

Dear Representative,

Kindly send your best quotation for the following item with various accessories on C.I.P. Bangalore basis to the undersigned. Your quotations should clearly indicate the terms of delivery, delivery schedule, entry tax, payment terms etc. The tender should be submitted in two separate sealed envelopes: one containing the technical bid and the other containing the commercial bid, both of which should reach the undersigned, duly signed on or before 1700 hours, November 11, 2019. The technical bid must include details of technical specifications of the equipment along with commercial terms and conditions; however the price components should NOT be shown.

The commercial bid must include the price of the item indicating the break-up of the following:

- (i) The price of the goods quoted on C.I.P. (Bangalore)
- (ii) The charges for any insurance and transportation upto Bangalore customs warehouse.
- (iii) The agency commission charges if any.
- (iv) The installation, training and commission charges, if any.

Please enclose a compliance certificate along with the technical bid.

Terms and conditions:

1. The **vendor should have qualified technical service personnel for the equipment, based in Bengaluru, India who can respond within 24 hours.** Else the equipment should be diagnosable online by the off-site manufacturer within 24 hours.
2. At least 1 year warranty from the date of delivery.

Both documents should be addressed to:

**The Chairman,**

**Solid State and Structural Chemistry Unit,**

**Indian Institute of Science**

**Bangalore 560012.**

Please deliver or mail both sealed quotations to:

**Vivek Tiwari,**

**Solid State and Structural Chemistry Unit,**

**Indian Institute of Science**

**Bangalore – 560012.**

**Instrument Name and description: Spectrograph with required accessories**

**Specifications/Accessories required:**

- Removable aluminium lid with no light leaks
- Aperture f/4 or faster
- Spectrograph focal length 320 mm or larger to provide the specified resolution
- Resolution better than 0.1 nm (assuming approximately 10 micron exit slit and 1200 grooves/mm grating at 430 nm)
- Linear dispersion 2.3 nm/mm or larger (assuming approximately 10 micron exit slit and 1200 grooves/mm grating at 430 nm)
- Spectral Range 150-1500 nm (assuming approximately 10 micron exit slit and 1200 grooves/mm grating at 430 nm)
- Stray light rejection ratio  $1.5 \times 10^{-4}$  or better for the laser line 1 nm away from the detection wavelength
- Grating should be mounted on an easily interchangeable triple grating turret with rotation around an axis passing through the front grating surface, off-axis rotation design will not qualify
- Computer controlled front entrance slit from 0-7 mm in 6.25 micron or smaller steps
- Industry standard C-mount adapter compatible with the CCD camera should be included
- Focusing and rotational controls must be included in the design, to allow for removing/replacing CCD array with a high degree of repeatability and easy interfacing with a variety of array detectors.
- A turret compatible 300 grooves/mm and a 150 grooves/mm grating should be included. The gratings should be blazed at 600 nm, and manufactured from the same parent manufacturer as the spectrograph.
- Flat field size at the detector CCD array should be at least 30 mm x 12 mm or greater (assuming approximately 10 micron exit slit and 1200 grooves/mm grating at 430 nm)
- Spectrograph should be upgradable to dual entrance and exit ports, and a nitrogen purging port should be available
- All motorized functions including but not exclusive to - grating number, motorized slits, motorized mirrors, shutters, and filter wheel, should be automatically calibrated by the spectrometer
- The spectrograph must have USB connectivity, LabView VIs and Windows 10 compatible software should be included
- No other accessories other than those provided with the spectrograph at the time of purchase should be required for satisfactory functioning.