

Indian Institute of Technology Gandhinagar Advertisement for Research Position in Computational modeling of energetic materials subjected to thermal and mechanical insults

IIT Gandhinagar invites applications for **1** research and development position at the senior research fellow (SRF) level in the area of computational modeling of energetic materials subjected to thermal and mechanical insults. The work involves modeling combustion of various solid propellant compositions using an open source software package (written in C++) based on the material point method and the finite volume method.

Eligibility Criteria:

- Good BTech and MTech degree in Mechanical and/or Aerospace Engineering or equivalent
- Strong motivation to take-up research ventures in the field of solid propellant

Required background/skills:

- Good background in Computational Fluid Dynamics and Continuum Mechanics
- Good background in Mathematics and Numerical Methods
- Good background in Thermodynamics
- Proficiency in using Linux-based systems and build systems
- Proficiency in the programming language C++

Preferred background/skills:

- Familiarity with the Material Point Method and Finite Volume Method
- Experience in modeling combustion problems
- Exposure to parallel computing (especially MPI)

Compensation and term of position:

Compensation will follow stipulated norms of the Institute. Initial appointment will be for 1 year with the possibility of renewal for up to two more years depending on performance.

How to apply:

Interested candidates are requested to apply online through the following link: <u>https://goo.gl/forms/pYM3XOkxHOsfxMqz2.</u>

Deadline: The last date for application is 28 February 2019.

For any queries regarding the research area, please feel free to contact Prof. Gaurav Srivastava at gauravs@iitgn.ac.in.