

DEPARTMENT OF CHEMISTRY  
INDIAN INSTITUTE OF TECHNOLOGY - DELHI  
HAUZ KHAS, NEW DELHI – 110016

Dated: 14<sup>th</sup> Aug 2012

**NOTICE INVITING QUOTATIONS**  
**Sub: Purchase of UV-Vis-NIR spectrophotometer**

Sealed quotations in *separate envelopes of technical and commercial bid* kept in a one sealed outer envelope are invited for purchase of a **UV-Vis-NIR spectrophotometer** as per specifications given below. Your sealed quotation should reach latest by 5 PM on 5<sup>th</sup> Sep 2012 to **Prof. A. K. Ganguli, Department of Chemistry, Indian Institute of Technology – Delhi (IIT Delhi), Hauz Khas, New Delhi - 110016**. Your quotation should be superscribed “Purchase of UV-Vis-NIR spectrometer due on 5<sup>th</sup> Sep 2012”.

**SPECIFICATIONS**

**General description:** A UV-VIS-NIR spectrophotometer for materials optical characterization.

1. **Principle:** Double beam, double monochromator(type of monochromator mount: Czerny-Turner or Sei-Namioka), UV/Vis/NIR spectrophotometer with personal computer control.
2. **Wavelength range:** Between 175 nm and 3000 nm, or any higher range preferred.
3. **Grating:** Min 1300lines/mm in UV-VIS range and 350lines/mm in NIR range.
4. **Bandpass/bandwidth:** 0.05 to 5 nm with 0.01 increments in UV/VIS range & 0.20 to 20.00 nm with 0.04 increments in NIR range.
5. **Baseline Flatness:**  $\pm 0.0005$  A or better.
6. **Photometric range:** 7A or better.
7. **Source:** Pre-aligned Tungsten-halogen and deuterium lamps with facility of source energy enhancing.
8. **Stray light:** 0.00007 %T at 220nm (NaI) or better.
9. **Wavelength Resolution:**  $\leq 0.05$  nm in UV/VIS region &  $\leq 0.20$  nm in NIR region.
10. **Wavelength accuracy:**  $\pm 0.100$  nm in UV-vis region and  $\pm 0.400$  nm in NIR region or better accuracy.
11. **Wavelength reproducibility:**  $\leq 0.020$  nm or better in UV-Vis region.
12. **Photometric stability:** 0.0005 A/hr at 500 nm or better.
13. **Photometric accuracy:**  $\pm 0.0003$  A or better.
14. **Samples:** Solutions, powders, and thin solid films.
15. **Detectors:** Should have PMT , InGaAs and PbS detector for complete NIR region upto 3000nm or better.
16. **Integrating spheres:** 150 mm diameter integrating sphere with inbuilt InGaAs detector module.

- 17. Essential accessories:** Licensed s/w, Cuvettes for liquid samples, power cords, sample holders for liquid, thin films and powders(Cuvettes of 10mm pathlength; 3 pairs of 700 $\mu$ L and 1.4ML and two pairs of each of the following: 10  $\mu$ L, 50  $\mu$ L, 400  $\mu$ L, 3.5ML)
- 18. Local accessories:** Suitable PC-Color printer should be offered.
- 19. Warranty:** The system should cover a warranty of 3years.
- 20.** Suitable 1+1 peltier system for a temperature range 5-95°C with imported chiller/ water circulator.

## **TERMS AND CONDITIONS**

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as “Technical Bid” and “Financial Bid”. Both the sealed envelopes should be sent in a single sealed envelope, clearly marked as “Quotations for Purchase of UV-VIS-NIR spectrophotometer due on 5/09/2012”. The quote should reach the following address on or before 5/09/2012, upto 5 PM.

Prof.A.K.Ganguli

Department of Chemistry

Indian Institute of Technology Delhi (IIT Delhi)

Hauz Khas, New Delhi-110016

2. Please quote prices at FOB New Delhi, inclusive of installation charges. CIP charges should be quoted separately.
3. The quotations should be in the currency of the country of origin as well as Indian Rupees wherever possible and should be valid for at least three months.
4. Please attach all the technical literature and a list of similar installations done in India.
5. Standard warranty details (minimum 3 years) should be provided.
6. Payment should be through irrevocable letter of credit.
7. If the quote is being submitted by the representative of the Principals/manufacturer themselves, a valid Agency ship/Dealership Certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
8. Complete set of manuals for the operation of equipment should be given.
9. Clearly specify the installation requirements—such as space, power, frequency, environment (Temperature and humidity) etc.
10. If the items quoted are proprietary in nature, please enclose proprietary certificate from the principals stating “certified that \_\_\_\_\_ is a proprietary item M/s. \_\_\_\_\_ and no other manufacturer makes these items.
11. If the bidder is an Indian agent, the agency certificate should be enclosed.
12. Please produce compliance certificate for the specification.
13. Training should be provided free of cost.
14. Delivery period should be specifically mentioned and should be as small as possible.
15. The products will be used for educational purposes. Hence any applicable institutional discounts should be offered and stated.
16. SALES TAX : This Institute is not exempted from the payment of Sales Tax/Service Tax/VAT. The rate (i.e. percentage of Sales Tax should be clearly indicated included or excluded) wherever chargeable.
17. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.