key responsibilities: Under the leadership of the Investigators and within existing restraints, manage the project work. Planning and execution of fatigue testing as per the project test matrix. Microstrucral characterization, analysis of fatigue test data and report preparation. Other duties as directed by the Principal Investigator, having regard to the constraints of the Project.

P.I. GTRE Project Code No. R & D/SA/DRDO/Met./2021-22/03/295 Metallurgical Engg. IIT (BHU) Varanasi-221005 **3. Project Assistant (PA):** Three Post, @ Rs. 20,000 (fixed) per month for first two years and @ Rs. 25,000 (fixed) per month for 3rd and 4th year.

Age: Upper Age limit – 30 years: (5 years' relaxation for Female/SC/ST/Physically Handicapped Candidate). whereas 3 years in case of OBC (Non-Creamy Layer candidates). Age limit may be further relaxed for well qualified, experienced and deserving candidates. All other factors being equal, SC/ST candidates will be preferred as per GOI rules.

Essential Qualification: ITI in Turner/Fitter/Machinist trade (Min. 55% marks.) with minimum 2years of experience in making samples for mechanical testing/metallography/microstructural characterization. Diploma in metallurgical engineering or Graduates in Science with above skill/experience are also eligible to apply.

Desirable qualifications: Experience in preparing specimens for fatigue and tensile testing. Knowledge of computer operation and MS-office.

Key responsibilities: Preparation of samples for mechanical testing, metallography and microstructural characterization. Maintenance and operation of laboratory and office facilities. Duties as directed by the Principal Investigator, having regard to the constraints of the Project. The candidate must be ready to work in shifts and even on holidays.

How to apply:

The candidates are requested to provide self-attested copies of all mark-sheets, certificates, testimonials and details of any research or other experience etc. These should reach within 21 days of the advertisement, to *Dr. GS Mahobia, Associate Professor, Principle Investigator, Department of Metallurgical Engineering, Indian Institute of Technology (BHU) Varanasi - 221 005.* Candidates are also required to send their details as mentioned above to PI's email: gsm.met@iitbhu.ac.in and write in the subject: 'Application for GTRE Project'. A format for application is enclosed herewith in Annexure-A.

Selection Procedure:

- Selection will be made through interview for RA/JRF positions and skill test for project assistants.
- Interview may also be conducted via online mode telephonically, considering the constraints due to the ongoing pandemic.
- Initial appointment will be for one year, which is extendable up to 4 years solely based on the performance. The post is purely temporary and coterminus with the project.
- No TA/DA will be paid if called for interview or skill test.

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Photograph

(Self-attested)

APPLICATION FOR THE POSITION OF "....."

1.Full Name:

2. Date of Birth:

3.Sex: M/F

4. Category: GEN/SC/ST/OBC

5. Marital Status: Y/N

6. Nationality:

7. Physically handicapped: Y / N 8. Names of Father and Mother:

9. Address of Correspondence (including phone No):

10.E-mail Address:

11.Academic Record:

(a) GATE/CSIR/UGC National Exam Qualification details with Percent marks/Rank, year of qualifying, etc:

(b) Educational qualification (starting from high school):

| Examination with Specialization | Details of School/ College/ | Year of passing | Percentage marks/CGPA | 4 |
|---------------------------------|--------------------------------|-----------------|------------------------------|----------|
| Specialization | University | passing | marks/ cor / t | Division |
| | | | | |

- 12. Details of the project carried out (if any) with duration, place of work, area worked on, mentor/ guide's name, description of the project and contribution to the project (not more than 5 sentences), and publication details (if any):
- 13. Working experience (if any):
- 14. Whether currently employed:
- 15. Time required to join this position:
- 16. Names and addresses of two referees along with phone number and e-mail address:

Declaration: I hereby declare that I have carefully read and understood the instructions and particulars on this application and that all entries in this form as well as in the attached sheets are true to the best of my knowledge and belief.

Date:

Signature:

Place:

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