

DEPARTMENT OF METALLURGY AND MATERIALS ENGINEERING
Indian Institute of Engineering Science and Technology, Shibpur
Howrah-711 103

Enquiry No. 12/MET/IEST/2017-18

Date: October 04, 2017

To,
All the Enlisted Suppliers/Dealers/Manufacturers

Sealed quotations are invited for supply of the following Equipment for the Dept. of Metallurgy and Materials Engineering. The sealed quotations should be addressed to the Head of the Department indicating enquiry no. with date on the top of the sealed envelope. The sealed quotations should be submitted at the office of the department on any of the working day up to 16/10/2017 till 5.00 P.M.

Specification for four-point-probe resistivity measurement set-up

The system should be able to measure resistivity of sample with four-point-probe arrangement

(i) Four Probes Arrangement

Four individually spring loaded probes.

Collinear and equally spaced (with standard dimension) probes, mounted in a teflon bush, which ensure a good electrical insulation between the probes. A teflon spacer near the tips should be provided to keep the probes at equal distance. The whole --arrangement should be mounted on a suitable stand and leads are provided for the voltage measurement.

(ii). Sample (Ge-n type): Germanium crystal in the form of a chip

(iii) Oven (upto 200°C) with temperature controller.

(iv) Thermometer (0-150°C)

(v) Multirange Digital Voltmeter:

Range: X1 (0-200mV) & X10 (0-2V)

Resolution: 100mV at X1 range

Accuracy: $\pm 0.1\%$ of reading ± 1 digit

Impedance: $1M\Omega$

Display: $3\frac{1}{2}$ digit, 7 segment LED

(vi) Constant Current Generator:

Open Circuit: 18V

Current range: 0-20mA

Resolution: 10mA

Accuracy: $\pm 0.25\%$ of the reading ± 1 digit

Load regulation: 0.03% for 0 to full load

Line Regulation: 0.05% for 10% changes



(Prof. Sumit Ghosh)
Head

Prof. Sumit Ghosh
Head
Dept. Of Met. & Mat. Engg.
Indian Institute of Engineering
Science and Technology, Shibpur
Howrah-711 103

Copy forwarded for information to:

Institute Website, IEST, Shibpur, Howrah-711103

For details the vendors may contact Prof. Tapendu Mandal (Mobile No. 9674889808) during working hours.