



Indian Institute of Technology, Kanpur

Department of Chemical Engineering

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Assistant Professor

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Request for submission of quotation for "UV-VIS NIR Spectrophotometer"

Sealed quotations are invited from dealers/distributors on or before 9th September 2013 with all technical specifications for the supply of items;

Enquiry No: 16/CHE/SS

Opening date: 30th August 2013

Closing Date: 09th September 2013

The quote should be submitted to the Department of Chemical Engineering, IIT Kanpur.

The following specifications are as under:

Technical Specifications: UV-VIS-NIR Spectrophotometer

	Generic Specification
UV-Vis –NIR Spectro photometer with integrating sphere	Manufactured by an ISO 90001 certified company and should provide with original printed literature
Type	Double beam, ratio recording, double out-of-plane Littrow or equivalent monochromators, quartz over coated optical system with all reflective optics. Monochromator focal length 400 mm, dual double sided gratings, 1200 lines/mm in Uv-Vis and 300 lines/mm in NIR, blazed
Beam splitting System	Rotating Beamsplitter , which measures a sample, dark and reference signal per cycle with a speed of 30MHz or better
Sample for measurement	Solid sample like films and Liquid holder in solutions
Measuring Wavelength	175 to 3300 nm
Optical System	Double beam, Double Monochromator with holographic/diffraction

	grating.
Source	Tungsten-halogen lamp for Vis-NIR wavelength region and deuterium arc for UV source with automatic alignment.
Scan Rate	2000nm/min in UV VIS and 8000nm in NIR
Straylight	0.00007 %T at 220nm (NaI) and 370 nm (50mg/L NaNo ₂) or better
Detector	Photo Multiplier Tube R 928 for UV-Vis wavelength range, Cooled PbS detector for complete NIR wavelength range
Wavelength Resolution	UV & Vis range(≤ 0.05 nm), NIR range (≤ 0.2 nm) or better resolution
Wavelength accuracy	≤ 0.08 nm or better reproducibility in UV-Vis region and ≤ 0.4 nm or better reproducibility in NIR region
Wavelength reproducibility	UV & Vis range(≤ 0.025 nm), NIR range (≤ 0.1 nm) or better resolution
Photometric Range	≥ 8 Abs or better in UV Vis & NIR Region
Photometric Accuracy	< 0.00025 Abs or better
Photometric Noise	± 0.00003 A or better at 500nm, 0 Abs, 1s SAT, 2nm SBW
Spectral Bandwidth/Bandpass	UV VIS 0.05 to 4.0 nm and NIR 0.2 to 20 nm
Interface	IEEE with data rate 8Mbyte/s
Power compliance	230 \pm 10V AC, 50Hz
Software	Compatible with Windows Vista, Windows XP, Windows 7 etc.
Accessories	Liquid Sample Holder , Solid Sample Holder for reference and sample beam and Pair of quartz cuvette ,Computer with latest Core i5 or 7 Processor with Licensed Windows 7 Software with 4GB RAM, DVD and 19" TFT Monitor , Key Board , Mouse and Laser Printer or better to be supplied with System
Warranty	One year

Terms & Conditions of the quotations are as under:

1. The quotations should be submitted in the properly sealed envelope, addressed to the undersigned. The enquiry no. and date should invariably be quoted on the top of the envelope.
2. The time allowed for carrying out the above note work is 10 days.
3. The rate quoted should be inclusive of sales tax and other taxes including freight charges (if any).
4. Quotations should have a validity of a minimum of 90 days.
5. The Institute reserves the right of accepting or rejecting any quotations without assigning any reason thereof.

Kindly send your quotation before respected date in the following address:

Sri Sivakumar

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Kanpur, Uttar Pradesh, PIN 208 016

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