

**Department of Mines & Geology  
Govt. of Bihar**

No. 1/NMET/Procurement/2023

Dated 24.02.2023

From,

Advisor, BSMC & Nodal Officer  
NMET  
Deptt. of Mines and Geology  
Govt. of Bihar, Vikas Bhawan  
Patna 800015

To,

The Director & HoD  
NMET, Ministry of Mines  
Shastri Bhawan  
New Delhi 110001

Sub: Financial Assistance from NMET for Procurement of Laboratory Equipment/Instrument and Software: Reg.

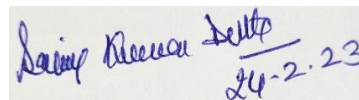
Ref.: Letter no. 6/9/2015-NMET/340 dated 9<sup>th</sup> Feb. 2023.

Sir,

With reference to the referred letter please find attached the list of equipments / Instruments and Software proposed to be procured from NMET fund to facilitate strengthening of technical infrastructure of State DGM, Bihar. The approximate expenditure will be Rs.3.73 lakhs (Approximately Rs. Three lakhs seventy thousand only).

This is for your kind information and necessary action please.

Yours faithfully

  
24-2-23

(Sanjay Kumar Dutta)

## Financial Assistance from NMET for Procurement of Machinery/ Laboratory Equipments/ Instruments etc.

### 1. Details of Proposed Items:

Sl. No.	Name Of the Equipment	Rate (approx.)	Unit	Amount (Approx.)	Specifications	Availability within the Department
1.	Handheld GPS	Rs. 30,000/-	5 nos.	1,50,000/- (approx.)	i. Screen size: 3.5 to 4.5 cm ii. Battery life: 24 Hrs. iii. Dimension (LxWxH): 6cmx10cmx4cm iv. Memory: 10GB v. Weight 120 – 160 gms Case (cover): Unbreakable	No
2	Brunton Compass	Rs. 8000/-	5 nos.	Rs.40,000/-	Suitable to be used in the field for location and measurement of geological features.	No
3.	Geologist's Hammer	Rs. 8000/-	5 nos.	Rs.40,000/-	Suitable for use in field for geological works	No
4	Digital Camera	Rs. 10,000/-	5 nos.	Rs. 50,000/-	Should be of light weight, with GPS location, connectable to Wi Fi and smart devices and suitable for Indian weather condition	No
5	ArcGIS software	Rs. 93,000/-	1 license	Rs. 93,000/-	Proprietary software developed by ESRI (to be purchased through GeM)	No

**2. Justification for procurement:** After the bifurcation of Bihar State into Bihar and Jharkhand not much geological investigation has been taken up by DGM, Bihar. It is proposed to take up few mineral exploration items in the coming years. As the Directorate of Geology has to initiate exploration items in future the above mentioned equipments will be required for geological works.

**3. Work projection for next 5 years and utilization of the instrument:** Equipments/ instruments will be utilized for geological investigations in coming years.

- i. The southern part of Aurangabad and Gaya districts bordering with Jharkhand exposes favourable rocks (mafic/ultramafic rocks) which are suitable for Copper (Cu), Lead (Pb), Zinc (Zn), Nickel (Ni), Chromium (Cr), PGE and suspected gold mineralisation will be taken up to prove resources of these commodities in future.
- ii. Considering the demand of different strategic minerals and industrial minerals formulation and execution of items on exploration of bauxite and associated strategic minerals (Titanium, REE, Ga etc.), limestone, pyrite and silica sand of Vindhyan Supergroup will be taken up to prove resources of these commodities in future.
- iii. As most of the parts of North Bihar falls in Zone V it is planned to carry out seismic micro-zonation of important towns of North Bihar in future after proper training of geologists of the Department.
- iv. GSI is involved in study of contamination of Arsenic and Fluoride for the last ten years and identified several pockets of arsenic/fluoride contamination. However, effect of contamination of soil and water due to some other elements like mercury, Radioactive elements, lead etc. is planned to be taken up in future after proper training of geologists of the Department.
- v. Northern part of Bihar is facing floods every year resulting loss of human, animals and infrastructure. It is planned to take up in future Flood Hazard Zonation and study of migration of river channels of major rivers with the help of Remote Sensing after proper training of geologists of the Department.
- vi. With the help of NRSA or in collaboration with different institutes shifting of rivers in North Bihar may be studied to understand the reasons and characteristics of migration.

**4. Strength (Division wise):**

- i. Mineral Development Officer (M. Sc. Geology): 9
- ii. Mineral Development Officer (M. Sc. Geophysics): 2
- iii. Mineral Development Officer (B. Tech. Mining Engg.): 20
- iv. Mining Inspector (B. Sc. Geology): 61
- v. Mining Inspector (Diploma in Mining/ Mine Surveying): 9

**Total strength of the DGM, Bihar: 101**