



ADVERTISEMENT FOR JUNIOR RESEARCH FELLOW (JRF) IN AR&DB SPONSORED PROJECT

Applications are invited from highly motivated and eligible candidates for the post of 02 Junior Research Fellows to work on a Aeronautical Research and Development Board (AR&DB)-sponsored research sanctioned for 03 years duration

ESSENTIAL QUALIFICATIONS:

- Master's degree or equivalent in Aerospace Engineering /Mechanical Engineering or related field with minimum Marks from a recognized university or equivalent.
- Qualified GATE/NET/CSIR-UGC or any selection process through National level exam conducted by central government agencies and Institute such as DST, DAE, DOS, DRDO, MoE, IIT, IISc, IISER, NISER etc.
- The upper age limit for the Junior Research Fellow is 30 years as on 31st January 2024.
- Relaxation in the minimum qualifying percentage of marks and age limit will be as per the Government
- Prior experience in combustion experiments (highly desirable)

DESIRABLE SKILLS:

1. Experience with CFD (Computational Fluid Dynamics) software (highly desirable).
2. Knowledge on C, Matlab, Python, openFOAM or Fortran is desirable.
3. Knowledge of detonation theory.
4. Experience with instrumentation and data acquisition systems.
5. Strong analytical and problem-solving skills.
6. Excellent written and verbal communication skills.

NO. OF POSTS: 02

LAST DATE OF RECEIPT OF APPLICATION:

25th May 2024

STIPEND:

INR 37,000/month - I and II year
INR 42,000/month for III year

JOB DESCRIPTION:

1. Conduct experimental/computational studies on pulse detonation engines (PDEs)
2. Investigate the effects of various parameters on PDE performance (e.g., fuel type, equivalence ratio, ignition timing).
3. Develop and implement diagnostic techniques to characterize PDE operation (e.g., pressure measurements, schlieren photography).
4. Analyze experimental data and interpret results.
5. Contribute to the development of a functional PDE prototype.
6. Prepare technical reports and presentations for dissemination of research findings.

SALIENT POINTS:

1. The project duration is of three years
2. The initial offer will be for 12 months. Depending on the performance of the candidate further extensions can be given from time to time till the end of the project. The post is purely temporary and co-terminus with the project.
3. The selected candidate may be considered for admission to the Institute's PhD program based on satisfactory performance through a separate process as per the Institute norms.
4. The shortlisted candidates will be intimated via E-mail for an interview.
5. In-campus hostel facilities would be provided as per institute norms.

SELECTION PROCESS:

Shortlisted candidates will be called for an interview. Selection will be based on academic qualifications, research experience and performance in the interview.

HOW TO APPLY:

Interested candidates should submit their resume/CV with photo, self-attested copies of relevant qualifications and experience certificates, grade/mark sheets from Matriculation onwards, valid caste certificate (if applicable), research publications (if any), etc. to aldinjustin@karunya.edu by 25th May 2024, 6:00 PM. The subject of the application will be "Application for Junior Research fellow." Shortlisted candidates will be intimated for the interview.

CONTACT: For any inquiries, please contact

Dr. Aldin Justin Sundararaj

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