



# CENTRAL UNIVERSITY OF SOUTH BIHAR

SH-7, Gaya- Patanchpur Road, Village- Karkhars, Post- Patanchpur,  
P.S- Takail, District- Gaya (Bihar) PIN- 824 258

Date: 16/01/2020

## CORRIGENDUM NOTICE

**Tender Notice No.: CUSS/PSO/PHY/TENDER/16/2019-20, Dated 02/01/2020**  
**(Supply & Installation of "Laboratory Equipments" for Physics Lab)**

Refer to above mentioned tender notice, the following corrigendum is published for queries received from prospective bidders.

**Name of the equipment: Vibrating Sample Magnetometer (VSM)**

### **Previously submitted specification**

|                                |                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------|
| Temperature Range              | 50-400K or Above                                                                                 |
| Cool Type                      | $^4$ He or Gaseous ( $^4$ He)                                                                    |
| Cool cell Size                 | Min 6.2cm                                                                                        |
| Oscillator Frequency           | 40Hz or above                                                                                    |
| Wdth sensitivity at zero field | 0.0% or better                                                                                   |
| Wdth Sensitivity at low B      | $6 \times 10^{-2} \pm 10^{-3}$ emu/mole Fe <sup>2+</sup> or 0.0% or better                       |
| Accuracy                       | 0.0% or better                                                                                   |
| Largest measurable moment      | 40 Gauss Amplitude (mT)                                                                          |
| Sample holder                  | Different sample holder are required                                                             |
| Other requirement              | Sample mounting/alignment kit is required & Computer with software license for software required |

### **Modified Specification**

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| About System | <ul style="list-style-type: none"> <li>System should be fully oxygen free. Only small amount of helium gas should be required for its fully automated start-up and operation.</li> <li>System must have a built in cryopump and vacuum gauge for controlling the sample environment. The cryopump must be able to pump out the sample chamber to less than <math>10^{-4}</math> Torr under 10 minutes or better.</li> <li>Sample chamber must have a common sample interface at bottom for convenient access and flexibility during different measurements.</li> <li>Cooled system must be Air-cooled. There may not be any requirement of other/optional cooling unit to reduce the maintenance/expense.</li> <li>Magnetic moment noise levels must be less than <math>5 \times 10^{-7}</math> emu at 300 K for 1 second integration time and 40-Hz frequency or better.</li> <li>VSM system must perform rapid, completely automated centering operations. There should not be any need to perform manual adjustments to center the sample.</li> <li> suitable sample holders and Sample preparation/alignment box should be included.</li> <li>Magnet power supply, temperature controller preferred from the manufacturer instead from third party.</li> </ul> |
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