



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH PUNE

IISER/PUR/0560/25

PREBID CLARIFICATION

आइटम विवरण- स्थिर अवस्था और समय-समाधानित ल्यूमिनेसेंस मापन सेट-अप की खरीद

Item Description- Procurement of Steady State and Time-resolved Luminescence Measurements Set-up

स्थिर अवस्था और समयअप की खरीद-समाधानित ल्यूमिनेसेंस मापन सेट- के लिए 15/10/2025 को संस्थान की वेबसाइट www.iiserpune.ac.in और CPP पोर्टल पर प्रकाशित एक खुली निविदा देखें।

Refer to an open tender published on the Institute website www.iiserpune.ac.in and on the CPP Portal on 15/10/2025 for procurement of Steady State and Time-resolved Luminescence Measurements Set-up.

प्री-बिड मीटिंग 27/10/2025 को शाम 3.00 बजे आयोजित की गई और बैठक का कार्यवृत्त निम्नानुसार है:

Pre-Bid meeting was held on 27/10/2025 at 3.00 PM and minutes of meeting is as under:-

प्रारंभ में, समिति ने सभी सदस्यों और संभावित बोलीदाताओं के प्रतिनिधियों का स्वागत किया और सामान्य तौर पर निविदा के दायरे की जानकारी दी और उसके बाद सहायक कुलसचिव (भंडारण एवं क्रय) से बोली लगाने वालों को निविदा की मुख्य विशेषताओं के बारे में जानकारी देने का अनुरोध किया।

At the outset, the committee welcomed all the Members and the representative of the Prospective Bidders and briefed in general the scope of the tender and thereafter requested Sr. Assistant Registrar (S&P) to brief the bidders on the salient features of the tender.

उपस्थित प्रतिनिधि दिए गए उत्तरों से संतुष्ट थे और यह सूचित किया गया था कि प्री बिड कॉन्फ्रेंस के दौरान की गई चर्चा के अनुसार दिए गए सुधार- / परिवर्धन / स्पष्टीकरण को IISER पुणे की वेबसाइट पर होस्ट किया जाएगा और सभी संभावित बोलीदाताओं को बोली दस्तावेजों में निर्धारित अनुसार अपनी बोली जमा करने से पहले प्री-बिड सम्मेलन की कार्यवाही का संज्ञान लेना आवश्यक है।

The representatives present were satisfied with the replies given and it was informed that the corrections / additions / clarifications given, as discussed during the Pre-Bid Conference would be hosted on the website of IISER Pune and all the Prospective Bidders are required to take cognizance of the proceedings of the Pre-Bid Conference before submitting their bids as stipulated in the Bidding Documents.

हमारी आईआईएसईआर वेबसाइट www.iiserpune.ac.in और CPP portal पर जारी नोटिस के अन्य नियम और शर्तें अपरिवर्तित रहेंगी। इस संबंध में और कोई पत्राचार नहीं किया जाएगा।

The other terms & conditions of the notice issued on our IISER website www.iiserpune.ac.in and CPP portal will remain unchanged. No more correspondence in this regard will be entertained.

बैठक अध्यक्ष के धन्यवाद प्रस्ताव के साथ समाप्त हुई।

The meeting ended with vote of thanks to the Chair.

31/10/2025

Sd/-

वरि. सहायक कुलसचिव (भंडारण एवं क्रय)

Sr. Assistant Registrar (S&P)

TECHNICAL AND COMMERCIAL QUERIES AND CLARIFICATION**PRE-BID CONFERENCE FOR PROCUREMENT OF STEADY STATE AND TIME-RESOLVED LUMINESCENCE MEASUREMENTS SET-UP**

S. No.	Query/Clarification Sought	Clarification / Amendment
1	Requesting grating for system if 600g/mm at blaze wavelength 1000 nm. Grating 830 g/mm is very specific supplied with system. it's not standard grating.”	Specifications (no. 3) is amended is as below:- “Extended fluorescence spectral measurements in the range of 870 nm-1650 nm with analogue InGaAs detector with additional emission grating with 600 g/nm to 850 g/mm in between 1000 to 1200 nm, and additional second order filter around 1250 nm. All other required hardware and software components must provide to measure NIR steady state spectra in the given range.”
2	“Technical Point No 5 Monochromator: Tender contains Single or double grating monochromator in both Excitation and Emission monochromator. Single excitation and single emission monochromator (325 mm focal length) configuration will have guaranteed sensitivity of >20,000:1 and complying with the tender specifications. Requesting to allow to quote single excitation and single emission monochromator.”	The proposed Single Excitation and Single Emission Monochromator configuration is permissible and fully acceptable, provided the Bidder guarantees and achieves a System Sensitivity of >20,000:1 (as per the stated tender requirements).
3	<u>Commercial: Price of optional items:</u> Clarification on PDF Price Bid regarding the price bid section mentioning the individual cost of the optional items.	Bidder may quote the individual cost of the optional items in a separate PDF document.
4	CHAPTER 4 Schedule of Requirements, Specifications & Allied Technical Details	CHAPTER 4 Schedule of Requirements, Specifications & Allied Technical Details is amended and appended as Annexure III

