



Tender Notification for the procurement of confocal micro – Raman laser ruby luminescence setup for high pressure measurements at a beamline of the Italian synchrotron centre, Elettra, Trieste

Dear Sir/Madam,

Your quotation should clearly indicate the terms and conditions of the quotations, delivery, delivery schedule, entry tax, payment terms, warranty coverage etc. The quotation should be submitted in two parts: Part I (Technical bid) and part II (Commercial bid) and both should be submitted in a sealed envelope. Technical bid should be exactly same as commercial bid except that prices are not shown in the technical bid. Technical bid should have item wise compliance report of all specifications. The commercial bid should have pricing for the items quoted in the technical bid. Prices quoted should be inclusive of all taxes/ duties. The prices quoted should be inclusive of delivery of the items to the site and installation at site. The offer should be valid for a period of at least 60 days from the last date for submission of quotes. Your quotation duly signed and sent in sealed envelope should reach us at the following address by 11 October, 2019.

Prof. D. D. Sarma
Solid State and Structural Chemistry Unit
Indian Institute of Science
Bangalore 560 012, India
Tel :+91-80-2293 2945, 23607576
Email: sarma.dd@gmail.com, sarma@iisc.ac.in

Important: The item will be installed at the Italian synchrotron centre Trieste, Italy and has to be delivered directly to C/o Dr. Bobby Joseph , Laboratorio Fisica Applicata/Esperimenti Turbolenza del Centro di, Fisica Teorica Abdus Salam, presso Edificio ES3 della Sincrotrone Trieste S.C.p.A. Strada Statale 14 - km 163,5 in AREA Science Park, 34149 Basovizza, Trieste ITALY

Technical Specifications:

- Raman Spectral Range: 100 cm^{-1} to 4000 cm^{-1}
- Spectral Resolution $\sim 0.7 - 3 \text{ cm}^{-1}$, notch or edge filter with cutoff 70-120 cm^{-1}
- Encoder feedback controlled motorized grating stages (300g/mm, 1200 g/mm and 2400 g/mm) for different spectral ranges
- Detector – CCD array detector, thermoelectrically cooled to -90°C with typical 1650x200 pixel format with 16x16 micron pixels
- Motorized neutral density filters to offer different output power level (to select laser excitation from 100% to 0.000001%)
- Microscope with long working distance objective (20x, and/or 50x N.A 0.25, Minimum working distance 25 mm, type plan Apochromat objective)
- Efficient manual X-Y positioning system for diamond anvil cell
- Manual z-positioning system for objective
- High resolution digital CCD camera system for visualization and image storage.
- Laser -- Diode Laser – 532nm, 50mW/100mW, Air cooled 50mW or similar, Mirrors and mounts for laser system
- The pixel resolution we look for is about 16 micron pixels. Our intention is to get a spectra resolution of 0.7 cm^{-1} .
- Any good CCD detector that can provide the above kind of resolution and cover the spectral range we mentioned is acceptable.
- We prefer a good stray light rejection, 1% or less. This is a desirable criterion
- Required Instrument control and data acquisition software
- Delivery, Installation and operator Training