

भारतीय प्रौद्योगिकी संस्थान पालक्काड Indian Institute of Technology Palakkad अहलिआ एकीकृत कैम्पस, कोज़्हिपारा Ahalia Integrated Campus, Kozhipara पालक्काड- 678557 Palakkad – 678 557

Ref No: IITPKD/CHY/MP/095/2017

Date: 01.01.2018

दूरभाषसंख्या/ Phone no:

purchase@iitpkd.ac.in

ईमेल/ Email :

04923 - 226300/ 590/ 586

Due Date of the tender: 15.01.2018 @ 3.00 PM

TENDER FOR INVITING QUOTATIONS

Dear Sirs,

On Behalf of Indian Institute of Technology Palakkad quotations are invited for **"Fluorescence Spectrophotometer**" confirming to the specification in the Annexure.

- Preparation of Bids: The tenders should be submitted under two-bid system (i.e.) Technical bid and Financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. No prices should be included in technical bid. Financial Bid should indicate item – wise prices for the items mentioned in the technical bid. The technical and the financial bids should be put in separate cover and sealed. Both sealed covers should be put into a bigger cover.
- 2. <u>Compliance sheet for the specification & OEM Brochure has to be attached along with Technical bid.</u> Vendor has to fill the compliance sheet and mention page number or reference number in OEM brochure. Unfilled / partial filled sheets lead to disgualification.
- 3. The Quotations duly sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above. Fax and Email quotation are not acceptable.
- 4. The price should be quoted per unit and packing and delivery charges should be indicated separately. The offer/bids should be exclusive of Taxes and Duties, which will be paid by the purchaser as applicable. However the percentage and of taxes and duties as on date should be clearly indicated.
- 5. The Quotations should be valid for **sixty days** from the due date and the period of delivery required should also be clearly indicated.
- 6. **Local Firms**: Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
- 7. **Outside Palakkad**: Quotations should be for **F.O.R. at IIT Palakkad**. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.

- 8. Goods shall not be supplied without an official supply order.
- 9. **Custom Duty:** Custom Duty which will be paid at a concessional rate against duty exemption certificate.
- 10. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later. No advance payment will be made. The Tenderer have to furnish the bank details along with tender like Account No, Account Name, IFSC Code, Bank address etc.
- 11. Submission of Bids: Quotation should be sent to the following address "The Registrar, Indian Institute of Technology Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad -678 557, Kerala", Phone No: 04923 226 586/590, Email: purchase@iitpkd.ac.in.
- **12**. Delivery Period: 6-8 Weeks from the date of Purchase order.
- **13.** Warranty: Warranty condition should be indicated.
- **14. Delay in Supply or Liquidate damages**: If the supplier fails to deliver the stores within the time specified in the purchase order, the purchaser will recover from the supplier as liquidated damages a sum of one- half of one percent (0.5%) of the P.O value of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed five percent (5%) of the P.O price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.
- 15. Late offer: The quotation received after due date will not be considered. Please ensure that your offer is sent well in advance to reach the Institute by the due date.
- 16. Loading and unloading charges will be borne by the supplier.
- 17. Acceptance and Rejection: IIT Palakkad has the right to accept the whole or any parts of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

Yours faithfully,

Encl: Specifications

Registrar, IIT Palakkad

Specification for Fluorescence Spectrophotometer

Name of the	Fluorescence Spectrophotometer
instrument	
Source	150W Xenon flash lamp, pulsed at a line frequency Xenon flash
	lamp, pulsed at a line frequency (50 to 60 Hz); pulse width at half
	peak height $< 10 \ \mu s$, delay (td) and gate time (tg) should be varied
Wavelength range	200 to 900 nm
Sensitivity	Signal to noise ratio S/N should be minimum 2500:1
Wavelength accuracy	$\pm 0.5 \text{ nm}$
Slit width	Variable excitation 2.5–15 nm and emission 2.5- to 20 nm slits in 0.1
	nm increments
Scanning Speed	The scanning speed should be selected in increments of 1 nm from
	10-1500 nm/min; data should also be collected with respect to time
Software	• Software should provide specific applications such as Scan, Time Drive, Data Collection
	• Control over spectrometer components such as lamps,
	monochromator and detector settings
	• Should incorporate a software-controlled filter wheel in the
	emission monochromator with 290, 350, 390, 430 and 515-
	nm cutoff filters, 1% T attenuator and clear beam
	• Data handling routines (normalization, arithmetic, integration,
	smooth etc.)
	File import/export options, including ASCII
Computer	Processor: Dual Core i3 processor
	• RAM: At least 4 GB RAM
	Hard Disk: 500 GB hard drive
	DVD drive
	• Windows 7 (or higher)
Accessory	• Should have the ability to perform 96 well plate analysis
	• Built in automated polarizer with software selectable vertical
	or horizontal orientation
Cell	• 2 nos. of Rectangular Quartz cell (3 mL) with 10 mm path
	length should be offered
	• 2 Nos of Rectangular Quartz cell (850 µl) with 10 mm path
	length should be offered
	Should include thermostatable cell holder
Instrument	Should have the ability to analyze solution sample, solid samples,
performance	thin films & powders
Data Analysis	Should be available for performing mathematical calculations on

	stored data including arithmetic functions, smoothing, area, peak,
	normalization, merge, difference, and interpolate.
Warranty	3 years warranty should be provided
Annual Maintenance	Annual Maintenance contract for three years after the warranty
contract (AMC)	period should be offered
Installation and	• Demonstration and Training on system should be done by the
Demonstration	supplier at installation site.
	• Basic training for a period of one week after installation of
	the equipment to technical personnel should be provided. An
	extended training after 2-3 months should be offered to
	clarify any hardware, software and application queries. At least one periodical training per year should be conducted during the warranty period at
	installation site in order to clarify on interpretation of data,
	method development and application support.
Inspection &	Fluorescence spectra of two dyes (one low and the other one high
Acceptance criteria	extinction co-efficient) will be recorded at (i) three different
	concentrations and (ii) three different slit width. Satisfactory and
	reproducible signal to noise ratio will be needed to accept the
	instrument.
Additional	User list within India should be provided
Service back-up	• Technical support should be available at short notice at the
	places where fluorescence spectrophotometer will be installed
	• Troubleshooting training (instrumentation/application) as
	and when required free of cost.
Service manuals	Complete operation and service manuals should be provided
Delivery	6-8 weeks from the date of receipt of PO