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Enquiry Letter No. CE/EEM/2013/NC/VA/10
Last Date: September 9, 2013

Date: Aug 22, 2013

Letter Requesting Quotation for Voltmeter

Quotation is sought for a *Voltmeter* with minimum specifications given in the list below. The quotation has to be submitted in two separately sealed envelopes, one containing the technical specifications and marked as "Technical Quote" on the envelope and the other containing the price and marked as the "Price Quote" on the envelope. Please apply the discounts admissible to the educational institutes such as IIT Kanpur and also note that IIT Kanpur is exempted from paying duties for imported items.

Minimum Specification Required:

- Voltmeter: determination of transition metals like copper, tin, vanadium, mercury and other metals based on Voltammetry principle with wide-band low-noise amplifier, potentiostat and galvanostat. Voltage Range: ± 5 V, Output Range: ± 12 V, Current Range: ± 80 mA with measurement resolution of 10nA to 10mA, sweep rate of 1mV/s to 3V/s and/or 35V/s
- Electrode System: multimode SMDE, HMDE and DME, choice of multiple drop sizes, should minimize mercury requirement. Rotating disc electrode facility and various solid-state electrodes like Gold, Silver, Glassy Carbon, Platinum and Graphite.
- Instrument Control and Analysis: Computer and Software must be provided for fully computer controlled operation, data acquisition and quantitative analysis. Software must be able to analyse by following voltametric techniques: Direct Current (DC), Sampled DC, Differential Pulse (DP), Square-wave (SQW), Alternating Current (AC) 1st and 2nd harmonic, phase selective, Cyclic Voltammetry (CV), Potentiometric Stripping Analysis (PSA), Normal Pulse (NP) and Constant Current Potentiometric Stripping Analysis (CCPSA). Software should provide complete capability of data visualization, analysis and reporting involving voltammograms and calibration curves.
- Measuring cell: for sample volumes 10 – 70mL, stirrer speed 200 – 3000 rpm with precision of $\pm 5\%$, (Speed Stability $\pm 5\%$)
- Electrodes: solid state electrodes and rotating disk electrodes should be included.
- Expected Free of Cost: Manuals, Application Notes, 3 years of service and maintenance.

We have an existing Voltmeter (Metrohm Model VA Computrace 757). We are interested in the buy-back offer and appropriate buy back discount from all companies.

All quotations should be in the currency of the country of origin of the instrument and CIF, Delhi. The quotation should reach the address mentioned in this letterhead no later than September 9, 2013.

(Vinod Tare)