

**Indian Institute of Technology Kanpur  
Centre for Environmental Science and Engineering**

Inquiry No- IITK/CESE/DP/08-2013/03

23 August, 2013

**Sub: Quotation for supply of UV-VIS Spectrophotometer and related accessories as mentioned below.**

With reference to the subject mentioned above, you are invited to submit quotation in a sealed cover on or before August 30, 2013 to the address mentioned below.

The prospective suppliers are required to send quotation in two parts, both in sealed envelopes, clearly marked as "**Technical Bid**" and "**Financial Bid**". The Technical Bid should contain detailed technical specification 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 if any, shipping and handling charges.

**Terms and Conditions:**

1. Maximum education discount, if any should be offered
2. Validity of quotation should be at least for 60 days
3. Prices should be on CIF and FOB separately (if imported)
4. Prices should include the installation and training cost
5. Warrantee must be one year or more
6. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection)
7. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
8. Delivery should be made within 3 months.

**Technical Specifications for UV-VIS Spectrophotometer and related accessories:**

**1. UV-VIS Spectrophotometer with below specification:-**

- |                                     |  |
|-------------------------------------|--|
| • <b>Wavelength range</b>           | 190-1100 nm  |
| • <b>Bandwidth</b>                  | 1 nm   |
| • <b>Stray light</b>                | At 220 nm (NaI) < 0.005%T<br>At 340 nm (NaNO <sub>2</sub> ) < 0.005%T<br>At 370 nm (NaNO <sub>2</sub> ) < 0.005%T<br>At 200 nm (KCl) < 1%T |
| • <b>Wavelength Accuracy</b>        | At D2 peak (656.1 nm) ±0.1 nm  |
| • <b>Wavelength Reproducibility</b> | 10 measurements at 656.1nm ±0.05 nm  |

- **Photometric accuracy** At 1 A using NIST 930D filter : $\pm 0.001$  A  
At 2 A using NIST 1930D filter:  $\pm 0.005$  A  
Potassium dichromate:  $\pm 0.010$  A
  - **Photometric Reproducibility** Maximum deviation of 10 measurements  
1 A < 0.001 A
  - **Photometric stability** Stability at 1 A, at 500 nm with 2-sec.  
Response time: < 0.00015 A/hour.
  - **Photometric noise at 500 nm (RMS)** Noise 500 nm/0 A RMS Slit 1 nm :  
< 0.00005 A
  - **Baseline flatness** Slit 1 nm  $\pm 0.001$  A
  - **Optics** : Double-beam, sealed, quartz-coated mirrors; lens-free system to reduce chromatic aberrations
  - Holographic, concave grating with 1000 lines per mm or better
  - **Deuterium and Tungsten realigned sources with automatic switch-over**
2. **Cuvettes**: One Pair 10mm pathlength **quartz cell**, Cell Volume 3.5ml.  
Three Pair 10mm pathlength **glass cell**, Cell Volume 3.5ml.
  3. Branded compatible with latest configuration computer for UV-VIS Spectrophotometer and branded Laser jet printer.
  4. One unit 2kVA UPS for back up

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