Modified Schedule of Requirements, Specifications & Allied Technical Details

SL No	Specifications	Marks
1	Design: Modular fluorescence spectrometer system for acquiring steady-state excitation and emission spectra in the UV-VIS spectral range with single photon counting sensitivity. The standard instrument configuration must have a guaranteed sensitivity of >20,000:1 for the Signal-to-Noise Ratio of the water Raman signal measured with excitation at 350 nm, emission at 397 nm, with a 1 second integration time and 5 nm spectral bandwidth. Fluorescence lifetime measurements capabilities in the time range of <200 picoseconds to second. All the related hardware and software accessories must be included. The instrument must be suitable for chemical and biological samples.	10
2	Light Source for PL measurements: 450 W Ozone free CW xenon lamp with integrated power supply for steady state PL measurements. Light source for Phosphorescence measurement: 60 W Pulsed xenon lamp for phosphorescence measurements with Optical pulse width 1.5 μs to 2.5 μs and Repetition rate is 0.1 Hz - 100 Hz. TCSPC Measurement sources: 1. Pulsed LED with peak Wavelength (340 to 365) $\pm$ 10 nm 2. Pulsed Laser with peak Wavelength of 375 $\pm$ 15 nm (FWHM <100 ps) 3. Pulsed Laser with peak Wavelength of 405 $\pm$ 15 nm (FWHM <100 ps) 4. Pulsed Laser with peak Wavelength of 450 $\pm$ 15 nm (FWHM <100 ps) 5. Pulsed Laser with peak Wavelength of 510 $\pm$ 15 nm (FWHM <100 ps) 6. Pulsed Laser with peak Wavelength of 635 $\pm$ 15 nm (FWHM <100 ps) Above mentioned LED and pulsed Laser sources must be capable of working in MCS mode for measuring lifetime in the microsecond to second range.	15
3	Detector: UV-VIS PMT Detector: Suitable PMT detector in cooled housing. Detectors should have a response width: <600 ps with spectral coverage is 230 nm to 980 nm or better, with low dark count <100 cps at -20 degree or better. NIR InGaAs detector and related accessories: Extended fluorescence spectral measurements in the range of 870 nm-1650 nm with analogue InGaAs detector with additional emission grating with 600 g/nm to 850 g/mm in between 1000 to 1200 nm, and additional second order filter around 1250 nm. All other required hardware and software components must provide to measure NIR steady state spectra in the given range.	15
4	Active gating hardware circuit must be provided for time gated or delayed spectral measurements.	10
5	Monochromator: Excitation Monochromator:	10

	Single or double grating monochromator in Czerny Turner configuration with suitable grating optimized for UV range around 300-400 nm with minimum step 0.01 nm and Computer-controlled slits. Emission Monochromator: Single or double grating monochromator in Czerny Turner configuration with suitable grating optimized for visible range around 400-500 nm with minimum step 0.01 nm and computer-controlled slits with swing mirror.	
6	Sample chamber: Large Sample Compartment with single cuvette holder temperature adjustable by water/coolant circulation. Solid sample holder: Front face detection suitable for measurements of powders and film/slide samples including all the sample holders and necessary long-pass filters with wavelength of 330 nm, 395 nm, 455 nm, 495 nm, 550 nm, 590 nm, and 645 nm. All filters are of the size of 50 mm x 50 mm and fit into the filter holders.	8
7	LN Cryostat: Liquid nitrogen cryostat along with all the controllers and sample holders, sample chamber adapter module, turbo pump and all the other related accessories for the complete measurement of liquid and solid (both the thin film and powder) samples from 77K-300K.	10
8	Software: All the necessary hardware and timing electronics to measure Steady state and time resolved PL measurements full capabilities must be provided with comprehensive fluorescence spectrometer control, performance monitoring, spectral and lifetime data acquisition and data fitting and analysis. Software should also have facilities like spectral and fluorescence/phosphorescence lifetime acquisition, kinetic measurements, time resolved excitation and emission spectra (TRES) and data handling routines (normalization, scaling, arithmetic, integration, differentiation, smooth etc.), routines for quantum yield, reflectance and absorption measurements, chromaticity and luminance calculation and presentation etc. Quartz Fluorescence Cuvette: 3ml Quartz fluorescence cell 1cm x 1 cm (Qty-2) and Low temperature cuvette compatible with LN cryostat down to 77K (Qty-2) Computer: Suitable computer/workstation with all the interfacing hardware and pre-loaded software to operate the system with full capabilities and the license key must be provided. One software license key for operating the software in another computer independently.	10
9	Future Upgradation 1. Integrated Sphere for Absolute Quantum Yield Measurement 2. System can be upgraded to Liquid He cryostat. 3. System can be upgraded to lifetime measurement up to 25 ps. 4. NIR PMT (300 to 1700 nm) in Liquid nitrogen cooled housing.	10
10	Warranty: Three-year comprehensive warranty on the full system	2
11	Optional Items: 1. Polarizers for anisotropy/polarization studies.	

2. Integrated Sphere Absolute Quantum Yield 3. Liquid He cryostat for doing experiment from 4 K onward 4. Detector which is suitable to measure lifetime of ~25 ps. 5. NIR PMT (500 to 1700 nm) in Liquid nitrogen cooled housing. 6. Pulsed Laser with peak Wavelength of 635 ± 15 nm (FWHM <100 ps) 7. Pulsed Laser with peak Wavelength of 475 ± 15 nm (FWHM <100 ps)	
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