NIT for purchase of Thermal conductivity meter

Quotations under sealed cover are invited by the undersigned for supply and installation of Thermal conductivity meter with accessories with the following technical specifications under the DBT Biotech hub programme:

- Instationary heat wire resistance measurement in accordance with ASTM D7896.
- Thermal conductivity 10 to 2.000 mW/mK.
- Accuracy +/- 2 %
- Reproducibility +/- 1%
- Repeatability +/- 0.5%
- Temperature range -30°C to 400°C
- Temperature sensor $PT100 + -0.1^{\circ}C$
- Specific heat (computed) 0.1 to 1 cal/g^oC
- Measuring time approx. 30s
- Digital interface: RS232
- Analog interface: 4...20mA (thermal conductivity)
 - 4...20mA (temperature)
- Controller interface : 0 - 1 volt(\rightarrow heating unit)
- Appropriate Interface cable and PC with appropriate analytical software for operating the system and data analysis

Sensor Unit: SS, with PT heat wire element, having upto dimensions of (32x 70 mm) designed to be screwed into measuring chamber, Temperature sensor PT100 +/- 0.1° C with range from -30°C to 400°C and Viscosity range: 0.1 to 100,000 mPas, 10-30 ml sample volume with appropriate sensor cable,

Measuring chamber: SS, 36 mm x 70 mm (L1)x105 mm (L2) with temperature range from -30°C to 170°C and pressure range from 0 to 35 bar

The quotations should reach the office of the undersigned within 15 days from the date of issue of the NIT.

May 7, 2018

Prof. N. K. Chrungoo Dept. of Botany North Eastern Hill University Shillong