

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

Date: 28/01/2014

NOTICE INVITING QUOTATIONS

Sub: UV-Visible Spectrophotometer

Sealed quotations in **separate** envelopes of **technical** and **commercial** bid kept in one sealed outer envelope are invited for purchase of a UV-Visible spectrophotometer as per specifications given below. Your sealed quotation should reach latest by 5 PM on 14.02.2014 to Dr. Prमित K Chowdhury, **Department of Chemistry, Indian Institute of Technology – Delhi (IIT Delhi), Hauz Khas, New Delhi - 110016**. Your quotation should be superscribed “Quotation for UV-Visible spectrophotometer due on 14.02.2014.”

Minimum Specifications: UV-Visible Spectrophotometer

The UV-Visible spectrophotometer must have the following specifications:

1. **Principle:** PC based Double Beam UV-VIS Spectrophotometer with variable bandwidth manufactured by an ISO 9001 certified company.
2. **Measurable Wavelength range:** Wavelength range from 185nm to 900nm (standard) & Up to 1400 nm (with Integrating Sphere attachment)
3. **Wavelength accuracy:** ± 0.3 nm with auto wavelength correction
4. **Bandpass/bandwidth:** 0.1 nm (at least 6-steps switching possible)

5. **Light Source:** Halogen lamp, Socket type Deuterium lamp, auto position adjustment should be present
6. **Stray light:** Less than 0.005% with NaI soln at 220 nm
7. **Resolution:** 0.1 nm
8. **Wavelength reproducibility:** ± 0.1 nm
9. **Photometric mode:** Absorbance, Transmittance (%), Reflectance (%), Energy (E)
10. **Photometric accuracy:** ± 0.002 Abs
11. **Monochromator:** Single Monochromator: High performance, Low-Stray-Light blazed holographic grating in aberration corrected Czerny Turner mounting
12. **Detector:** Photomultiplier tube (preferably R-928)
13. **Cuvette:** Quartz cuvette of 10 mm path length, 1 mL capacity (2 nos.), 3.5mL (2 nos.)
14. **Software feature:** Scan mode, kinetics mode, and quantitative mode. Software should be capable of measuring solid sample and thin film, application with Kubelka Munk conversion.
1. **Integration sphere attachment:**
 - To be used for measurement of diffuse, total and reflectance and measurement of transmittance of liquid, solid sample and films
 - Wavelength range: 220nm -1400nm.

- Integrating sphere: Preferably 60 mm inner diameter, to be equipped with inbuilt photomultiplier tube & InGaAs detectors.
 - Incident angle : 0/8 deg
 - Two sample holder (one for liquid samples and one for powder sample)
 - Film holder for measuring transmittance reading of the films.
2. **UPS** (1KVA online with 30 minutes battery backup) with Battery.
 3. **Computer** : A high speed computer with high storage, original current 32 OS and large flat screen suitable for the instrument and for the software.

Terms & 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, with clearly marked as “Quotation for **UV-Visible Spectrophotometer**”. The quote should reach the following address on or before 14th February, 2014 by 5 PM.

Dr. P. K. Chowdhury
 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.
3. The quotations 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. Warranty details should be provided (warranty for 3 years). Extra financial charges (if applicable) for the asked warranty details should be included in the financial bid and mentioned very clearly.
6. Payment should be through irrevocable letter of credit.
7. If the quote is being submitted by the representative of the Principals/manufacturere 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 onsite.
14. Delivery period should be specifically mentioned and should be as minimum as possible.
15. The products will be used for research purposes. Hence any applicable institutional discounts should be offered and stated.
16. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.