# Nano Research Facility Indian Institute of Technology Delhi

#### **Notice for inviting quotations**

Date: 02-09-2011

Sub: extended Deadline: Purchase of optical, optomechanical and optoelectrical components

Please refer to the NIQ of the above subject, Dt: 25-08-2011. This is to inform all the interested vendors that the quotation deadline has been extended upto **5 PM** on **16-09-2011**.

#### Please note that:

- The NIQ details are same as earlier (enclosed herewith)
- Those who have already submitted quotations need not send the quotations again and their previous quotations will be considered.

G. Vijaya Prakash Pl of the project

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Sub: Purchase of optical, optomechanical and optoelectrical components

Please send your quotation for purchase of above said item(s) as per specifications given below. Your quotations should reach latest by  $5\ PM$  on  $09^{th}$  September 2011. Quotations are solicited only for item manufactured by reputed company with proven past record of sales, supply and after-sale service.

		Category I: Optical components	
			No. required
1		Lens System complete set	
	i.	N-BK 7 Plano Convex lens, 1" dia,	
		f=75mm	2
		f=100mm	2
		f=150mm	2
		f=200mm	2
		' f=300mm	2
	ii.	UV Fused Silica Plano-Convex Lens, 1" dia	
		f=50mm	
		f=100mm	2
		f=150mm	2
			2
	iii.	N-BK 7 Plano Convex lens, 2" dia,	
		f=60mm	2
		f=100mm	2
		f=150mm	2
		f=200mm	$\frac{1}{2}$
	iv.	Lens mount	_
		SM1 threads Ø1"	16
		SM2 threads Ø2"	8
	v.	N-BK7 Plano-Convex Lens Set, Ø1", 14 pc	
		f(mm) = 25.4, 35, 50, 75, 100, 125, 150, 200, 250, 300, 400, 500, 750, and 1000	1
	vi.	N-BK7 Plano convex cylindrical lens	
		f =75mm; H =50.8mm; L = 53mm	1
		f = 100 mm, H = 30 mm, L = 60 mm	1
	vii.	Right handed Kinematic Cylindrical Lens Mount	2
	viii.	Bases & Post Holders Kit (assorted items) in a box	1
		Post Holders	
	1	x150mm	5
	1	x100mm	5
		x75mm	10
	1	x50.8mm	10
	1	x40mm	10
		x25mm	10
		Mounting Bases	
		( 25x58x10)mm	10
		(25x75x10)mm	10
		(50x75x10)mm	10
		Locking Thumb Screws	
		x5mm	20

		Thomas Common	
1		Thumb Screws	10
		Standard Base Clamps	20
	ix.	Posts	
		20	4
		20 mm 30 mm	4 4
		40mm	4
		50mm	4
		75mm	4
		100mm	4
		150mm	4
2		Mirror Systems	
	i.	Mirror Systems 10 Pack of Protected Silver Mirrors, Ø1" (Ø25.4 mm)	1 Set
	ii.	10 Pack of UV enhanced Aluminium Mirrors, Ø1" (Ø25.4 mm)	1 Set
	iii.	Kinematic mirror Mounts for Ø1"	20
		Pitch and Yaw Angular Range of ±4°	
		• 1/4"-80 Adjuster	
		Screws for Greater Sensitivity	
		Removable Adjuster	
		Knobs Expose Hex Sockets	
	iv.	Ø1/2" Post	
		×20mm	4
		×40mm	4
		×75mm	4
		×100mm	4
	V.	Complete Laser Port Hole Periscope Assembly Kit, Metric	1
	vi.	Post-Mounted Iris Diaphragm, Ø25.0 mm Max Aperture  ND Filters ( 01 Nos. each)	2
	vii.	Diameter: Ø25.0 mm wavelength range: $\sim$ 350-1100nm; Thickness: 1.0 $\pm$ 0.25 mm (Unmounted); O.D- 0.1, 0.2,0,5,1,2 and 3	1 set
	viii.	Mounted step Variable Circular ND filter, Ø2.5"; O.D.= 0.04-3.0	1
	ix.	Mirror Flip mount with 90° Flip Action	1
3	х.	BEAMSPLITTER	
		Broadband Non-Polarizing Beam Splitter Cube, 400-700 nm	2
		BASE for the beamsplitter	2
		Rotatable Cover Plate	2
4		Series Fiber Adapter, SM1-to-SMA Adapter (1" mountable)	4
5		MAGNETIC BASEs	·
		Kinematic MAGNETIC BASE: The top and bottom base plates , magnetically coupled. $3"\ x\ 3"\ x\ 1"$ ( metric), M6 tapped holes and through hole.	2
		Heavy-duty magnetic base : has a switchable magnet for quick positioning of optical component, with M6 mounting stud	2
6		Assorted screws and hex keys CAP SCREW KIT: Assorted cap screws, washers and nuts organized storage box of (i) M6, (ii) M3 and (iii) M4.	1 set each
		M6 x 1.0 Setscrews set: Contains the M6 x 1.0 Setscrews: 6, 10, 12, 16, 20, 25, 30, and 35 mm long; ten 3 mm Hex Keys.	1 set

