

**Department of Optoelectronics, University of Kerala, Kariavattom,  
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OPTO/P-CHE-01(re-tender)/2023-24

**Quotation Notice – Re-tender**

Quotations are invited for the following chemicals in the Department of Optoelectronics,  
University of Kerala, Kariavattom, Thiruvananthapuram

Sl No	Chemicals	Formula	Pack	Purity	Quantity	Preferred make
1.	Lanthanum (III) nitrate hexahydrate	La (NO <sub>3</sub> ) <sub>3</sub> .6H <sub>2</sub> O	1	99.90 %	100 g	Thermo Fisher Scientific
2.	Iron (III) nitrate nonahydrate	Fe (NO <sub>3</sub> ) <sub>3</sub> .9H <sub>2</sub> O	1	98+%	100 g	Thermo Fisher Scientific
3.	Titanium (iv) n-butoxide (liquid)	Ti[O(CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub> ] <sub>4</sub> ,	1	99 +%	500 g	Alfa-Aesar
4.	Syringr Filters PTFE, Filtration rating: 0.45 um, Diameter : 13 mm				100 nos	
5.	<u>Cobalt(II) nitrate hexahydrate</u>	Co(NO <sub>3</sub> ) <sub>2</sub> · 6 H <sub>2</sub> O	1	≥ 99%	5g	Sigma Aldrich
6.	N, N, dimethyl formamide , anhydrous (DMF) solvent	HCON(CH <sub>3</sub> ) <sub>2</sub>	1	99.8%	1L	Sigma Aldrich
7.	Gold(III)chloride trihydrate ≥ 99.9%	HAuCl <sub>4</sub> .3H <sub>2</sub> O	3	≥ 99.9%	1 g	Sigma Aldrich
8.	Potassium Iodide	KI	1	≥ 99.9%	5 g	Sigma Aldrich
9.	Ethylene Glycol	HOCH <sub>2</sub> CH <sub>2</sub> OH	3		500 ml	Sigma Aldrich
10.	L-ascorbic acid	C <sub>6</sub> H <sub>8</sub> O <sub>6</sub>	1	99%	25 g	Sigma Aldrich
11.	Hydroxyl amine 50% solution in water		1		100 ml	Sigma Aldrich
12.	Ethanol	C <sub>2</sub> H <sub>6</sub> O	4		500 ml	Himedia
13.	Methanol		1		500 ml	
14.	CTAB		1		100 gm	
15.	Iron (II) chloride tetrahydrate	FeCl <sub>2</sub> .4H <sub>2</sub> O	1		5 g	Sigma Aldrich

16.	Nitric Acid		6	69%	500 ml	Merck
17.	Europium (III) Oxide		1	99.9%	5 gm	Thermofisher scientific
18.	Tungsten (VI) Oxide		1	99.9%	100 gm	Sigma
19.	Strontium Carbonate		1	99.9%	100 gm	Sigma
20.	Acetone		1		5 L	Emparta ACS
21.	Methylene Blue		1	≥ 99%	50 mg	Merck
22.	Malachite Green		1	≥ 99%	50 mg	Merck
23.	Rhodamine B		1	≥ 99%	50 mg	Merck
24.	Methyl Orange		1	≥ 99%	50 mg	Merck
25.	Hafnium IV Chloride	HfCl <sub>4</sub>	3	98%	10 gm	Sigma
26.	Calcium Chloride	CaCl <sub>2</sub>	1	98%		Sigma
27.	Hafnium IV Chloride		2	99%	25 gm	Thermofisher scientific
28.	Magnesium carbonate		1		500 gm	Himedia
29.	Zirconium IV Oxide		1	99%	100 gm	Thermofisher scientific
30.	Sodium Carbonate		1	99.95 %	500 gm	Thermofisher scientific
31.	Europium (III) Oxide		1	99.9%	25 gm	Thermofisher scientific
32.	Erbium III Oxide		1	99.9%	25 gm	Thermofisher scientific
33.	Iron chloride hexahydrate		1	99%	500 g	Sigma/Merck
34.	Strontium chloride hexahydrate		1	99.5%	500 g	Sigma/Merck
35.	Ferric nitrate nonahydrate		1	98%	500g	Sigma/Merck
36.	Cupric nitrate trihydrate		1	95%	250 g	Sigma/Merck
37.	Dysprosium nitrate hexahydrate		1	99%	500 g	Sigma/Merck
38.	Nickel foil		1	99.9%	250 g	Sigma/Merck
39.	Sodium sulfide hydrate		1	60%	500 g	Sigma/Merck
40.	Nickel chloride hexahydrate		1	99%	100g	Sigma/Merck
41.	Titanium isopropoxide		1	99.5%	100 ml	Sigma/Merck
42.	Zinc nitrate hexahydrate	Zn(NO <sub>3</sub> ) <sub>2</sub> .6H <sub>2</sub> O	1	99%	500 gm	Sigma Aldrich
43.	2-Methylimidazole	C <sub>4</sub> H <sub>6</sub> N <sub>2</sub>	1	99%	100 gm	Sigma Aldrich
44.	Silver Nitrate	AgNO <sub>3</sub>	1	≥99%	25 gm	Sigma Aldrich
45.	Zirconyl IV Nitrate hydrate	ZrO(NO <sub>3</sub> ) <sub>2</sub> .xH <sub>2</sub> O	1	99.5%	100 gm	Thermofisher scientific/Merck
46.	PEDOT:PSS (high		1		10 gm	Sigma/Merck

