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Global Tender Notification for the procurement of a femtosecond optical parametric oscillator (OPO) laser unit (Last Date for submission of tenders: 6th November'2023)

REF: PH/ASIN/001/2023-24 11th October'2023

A request for quotation for an optical parametric oscillator (OPO) on **C.I.P. Bangalore basis**. The GTE approval number is IISc-GTE-2023-294. The quotation should clearly indicate the terms of delivery, delivery schedule, E.D., transportation charges, if any, payment terms etc. Kindly submit the quotation latest by 6th November'2023 to Department of Physics, IISc. The tender should be submitted in two separate sealed envelopes - one containing the technical bid and the other containing the commercial bid, duly signed.

Please enclose a compliance certificate along with the technical bid. This certificate should have a table that should describe your compliance in a "Yes" or "No" response against each of the items in the specifications listed below. If "No", the second column should state the extent of deviation. The third column should state the reasons for the deviation if any. Please enclose a compliance statement along with the technical bid. Bids with no statement of compliance will be considered invalid, and will be disqualified.

Specifications of Item: one-box, widely tunable, femtosecond optical parametric oscillator (OPO) laser unit with the following specifications:

1. Compatible with Mai-Tai HP as the seed/fundamental laser for synchronous pumping. The repetition rate should be close to 80 MHz.
2. Four independent outputs – signal, idler, depleted fundamental, Second Harmonic Generation (SHG), with 2-3 outputs accessible at any time.
3. Pulse-width: 100-250 fs (at 800 nm).
4. Second harmonic generation (SHG) unit integrated inside laser unit.
5. Gap free tuning range: 490-750 nm (signal), 930-2500 nm (idler), 350-500 nm (SHG), 690-1040 nm (depleted fundamental). Larger tuning range is also acceptable.
6. Power: > 0.3W (at 500 nm for signal), > 0.15W (at 1200 nm for idler), > 1W (at 400 nm for SHG), >1.1W (at 800nm for depleted fundamental)
7. Completely automated tuning of wavelengths using computer control, along with automated cavity alignment to maintain optimal power.
8. Integrated visible range spectrometer for monitoring laser spectrum.
9. On-demand ability of controller to stabilize wavelength or power.
10. Spatial mode TEM00, with M^2 <1.2 or lower.
11. Wavelength stability < 0.5 nm.
12. Polarization- 100:1 or better.
13. Output power noise < 1% RMS.
14. All appropriate air/water cooling units for laser should be included.
15. Appropriate computer software should be included. Additionally, Lab-View compatibility and appropriate sub-VI files should be provided.
16. Operating voltage: 220 VAC, 50Hz.
17. Related components such as necessary software, connectors, adapters, cables etc. necessary for independent operation of the laser should be included.
18. Installation should be performed on site. The installation engineer should also train at least one student.
19. Warranty ≥ 1 year from date of installation.
20. The vendor should have a track record of having supplied 10 similar equipment (femtosecond oscillator laser units) in India in the last five years (please furnish the details). It would be desirable to provide 2-3 reference letters from customers in India/abroad.

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21. Please include pictures of the exact model being offered.

Options (please quote separately):

1. Additional 1-year warranty (for a total of two years). Clear coverage scope to be mentioned.
2. Additional 2-year warranty (for a total of three years). Clear coverage scope to be mentioned.
3. Yearly annual maintenance contract (AMC). Clear coverage scope to be mentioned.

Terms and conditions:

1. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
2. The payment will be by Letter of Credit. Discounts for advance payment terms (if any) should be mentioned. All payments will be performed as per IISc rules.
3. The lead time for the delivery of the equipment should not be more than 4-5 months from the date of receipt of our purchase order.
4. The offer shall be valid at-least 60 days from the date of opening of the bid.
5. The vendors quoting should ideally be registered with IISc, and the quote should ideally carry the vendor registration number in the bid.

Yours Sincerely,

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