	Hex Keys Set: The Metric Hex Key Kit contains two organizers plus 20 pieces of each	1 set
	of the following sizes: 0.7 mm, 0.9 mm, 1.3 mm, 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm,	
	and 5 mm and ten pieces of the 6 mm size.	
7	Mechanical Kit: Cage Assemblies and Lens Tubes	1
	Contains four rigid steel rods on which optical components can be mounted along a	
	common optical axis	
	Contains:	
	Cage Assembly Rods - 1", Ø6 mm	4
	0.5" Thick Cage Plates, 30 mm	3
	SM1 Lens Tubes, 1.00" (25.4 mm) Bore Depth	5
	30 mm Cage System Cube, 4-Way	1
	30 mm Cage System Alignment Plates with 1 mm Hole	4
	XY Slip Plate Positioner, Coarse 1 mm	1

	Category II: Fiber optic components	
8	Fiber probe spectrometer (miniature) suitable for SMA connectors of Fiber optic white light sources.  Detector: CCD type, with pixels 1024 x 58 (1044 x 64 total pixels), with TE cooling, Sensitivity = ~0.06 counts / e- or less; quantum efficiency= 90% or above Appropriate filter arrangement; Optical resolution =~ 0.2nm or less; Spectral range ~200-1100nm, S/N ratio: 1000:1 or more, USB operation, required cables and power supply should be provided.	1
0	Fiber collimating lens fixture, Acromatic doublet 5mm dia, $f = \sim 10 \text{mm}$ Wavelength region: 350-1700nm 200-2000nm Fixture with both sides tapped with SMA905 connecters	2 Each 2 Each
10	Collimating lens of SMA905 connector for fiber optic spectrometer, 5mm dia, f= ~10mm, 200-2000nm region	2
11	Fiber path card, SMA terminals, 400 and 1000 micron core, 2mts length Core dia- (400 $\mu$ m $\pm$ 8 $\mu$ m); Wave length-(300-1100)nm Core dia(1000 $\mu$ m $\pm$ 20 $\mu$ m); Wave length-(300-1100)nm	2 2

		Category III: Optomechanical and optoelectrical components	
8		XYZ translational stage  Configured in XZ and XYZ Orientations  1/4"-20 (M6 x 1.0) Mounting Holes  Travel Range: 1"; resolution: 400 μm(course)&25 μm(fine) or better)  Vertical Load (Max): 20 lbs (9 kg)  Horizontal Load (Max): 90 lbs (41 kg)	3
9		Translational stage  1" Travel Translation Stage, Micrometer Drive  Left- or Right-Hand Configurable	3
10		Micropositioner and parts for micro-positioning applications,	
	i.	3-Axis Positioner W/ Differential Micrometers (manual) load =~1kg, height 62.5mm (optical access height 75mm); resolution 0.5mm/rev (course) and 50 μm(fine) or better,	2
	ii.	Replacement Mounting Plate for Flexure Stages [Metric].	2
	iii.	SM1 Compatible Flexure Stage Mount	2
	iv.	5.5mm Riser for Flexure Stage Mounts	2
	v.	Long Mounting Bracket, 56 mm Long	2

