INDIAN INSTITUTE OF TECHNOLOGY GOA

At Goa Engineering College Campus Farmagudi, Ponda, Goa 403401 E-mail: purchase@iitgoa.ac.in

Enquiry No: IITGOA/2018-19/043

Date: 18/12/2018

IIT Goa invites sealed quotations in two bid format for the supply of below mentioned items;

Sl. No.	Description of Items	Qty
1	Laser for Raman/PL Spectrometer	01 No.
	(Detailed specifications attached)	

Terms and conditions:

- 1. Quotation must be valid for at least 90 days.
- 2. The GSTIN should invariably be mentioned in your offer.
- 3. Kindly attach a compliance certificate along with the technical quote.
- 4. Supplier should provide free delivery and installation at IIT Goa.
- 5. Supplier should provide three-years warranty for the above stated item.
- 6. Prices should be quoted in Indian Rupees inclusive of any shipping/transportation charges.
- 7. Delivery and installation must be made within 4 weeks of getting a confirmed order.
- 8. Payment: Within 30 days after the delivery and successful installation.
- 9. The suppliers shall provide the banking details along with their quote on their letterhead duly signed and stamped.
- 10. IIT Goa reserves the right to accept and/or reject any/all bids without assigning any reason.
- 11. For any clarification, you may kindly contact Dr. Santosh Kumar (e-mail: skumar@iitgoa.ac.in) and Stores & Purchase Department (email: purchase@iitgoa.ac.in) till 28/12/2018.
- 12. Quotations shall be submitted in two parts;
 - Part I (Technical) should contain all the technical details and specification of the product. It should contain unpriced bid along with terms and conditions, compliance certificates, Proprietary certificates (if applicable), other certificates etc. This envelope should be marked as "Technical Bid"
 - 2) Part -II (Financial) The financial bid of the above item should be in a sealed envelope marked as "Financial Bid" and should contain financial terms and conditions.
- 13) All sealed quotations must reach to the Assistant Registrar (Stores & Purchase), IIT Goa, at Goa College of Engineering Campus, Farmagudi, Ponda Goa by 17:00 Hrs on or before 09th January, 2019.

Specifications of a CW 532 nm Diode-Pumped Solid-State Laser for Raman/PL Setup

- Emission wavelengths in air at 22 degree Celsius:
 - o a fixed peak wavelength of 532 nm is essential
 - o if above condition is not met, then a maximum tolerance in the peak wavelength of ± 0.1 nm is permissible
 - o linewidth (FWHM), ≤1 MHz
 - o wavelength stability (8 hrs, ±2 degree Celsius) ≤0.002 nm
- Beam properties
 - o spatial mode (TEM₀₀), beam quality factor M²<1.1
 - o beam diameter at aperture, <1 mm
 - o beam symmetry, >0.95:1
 - o beam pointing stability, <10 microrad/degree Celsius
 - o beam divergence (at 1/e2, full angle, in far field) <1.2 mrad
- Power:
 - o maximum power, 100 mW,
 - o adjustable from 50% to 100% without affecting the beam quality
 - o power stability (8 hrs, ±2 degree Celsius), <2%
- RMS optical noise (20 Hz 20 MHz), <0.25%
- Polarization properties:
 - o type linear, vertical
 - o ratio >100:1
- Operating temperatures, 10 40 degree Celsius
- Preferable dimensions, $120 \times 60 \times 60$
- Integrated shutter: Yes, manual or computer controlled
- Heat sink, if required, included
- Controller of Laser head: dedicated or integrated in the laser head
- Computer communication ports: RS232, USB 2.0, LAN or higher
- 64-bit Laser Control software, and MATLAB, LabVIEW or Python Library support

13/12/18