

Tender Document

**Department of Mechanical Engineering
Indian Institute of Technology Kanpur
UP-208016 India**

Enquiry No:	IITK/ME/NS/Spectrometer/2021/01
Publishing Date	29/12/2021 Time: 17:00 Hrs
Last date and time of uploading bids	08/01/2022 Time: 17:00 Hrs
Description:	UV-Vis Spectrophotometer with highly focused beam Geometry

Interested parties may view and download the tender document containing the details terms and conditions from the website www.iitk.ac.in/new/tenders-notice

Specifications requirements for UV-Vis Spectrophotometer with highly focused beam Geometry:

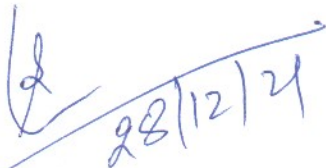
- The Latest State of Art computer-controlled UV-Vis system must have Double beam Czerny turner design with two silicone photo diode detectors to cover the entire wavelength range and measuring sample and reference signal with room light immunity feature comprising non measurement phase stepping wavelength drive.
- It should have High-performance Long-Life Xenon Flash Lamp (>75Hz) Source with min 7 year guarantee.
- Spectral Bandwidth (nm): 1.5nm or less.
- Wavelength Range: 200 -1100 nm or more.
- Photometric Range (Abs) : - 4 to + 4 Abs or more
- Wavelength Accuracy (nm): UV-Vis: ± 0.1 nm or less.
- Photometric Stability < 0.0007 or less.
- Photometric Noise: At 0 Abs: < 0.0006
- Stray light: ≤ 0.009 %T
- Scan Rate: 23000 nm/min or more min 75 data points/sec
- Fast analysis time of less than 3 seconds for full range.
- Grating: Holographic, min 1100 lines/mm with Czerny turner monochromator with highly focused beam 1.5 x 1.0 mm
- The system should be future upgradeable for analyzing samples (Minimum sample volume of 1 ul) in biological matrix. (i.e. DNA & Protein measurements) Minimum sample volume should be 1 uL.
- System should have facility to upgradable with Peltier based temperature controlling for temperature-based studies.
- System should have facility to be upgradable with solid sample holder

- Systems should have facility to be upgradable with rapid mix accessory for stopped flow kinetics measurements.
- Should be future upgradeable with remote DRA facility
- Cells: 3.5ml Quartz Cuvettes (Pair) 10mm path length should be offered.
- Latest PC, Printer should be supplied along with the instrument.
- All specification should be complied and necessary document should be available in the website. Any deviation will lead to cancellation of the bid.

Terms and conditions:

- Quotes should have minimum validity of 60 days.
- All prices to be for IIT Kanpur.
- Please provide official email ID for conversation post quotation opening.
- Inadequate quality spectrometer will be returned for the free replacement.
- The supplier should have documented proof that they have supplied such spectrometers to higher educational institutes.
- The institute reserves the right for accepting and rejecting any quotation without assigning any reason thereof. Also, the institute reserves the right to reject or accept all or any of the offer made above.
- IIT Kanpur has the right to accept the whole or any part of the tender or portion of the quantity offered or reject it in full without assigning reason.
- Higher warranty may be given preference.
- Document required:
 - 1) Certificate of GST and Bank details.
 - 2) Work experience.

Quotation should be in the name of: Prof. S. S. Gupta

A handwritten signature in blue ink, followed by the date '28/12/21' written in the same ink.

Prof. S. S. Gupta
Dept. of Mechanical Engineering
IIT Kanpur-208016.

Email:

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