	vi.	Standard Waveguide Mount,35mm Length	2
	vii.	Standard V-Groove Fiber Holder	2
	viii.	Package of 6 Magnetic Clamps	2
	ix.	Bag of 15 Cleats	2
11		Optical Chopper System With b0 10-slot[36°] Chopper Blade	1
12	i.	Compact Power and Energy meter Console, Digital 4" LCD	1
	ii.	C-Series Thermal Power Sensor, Surface Absorber, 0.19-25µm, upto 10W	1
	iii.	C-Series Standard Power Sensor, Si based, 200-1100 nm, upto 50mW	1
13	i.	Standard Series Optical Table - 2500 mm x 1250 mm x 210 mm -(8.3'x4.1'x12.4")	
		• Flatness: $\pm 0.004$ " ( $\pm 0.1$ mm) Over any 11.0 ft <sup>2</sup> (1 m <sup>2</sup> ) Area	2
		<ul> <li>Double-Plate, Single-Honeycomb Core</li> </ul>	
		Mounting Hole Pattern	
		• Metric: M6 x 1.0 on 25 mm Centers	
		• Imperial: 1/4"-20 on 1" Centers	
	ii.		
		Rigid, Non-Isolating Supports, Set of 4	2 sets
		27.5" (700 mm)	
		<ul> <li>Maximum Load Capacity): 5500 lbs (2500 kg)</li> </ul>	
		• Height Adjustment: +0.6", -0.25" (+15 mm, -6 mm)	

#### TERMS & CONDITIONS COVERING SUBMISSION OF QUOTATIONS

- 1. Technical requirements
  - 1) All items are to be in **metric scale** only.
  - 2) The quotation must contain the following details, otherwise quotation cannot be considered.
    - a. The quote must contain all the items at least in **ONE** category.
    - b. The <u>technical</u> bid must contain all the required specifications, drawings, graphs of transmission/reflection/response spectra of components if any) etc.
    - c. Along with the technical bid, please enclose support documents related to previous sale of the above items(s) within India.

2. **DELIVERY:** The rates quoted must be for C.I.F. Delhi (Air Freight) ( if required)

3. TERMS OF PAYMENT: 100% payment on delivery and satisfactory installation

**4. INSTITUTE'S RIGHTS:** IIT Delhi reserves the rights of acceptance or rejection of

any or all quotations.

**5. VALIDITY OF QUOTATIONS:** Quotations should be valid at least for a period of <u>3 months</u>.

6. SUBMISSION OF QUOTATIONS: Both Technical and price bids are to be quoted separately in separate sealed covers. Both these bids should be sent in a sealed cover marked at the top

SUBJECT AND DUE DATE

## 09<sup>th</sup> September 2011

Quotations should be sent, on or before due date to:

Dr. G. Vijaya Prakash, Associate Professor Department of Physics, IIT Delhi, Hauz Khas, New Delhi 110 016, India.

G. Vijaya Prakash Associate Professor,

Department of Physics, IIT Delhi.

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		f(mm) = 25.4, 35, 50, 75, 100, 125, 150, 200, 250, 300, 400, 500, 750, and 1000	1
	vi.		
		f = 75 mm; $H = 50.8 mm$ ; $L = 53 mm$	1
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	vii.	Right handed Kinematic Cylindrical Lens Mount	2
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	ii.	Rigid, Non-Isolating Supports, Set of 4 27.5" (700 mm)  Maximum Load Capacity): 5500 lbs (2500 kg) Height Adjustment: +0.6", -0.25" (+15 mm, -6 mm)	2 sets

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