

इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी दिल्ली
हौज खास, नई दिल्ली -110016
(औद्योगिक अनुसंधान एवं विकास इकाई)
Indian Institute of Technology Delhi
Industrial Research & Development Unit
Hauz Khas, New Delhi -110016

No. IITD/IRD/RM00081G/

509301

Dated:13/04/2026

Advertisement No.: IITD/IRD/087/2026

Applications from Indian nationals are invited for Project Appointment under the following project. Appointment shall be on contractual basis with consolidated pay, renewable yearly or upto the duration of the project, whichever is earlier. निम्नलिखित परियोजना के तहत भारतीय नागरिकों से आवेदन आमंत्रित किए जाते हैं। अपॉइंटमेंट, अनुबंधित आधार पर समेकित वेतन, नवीकरणीय वार्षिक या परियोजना की अवधि तक, जो भी पहले हो, के साथ होगा।

Project Background:

The percentage utilization of agro-waste in thermal power plants has been lower than expected due to several practical challenges, including but not limited to foaming and tripping of the pumps in the flue gas desuperization (FGD) unit, as well as ash handling, combustion instability, and so on. Moreover, lack of standardized data on biomass behaviour under Indian conditions, particularly in terms of emission profiles, slagging propensity, and reactivity and foam formation in lime-treated systems under biomass co-firing.

Motivation and Objectives:

The candidate is expected to execute the following objectives;

1. Optimization of biomass blending ratio, lime quality, and injection rate while eradicating foaming in the FGD-absorber at the lab scale.
2. Identification and development of suitable corrective measures to suppress the foaming in the FGD-absorber.
3. Detailed study for the development of solutions to mitigate the increased moisture content in calcium sulphate (gypsum) caused by foaming in FGD.

Working Requirements:

The project fellows are required to visit the NCR-based Thermal Power Plants (NPTC Dadri and Jhajjar) regularly for collecting the sample, data analysis and chemical study of the foam from the FGD units. The fellows must work in close coordination with IITD and NTPC's TPPs in the NCR for data collection and analysis; while the modelling and optimization can be done through CFD simulation, using IITD's facilities.

For further details, the potential candidate may write directly to:

Prof. S. K. TYAGI

Department of Energy Science & Engineering

Indian Institute of Technology Delhi

Hauz Khas, New Delhi 110016

E-mail: sudhirtyagi@yahoo.com; tyagisk@iitd.ac.in

Title of the Project	Developing an effective protocol to mitigate foaming in the flue gas desulfurization-absorber unit due to biomass co-firing in thermal power plants - Part 1. (RM00081G)	
Funding Agency	Central Power Research Institute	
Name of the Project Investigator	Prof. S.K. Tyagi [email ID: sudhirtyagi@yahoo.com]	
Deptt./Centre	Dept. of Energy Science and Engineering	
Duration of the Project	Upto: 31/03/2027	
Post (s)	Consolidated fellowship / Pay-slab	Qualifications
Research Associate – 01	Rs.58,000/-p.m. (consolidated)	Doctorate or M. Tech with 03 years research experience having R&D experience including publications/patents, etc. in Thermal/Mechanical /Energy/ Chemical/Chemistry) having min 60% of marks at the UG/PG level) preferably having PhD work experience in Chemical Kinetics, Combustion Simulation and related areas, besides the purchase of consumables and non-consumables following GFR/GEM, as per Govt. of India norms.

Jr. Research Fellow (02)	Rs.37,000/-p.m. (consolidated)	M.Tech. (Thermal/Mechanical Engineering/Energy/Chemical) having min 75% of marks at B. Tech and M. Tech. level preferably having some experience in Combustion Simulation and related areas. Another JRF/SRF M.Tech (Chemical Engineering/Chemistry) having min 75% of marks at UG and PG levels) preferably having some experience in Chemical Kinetics, Combustion Chemistry and related areas.
Or		
Sr. Research Fellow	Rs.42,000/-p.m. (consolidated)	Qualifications will remain same as prescribed for the post of Jr. Research Fellow with 02 years Research Experience is also required for the post of Sr. Research Fellow.
Project Assistant (Tech) - 02	Rs. 39,420 - 40,600 - 41,820 - 43,070 - 44,360 - 45,690 - 47,060 - 48,470 - 49,920 - 51,420/- p.m. (Consolidated)	B. Tech/Diploma (03 years duration) in Thermal/Mechanical Engineering/Energy/ Chemical with 02 years relevant work experience or Master (Chemistry/Chemical/Physics having min 60% of marks) preferably having some experience in project and R&D related work.

The candidates who are interested to apply for the above post should download **Form No. IRD/REC-4** from the IRD Website (<http://ird.iitd.ac.in/rec>) of IIT Delhi and submit the duly filled form with complete information regarding educational qualifications indicating percentage of marks/division, details of work experience etc. by e-mail with advertisement No. on the subject line to Prof. S.K. Tyagi at email id: sudhirtyagi@yahoo.com; tyagisk@iitd.ac.in

IIT Delhi reserves the right to fix higher criteria for short-listing of eligible candidates from those satisfying advertised qualification and requirement of the project post and their name will be displayed on web link (<http://ird.iitd.ac.in/shortlisted>) alongwith the online interview details. **Only short-listed candidates will be informed for online interview.** In case any clarification is required on eligibility regarding the above post, the candidate may contact to Prof. S.K. Tyagi at email id: : sudhirtyagi@yahoo.com

5% relaxation of marks may be granted to the SC/ST Candidates. In case of selection of a retired/superannuated government employee, his/her salary will be fixed as per prevailing IRD norms. **The last date for submitting the completed applications by e-mail is 28/04/2026 by 5.00 p.m.** अनुसूचित जाति / अनुसूचित जनजाति के उम्मीदवारों को अंकों की 5% छूट दी जा सकती है। एक सेवानिवृत्त सरकारी कर्मचारी के चयन के मामले में उसका वेतन वर्तमान आईआरडी मानदंडों के अनुसार तय किया जाएगा।

कार्यवाहक प्रमुख (आईआरडी स्थापना)

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- Prof. S.K. Tyagi, PI, Dept. of Energy Science and Engineering
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