



INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR

Research & Development Office

ADVERTISEMENT NO. SPON/10431/Advt0315 DATED 14.09.2026

Applications are invited for a temporary position of **Senior Project Associate** at IIT Gandhinagar. The details are as below:

Name of PI	Prof. Shubhangi Bansude	Department	Mechanical Engineering
Project title	Accelerated Large-eddy Simulation of Flashback Prediction in Hydrogen-Enriched Gas Turbines		
Designation	Senior Project Associate		
Number of positions	01		
Application Link	http://recruitment.iitgn.ac.in/projectstaff/		
Last date of application submission	26th September 2026		
Consolidated Monthly Remuneration including HRA	₹ 74,100/- per month		
House Rent Allowance per month (If applicable)	Rs. 17,100/- per month		
Duration of appointment	8 months (Extension based on performance and funding)		
Eligibility Norms ¹	☐ Institute norms	☒ Funding Agency norms	
Essential Qualification/Experience as per the norms	Applicants must meet any one of the following qualification and experience requirements: • A four-year Bachelor's degree in Mechanical Engineering, Aerospace Engineering, or an allied field, along with at least four years of relevant R&D experience in industry, academia, research institutions, scientific organizations, or related technical services; OR • A Master's degree in Mechanical Engineering, Aerospace Engineering, or an allied field, along with at least two years of relevant R&D experience in industry, academia, research institutions, scientific organizations, or related technical services; OR • A Ph.D. in Mechanical Engineering, Aerospace Engineering, or an allied field. In addition, applicants must have secured a minimum of 60% marks (or equivalent grade) from the undergraduate level onwards, and a minimum of 55% marks (or equivalent grade) in both Class 10 and Class 12.		
Desirable Qualification/Experience	• Strong CFD background and experience with CFD tools, OpenFOAM proficiency preferred • Good understanding of fluid mechanics, turbulence, and combustion • Experience with high-performance computing (HPC) • Proficient in basic machine-learning model development		



INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR

Research & Development Office

	● Expertise in at least one programming language and proficiency in Python ● Good communication skills
Job Description	The Senior Project Associate will work on reduced-order combustion modeling for hydrogen-enriched gas-turbine combustors, with a focus on computationally efficient LES and flashback prediction as a part of composites as part of an ANRF-funded project. The work will involve generating and analyzing methane-hydrogen 1D flame datasets, developing PCA-based reduced-order models and physics-guided machine-learning approaches, and implementing these models in CFD solvers preferably OpenFOAM. The developed models will be validated against detailed-chemistry simulations and available experimental data. The position will involve combustion modeling, CFD simulations, scientific machine learning, model development and validation, and preparation of research publications and technical reports. The role is intended to strengthen both technical depth and broader research skills needed for a career in academia, R&D, or advanced engineering. Application Procedure: Applicants can apply at http://recruitment.iitgn.ac.in/projectstaff/. Please make sure to fill in all details and submit the necessary documents. Incomplete applications won't be considered. Date of Joining: Between 15th October - 15th November 2026
Contact	For queries, please contact: Prof. Shubhangi Bansude shubhangi.bansude@iitgn.ac.in

"Merely meeting the minimum eligibility criteria will not guarantee the shortlisting and/or appointment. A higher cutoff level may be used. The Institute reserves all rights not to call an applicant for a selection test or not to fill up a position through this round of the selection process without assigning any reason."