### INDIAN INSTITUTE OF TECHNOLOGY KANPUR IIT Post office, Kanpur 208016, U.P Department of Physics

Prof. S.A.Ramakrishna Dept of Physics IIT Kanpur Kanpur 208016, U.P

e-mail: sar@iitk.ac.in

## Enquiry no.: PHY/OPTICS/SAR/EQP/2 Enquiry date: 21.5.2012 Closing date: 31.5.2012

Sealed quotations should reach the undersigned latest by 4.00 pm on 31<sup>st</sup> May, 2012 for the following items:

S. No.	Description	Quantity
А	He-Ne Laser	6
В	He-Ne Laser Mount	6
С	Large-area detector	5
D	Pinhole detector	5
Е	Laboratory Spectrometer	16

The above-mentioned equipment should conform to the following specifications:

### (a) He-Ne Laser:

Parameter	Required specification
Wavelength	632.8 nm
Power	2 mW
Polarization	Random
Mode Structure	TEM <sub>00</sub> >99%
Beam shape	Circular
Beam Diameter	<2 mm
Beam Divergence	<1 mrad
Beam Drift	<0.2 mrad
Long-Term Beam Drift	<0.05 mrad
Power Input	AC, 230 V, 50 Hz
Accessories	Power supply and appropriate cables

### (b) He-Ne Laser Mount:

Parameter	<b>Required specifications</b>
Туре	Applicable for the lasers mentioned above

Mounting type	Threaded post with locking knob, adjustable for height
	and levelling
Supporting Height	90 - 150mm
Finish	Black anodized
Construction	Aluminum alloy
Coarse adjustment	360° (Azimuth & elevation)
range	
Fine adjustment range	+/- 5° (Azimuth & elevation)

# (c) Large area detector:

Parameter	Required specification
Type	Mounted Si-Photodiode for CW applications in
Туре	1µW to 100 mW range
Wavelength range	200-1100 nm
Calibration	to be provided
Detector area	$1 \text{ cm}^2$
Accessories	measurement meter with display and all appropriate
	cords

# (d) Pinhole detector:

Parameter	Required specification
Type	Mounted Si-Photodiode for CW applications in
Туре	1µW to 100 mW range
Wavelength range	200-1100 nm
Detector cover	Pinhole-covered
Accessories	measurement meter with display and all appropriate
	cords

# (e) Laboratory Spectrometer

Parameter	Required specifications
Туре	The graduated scale should be fitted on the spindle and two
	double ended verniers. Both telescope and scale should have
	the provision for coarse and fine movement. The prism table
	should has leveling screws and markings on it for positioning
	of prism / grating clip
Scale	Brass, Dia. 175mm
Objective	Achromatic, focal length approx 180 mm, aperture approx 30
	mm
Slit	Metallic
Reticle	90 <sup>0</sup> cross etched on glass
Least count	20 seconds

Base	Aluminum Casting
Accessories	Allen Key, Grating Holder and Prism Holder

### **Terms and conditions:**

Quotations should have a validity of a minimum of 60 days.

The equipment should be provided with a warranty of 1 year against manufacturing defects. Maximum possible educational discount should be specified on the quotation since all are for teaching purposes.

Quotations are required in duplicate in a sealed envelope with enquiry number mentioned on the envelope.

The delivery period should be within 40 days of placing the purchase order.

The rate offered should be F.O.R Kanpur for firms located outside Kanpur and free delivery at the Institute premises for local firms.

Institute is exempted from payment of E.Duty under notification no.10/97

Institute is entitled to avail concession rate of sales tax as admissible under Sub-sec 5 of Sec 8 C.S.T Act 1956 applicable to Educational/Research institution in inter-state purchase.