	conductivity grade)					
47.	Silicon Wafer with interdigitated electrodes or PET or glass substrate with interdigitated electrodes	Electrode gap $\leq$ 1 $\mu$ m	5 Nos.			
48.	Microscopic glass slide		1			
49.	Forceps, length 100 nm		2 Nos.			
50.	Microippette tips		1 pack			
51.	Alumina Crucible Cylindrical	Height- 2.5 inches Diameter- 2 inches	4 Nos			
52.	Teflon Crucible		1		100 ml	
53.	Petridish	100mm	4 Nos.			
54.	Syringe filters PTFE	Filtration rating 0.45 $\mu$ m, Diameter: 13mm	100nos			
55.	Octagon spin bar, Magnetic spinning bars	Length* Diameter =25.4mm*8mm	5 Nos.			
56.	Polygon stir bars	Length* Diameter =20 mm*8mm	5 Nos.			
57.	Borosilicate Glass pipette Graduated with pipette bulb	5ml, 10ml,25 ml	2 each			
58.	Glass dropper pipette	3ml, 5ml	5 each			
59.	Transfer pipette (Paster pipette )	3 ml-plastic	20 Nos.			
60.	Stirring rod (glass)		5 Nos.			
61.	Double ended microwire spatula		3 Nos.			
62.	Spatula 8"		4 Nos.			
63.	Spatula 6"		4 Nos.			
64.	Kimtech Purple Nitrile Powder free exam gloves medium		2 pack			
65.	Tissue roll		50 Nos.			Hylax

66.	Cryogenic vials		250 Nos		10 ml	
67.	Glass Cuvette – 4 side transparent	340 nm-2500 nm Volume-3.5 ml Path length-10mm Dimension – 45 x 12.5 x 12.5	2 Nos.			
68.	Quartz Cuvette – 4 side transparent	190 nm-2500 nm Volume-3.5 ml Path length-10mm Dimension – 45 x 12.5 x 12.5	2 Nos.			
69.	Quartz Cuvette – 2 side transparent	190 nm-2500 nm Volume-3.5 ml Path length-10mm Dimension – 45 x 12.5 x 12.5	2 Nos.			
70.	Quartz Cuvette Length – 4.5 cm Breadth – 2 cm Height – 1 mm	1 mm thickness (Z scan)	2 Nos.			

### Scope of supply

The rates quoted must be inclusive of all taxes, cost of supply at site including loading and unloading charges if and any other applicable charges etc.

Warranty/Guarantee- The supplier shall guarantee to supply the items without any damage, if found defective, the entire expenditure for replace the item in this regard shall be borne by the supplier.

The firms wish to supply the item are requested to submit the quotation in sealed cover super scripted with “reference..... ” to the undersigned not later than 3:30pm on 08.11.2023. Quotations will be opened at 10:30am on next working day (09.11.2023) in the presence of the suppliers or their authorized agents. If the above date of closing/opening tender happens to be declare as a holiday or due to any other valid reason, the tender closing/opening process will be done on the next working day or the day fixed by the undersigned.