



राष्ट्रीय औषधीय शिक्षा तथा अनुसंधान संस्थान गुवाहाटी

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH GUWAHATI

(Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Govt. of India)

Silakatumur (Halugurisuk), P.O.: Changsari, Dist: Kamrup, Assam, Pin: 781101.

➤ F.NO:- NIPER-G/196/EQP-CPC/Raman Spectroscopy /2021-22

MINUTES OF PRE-BID MEETING.

Equipment Description: Supply and Installation of Raman Spectroscopy

With reference to the tender enquiry no : NIPER-G/196/EQP-CPC/Raman Spectroscopy /2021-22 dated: 25.02.2022 & NIPER-G has invited open tender enquiry for the procurement of Raman Spectroscopy

As per terms and conditions of the tender the pre-bid meeting for this equipment is scheduled on 07.03.2022 at 11: 30 AM in the Purchase Department NIPER-Guwahati

Subsequent to the pre-bid conference held on 07.03.2022 the following technical changes was made in the tender document.

Microscopy: Branded research grade Upright optical microscope - complete microscope with 2 position motorized white light illuminator including video camera - PC controlled, with 0.5MPix or better.

- Binocular head with eyepieces and High-grade Colour video camera should be provided for viewing the sample under white light and laser illumination.
- Reflected light illumination
- Kinematic honeycomb baseplate for spectrometer, microscope and up to three lasers.

Koehler Illumination by reflection (LED) / transmission (LED) with lamp housings, Abbe condenser, and 4 objectives 5x, 20x, 40x/50x and 100x.

Motorized Stage for sample positioning including XY motorized stage (X = >100 mm, Y = >70 mm) and motorized Z device (3D imaging capability).

XY specifications: Resolution ≤ 100 nm; repeatability ≤ 3 μ m; accuracy Min. +1 μ m or more; resolution encoder 50 nm (minimum step: 10 nm, encoder disabled).

Confocal resolution: ≤ 500 nm lateral XY (with 532nm) and test sample.

Z specifications: resolution (minimum step size) $\leq 0.01 \mu\text{m}$.

- Includes positioning joystick/trackball, external controller, software package and high level of automation capability with the preferred following features
- Auto align and optimization of input laser power.
- Auto switch and auto align of laser through pinhole of beam expander unit.
- Self-validation using built-in internal reference sample.
- Built-in self-calibration and intensity correction using neon and white light sources.
- Includes the Standard Confocal Raman Image generation module. High speed Raman acquisition mode suited for fast mapping applications.
- Analysis of 1D, 2D and 3D hyperspectral images
- Display and Analysis of 1D, 2D and 3D hyperspectral images

Raman Spectroscopy:

- Spectral range UV-VIS-NIR (200-2100 cm^{-1}) using a single spectrometer
- Integrated Imaging spectrometer on motorized turret (2 gratings or more) for full resolution, range, and coverage.
- 532 nm laser kit including air-cooled solid-state laser (532 nm/50 mW or more), Edge and Band pass filters set at 532 nm for measurements from 100 cm^{-1} or less
- 633/638 nm laser kit including air cooled laser diode (633 nm/17 mW or 638nm/30mW), Edge and Band pass filters set at 633 cm^{-1} for measurements from 100 cm^{-1} or less
- 785 nm laser kit including air cooled laser diode (785 nm/50 mW or more), Edge and Band pass filters set at 785 nm for measurements from 100 cm^{-1} or less
- Spectral Stability: 0.05 cm^{-1} or better over 40 Acquisitions.
- Extended scanning facility for measurement of high-resolution spectra with wider wavelength range than can be accommodated on a single CCD view, without any 'stitching' of spectra together.
- High Resolution Spectral coverage in one single continuous acquisition and readout of the detector without any step and stitches maintaining 1 cm^{-1} spectral resolution.
- CCD Detector: Peltier cooled to CCD Peltier cooled to -70°C and covering a spectral range of 400 nm to 1050 nm or better with a pixel Format and size: Minimum 1024x256 and 26x26 microns

Computer and Spectroscopic software suite:-

- Seamless rapid data stream with HR-High resolution (250nm) Raman images feature. Fast Raman mapping (with speed > 1000 spectra per sec) and data processing package. This provides high-speed

sub-micron imaging capability (down to 250nm with a suitable objective and laser wavelength).

- Spectral software suite for the easy acquisition and analysis of Raman data. Includes control of the hardware and acquisition parameters, AUTO calibration, customizable methods, FLAT fluorescence subtraction, Peak label and fit, Image capture, smoothing, spectral subtraction etc.
- More than 3 extended licenses package (1 license for system control; 2 licenses for processing).
- Computer (see latest spec), with Win 11 64bit, flat screen 24" TFT screen, mouse and keyboard, 17 processor (Latest generation), Graphic card (4 GB), 16 GB RAM, 256 GB SSD + 2 TB SATA HD.
- QC certification and electronic manuals, OEM certified reference sample and sample test.
- Software should allow: Automated analysis on multiple data files (images or force curves), Multicurve analysis, Export utilities (on both single and also multiple files, ASCII, JPEG, BMP.)
- Software for fast and automatic sample focusing. Sample viewing software for Production of surface topographical images with Raman and white light overlays. Raman image generation software for 3D rendering of surface information.

Warranty: 03 Years of warranty (from the date of commissioning) and 02 Years of extended warranty.

Optional:

Motorized polarization optics to produce optimal polarization

- Polarization Kit
- Laser Polarization Control Kit for 532 nm: Circular Polarizer (quasi-depolarizer - 1/4 Wave plate) and rotator (1/2 wave plate)
- Laser Polarization Control Kit for 633 nm: Circular Polarized (quasi-depolarizer - 1/4 Wave plate) and rotator (1/2 wave plate)
- Polarization Analyzer Kit for 532nm: Polarization Analyzer / polarization Rotator (1/2 wave plate)
- Polarization Analyzer Kit for 633 nm: Polarization Analyzer / polarization Rotator (1/2

Wave plate)

However the committee also suggested the following changes in the tender document:--

- The prospective bidders may please note that EMD payable is 3% of the Quoted value and the amount of Rs.3,00,000/- for the procurement of Raman spectroscopy indicated in CPPP may be ignored. EMD can be waived off on submission of requisite document and to be registered under small scale Industries, which clearly indicates the supplier's registration for the item being quoted
- The prospective bidders are here by requested to provide the Make in India certificate in the following format.

To be given on company's letterhead.

- "We here by certify that our firm/agency/organization is coming under the category of class I Local suppliers / class II Local Suppliers (Cut whichever is not applicable) as per Make in India policy guidelines as our Indian content in the quoted items materials offered is [more than 50% / more than 20-less than 50%](Cut whichever is not applicable)"

In this connection, we understand that in case the above provided certificate is found false in future we will be liable for disciplinary actions like blacklisting, debaring for a particular period etc.

The above information provided is true and correct.

In confirming above certificate, we are here with attaching certificate issued by Chartered accountant confirming our eligibility as Local supplier.

Authorized signatory of the bidder.

The other terms and conditions will remains unchanged as mentioned in the tender document under reference no : NIPER-G/196/EQP-CPC/Raman Spectroscopy /2021-22 dated: 25.02.2022

The last date for the submission of Bids 18.03.2022 till 14:00 hrs.


Stores and Purchase Officer.

भंडार एवं क्रय अधिकारी / Stores & Purchase Officer
नाइपर गुवाहाटी, असम (भारत) / NIPER Guwahati, Assam (India)