Thapar Institute of Engineering & Technology (TIET), Patiala, Punjab and Sardar Swaran Singh National Institute of Bio-Energy (SSS-NIBE), Kapurthala, Punjab (an autonomous institution of the Ministry of New and Renewable Energy, Government of India) have been awarded a research project from Department of Science & Technology, DST (Climate, Energy & Sustainable Technology Division). This project aims to increase biomass utilization in coal fired thermal power plants by co-firing agro-waste with coal, thus contributing towards carbon neutral energy generation and reduction of air quality deterioration caused by stubble burning.

**Project title**
To Optimize Coal and Agro-Wastes Mixing and Feeding for Co-Milling for Thermal Power Plants with Minimum Changes to Installed Systems and Operations

**Sponsoring agency**
Department of Science & Technology, DST, Government of India (Climate, Energy & Sustainable Technology Division)

**Project value**
Rs. 1,76,18,280

**Project duration**
2 years

**Implementing institutes (in collaboration)**

**Investigators**
Dr. S.S. Mallick, Professor (Principal Investigator), TIET, Dr. Sanghamitra Barman, Professor, TIET, Dr. Ashish Purohit, Associate Prof., Mechanical Engineering Department, TIET, Dr. Kundan Lal, Assistant Prof., Mechanical Engineering Department, TIET, Dr. Kunwar Pal, Scientist-C, Thermochemical Conversion, Division, NIBE, Dr. Tapas Patra, Scientist-C, Thermochemical Conversion, Division, NIBE

**Positions available**
Total 4 Positions:
2 No. Junior Fellow (JRF), to be placed at TIET
2 No. Research Associate-I (RA-I), to be placed at SSS-NIBE

**Qualifications and experience**
JRF: Post Graduate Degree in Basic Science (MSc in Physics/Material Science/Mathematics/Chemistry/Energy/Power/Agriculture) or Graduate/Post Graduate Degree in Professional Courses (BE/BTECH/ME/MTECH in Mechanical/Chemical/Mechanics/Energy/Agriculture Engineering or similar) and **NET/GATE qualified (mandatory)**.

Research Associate-I (RA-I): PhD or equivalent degree of having 3 years of experience in research/teaching after ME/MTECH with background of Mechanical/Chemical/Mechanics/Energy/Physics/Material Science/Mathematics/Chemistry/Energy/Agriculture or similar.

**Emoluments**
JRF: Rs. 37,000 + 9% HRA: Rs. 40,330 per month
RA-I: Rs. 58,000 + 9% HRA: 63,220 per month

**Application procedure and deadline**
Applicants to email their resume, certificates, NET/GATE score by 26th July 2024 to:
For JRF: Email to Dr.S.S.Mallick (TIET) at ssmallick@thapar.edu
For RA-I: Email to Dr. Kunwar Pal (SSS-NIBE) at kunwar.pal@nibe.res.in (with cc to ssmallick@thapar.edu)

Only shortlisted candidates will be called for interview. Interview will be held in the last week of July or first week of August 2024 in online/offline mode.

**Additional Note**
There is a possibility for the JRFs to be admitted for PhD.
For general guideline, the candidates can refer to: https://dst.gov.in/sites/default/files/1687843045_Revised_of_emoluments_OM.pdf
Dr. S.S. Mallick is a full professor in the Department of Mechanical Engineering, Thapar Institute of Engineering & Technology (TIET). He holds a PhD from UoW Australia in Powder Technology and has a total of 24 years of industry, academic and research experience in the area of Powder Technology.

He has developed Particle and Bulk Solids Technologies Laboratory at TIET with financial assistance from DST, DST-SERB, CSIR, NTPC, RIECO INDUSTRIES etc. He has tested, modelled and designed over 100 bulk powder systems and has published 50 research papers (SCI) in international journals.

Dr. Mallick has provided technology driven design and process solutions to 30 industrial consulting projects/industries, including multiple plants of NTPC, Reliance Industries, Aditya Birla Group, Odisa Powder Generation Corporation (OPGC), Haryana Power Generation Corporation (HPGC), TATA Power etc.

Dr. Mallick has served as the Associate Editor for the International Journal of Particulate Science & Technology, Taylor Francis. Dr. Mallick has trained over 500 industry personnel through numerous workshops and professional development training programs. He has organized 4 international conferences aimed towards increasing academia-industry collaboration. Dr. Mallick’s thesis students have successfully obtained prestigious faculty/scientist/industrial R&D positions in Germany, UK, USA, IIT, CSIR etc.