

Inquiry no.: IITK/CE/AS/06-2015/03 Closing date and time: 17.06.2015 at 5 pm Date: 03.06.2015

## Sub: Call for quotation for supply and installation of a portable hand-held pH meter

Sealed quotations (**Technical and Financial bids separately**) are invited from authorized suppliers for items and their specifications given below before 5 pm of 17.06.2015.

The quotation for supply and installation of **a portable hand-held pH meter** should be sent in two parts in sealed envelopes, clearly marked as "**Technical Bid**" and "**Financial Bid**". The Technical Bid should contain detailed technical specifications of the product being offered and **should not mention any prices**. The Financial Bid should include the detailed price quotation clearly, including the cost of the equipment, taxes, service charges, shipping and handling charges, if any. Our organization is an educational institute of repute and liable to get maximum <u>education discount</u> from manufacturer. Please specify it, separately.

S. No	Product Name & Specifications	Quantity
1.	<ul> <li>Portable hand-held pH and multi-parameter meter         The pH meter should be a microprocessor controlled, user friendly system with         ease of operation and should be portable enough to facilitate field analysis of the         samples. Also it should be water proof and robust for application in wide range         of environmental conditions in the field. It should be able to analyse samples for         pH, temperature, ORP, conductivity and ions (fluoride and others).     </li> <li>pH:         <ul> <li>Range: 0.0 to 14.0 pH or higher range</li> <li>Resolution: ±0.01pH or better</li> <li>Accuracy: ±0.01pH ± 1 digit or better</li> <li>Should have facility for calibration with 3 points or higher</li> </ul> </li> </ul>	1
	<ul> <li>ORP:</li> <li>Range: 1 to ±1999.9mV</li> <li>Resolution: 0.1 mV (±199.9 mV)/ 1 mV (beyond) or better</li> <li>Accuracy: ±0.2 mV (±199.9 mV) / 2 mV (beyond) or better</li> <li>Calibration with at least two points (<u>specify how many</u>)</li> <li>Temperature compensation: Automatic, 0.0 to 100.0 °C</li> </ul>	



## **Environmental Geochemistry Laboratory Department of Civil Engineering Indian Institute of Technology Kanpur**

	<ul> <li>Fluoride and other ions</li> <li>Range: 0.01 ppm to 2000 ppm or wider</li> <li>Resolution: 2 digits or better</li> <li>Accuracy: 0.5 % Full scale (monovalent) / 1 % Full scale (divalent)</li> <li>3 or more calibration points</li> </ul>	
	<ul> <li>Conductivity:</li> <li>Range: Should span 0 to 2000 mS/cm or higher with multiple ranges.</li> <li>Resolution: 0.05% of full scale or better</li> <li>Accuracy: ±1 % of Full scale ± 1 LSD or better</li> <li>Calibration point: Multiple points with each range spanned with minimum 1 point</li> <li>Temperature compensation: 0 to 50°C or better, automatic</li> <li>Adjustable cell constant</li> </ul>	
	<ul> <li>Temperature:</li> <li>Range: 0.0 to 100.0 °C or higher</li> <li>Resolution: 0.1 °C</li> <li>Accuracy: ±0.5°C or better</li> </ul>	
	Memory: Minimum 100 data sets Output: USB / IrDA Interface Adapter / RS232 / RS232C Power supply: 9 V DC adapter, long life compatible batteries, AC adapter 230- 240V 50/60 Hz Weight: Should be less than or equal to 500 gm (preference for lower weight). Operating Temperature: 5-50 °C (ambient) Operating Conditions: 5-85 % (non-condensing)	
	Diagnostic message display should be present. Unit should be water proof.	
2.	Compatible and rugged electrodes for field measurements of parameters listed above ( <b>quote electrodes with model numbers and clearly specify whether</b> <b>these are included in the price of item 1</b> ):- a) Stainless steel ATC probe b) Plastic pH electrode, refillable c) Fluoride electrode d) ORP electrode e) Conductivity probe	2 sets
3	NIST traceable standards for calibrating above parameters. Quote separately their make, volumes (mL) and expiry dates, and clearly specify whether these are included in the price of item 1.	1 set

**Terms and Conditions:** 



- The vendor should supply list of installation (minimum 5, in last two year) in India of the same model quoted against this enquiry preferably at IITK.
- Manufacturer should have appropriate certification.
- If the Financial Bid is included in the Technical Bid, then the quotation will be rejected.
- Quotation should have minimum validity of 60 days from the date of opening.
- Delivery period should be within 45 days from the receipt of the purchase order. Shorter delivery time may be given preference.
- Taxes, packaging, forwarding freight charges, if any should be mentioned.
- Quotation should carry proprietary certificates and authorization letters/certificates.
- Prices should include installation and training of the equipment.
- Provide contact number/address for complaint, else quotes may be rejected.
- The warranty period for the meter should be 3 years and at least 6 months for the electrodes from the date of installation.
- The firms may also quote for optional accessories which will extend the capability or ease of use of the equipment.
- All quotations should be in the currency of the country of origin of the instrument on FOB and CIF, Delhi (if imported) basis, and also converted to ₹.
- The Institute is exempted from excise duty and pays a nominal customs duty of ~5% under Govt. of India notifications 10/97 and 51196, respectively. Custom Duty exemption certificate under notification 51196 and road permit will be provided if applicable.
- Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection).
- The Institute reserves the right for accepting and rejecting any quotations without assigning any reason thereof. Also, the Institute reserves the right to reject or accept all or any of the offers made above.

Thanking you,

Sincerely, Dr. Abhas Singh Assistant Professor, FB-306, Department of Civil Engineering, I.I.T. Kanpur, Kanpur- 208016, Uttar Pradesh, India.