Sanction No and Date: DSF Contract ID: 2022/11158 07.12.2022	TEXMiN Project No. PSF-IH-1Y-020	Date: 12.01.2023

"Research Fellow position" under "Technology Innovation in Exploration & Mining Foundation (TEXMiN) under Technology Innovation Hub (TIH)" Project

Applications are invited under the sponsored project. The details of the project are as under:

Position	Research Fellow
Number of Position (s)	2
Title of The Project	**Hyperspectral Image Processing and Analysis for Exploration in Mining Industry**
Principal Investigator	Prof. Dheeraj Kumar
Tenure of Project	1 Year
Job Description and skill	Build a framework that HSI backs for carrying out standard Computer Vision methods for processing, augmenting and training models for the Hyperspectral Images. In Remote Sensing, Hyperspectral remote sensors are widely used for monitoring the earth's surface with a high spectral resolution. Hyperspectral Image (HSI) data often contains hundreds of spectral bands over the same spatial area, providing valuable information to identify various materials. In HSI, each pixel can be regarded as a high dimensional vector whose entries correspond to the spectral reflectance from visible to infrared. Applications include Precise Agriculture, Environmental Analysis, Military Surveillance, Mineral Exploration, Urban Investigation, etc. Developing a framework which processes and handles HSI data with ease with inbuilt AI models for image analysis requires knowledge in Python programming, working knowledge with Tensorflow/PyTorch, Computer vision and Data Analysis
Essential Qualification	B.Tech/B.E in Mining Engg./Mechanical Engg./Electronics and Communication Engineering/Computer Science Engineering **Note: Final year B.Tech Students pursuing any of the above degrees may also apply.**
Essential domain knowledge	Knowledge in Machine Learning, Deep Learning, Python programming, Statistics, Computer Vision, Data Analysis, Imaging Data Analysis, Tensorflow/PyTorch
Age and Relaxation (if any)	35 Years (Maximum)
Fellowship	Rs. 20,000 - 30000 (consolidated depending on experience)
Last Date & Time	Interested candidates are requested to send an application with detailed Bio-Data and a soft copy of educational qualifications and proof of domain knowledge/ experience with age proof to the Principal Investigator by Email: texmin@iitism.ac.in on or before 20.01.2023.
Shortlisted candidates will be informed about the date of the interview. Mere possession of minimum qualification does not guarantee an invitation to the interview. Candidates will be shortlisted based on their merit and as per the requirement of the project. No TA/DA will be paid to attend the interview.	