



Government of India  
**Bhabha Atomic Research Centre**  
Nuclear Recycle Group  
Process Development Division

Ref: PSDD/MF/TM/2021/ office/24412

Date: 16/12/21

**Sub:** Fabrication and supply of the Ion Exchange (IX) column setup as per the attached technical specification without any free issue material.

Dear,

You are requested to submit your quotation in sealed envelope for the above mentioned job. The material should confirm to our specifications. The reference no. given above should be clearly mentioned on the sealed envelope.

Due consideration shall be given to the following aspects while you submit your offer:

1. Quotation shall be printed on letter head in quotation format which should consist of GSTN, PAN Number of the firm etc.
2. Quotation shall be completed in all respects with regard to specifications, validity of offer etc.
3. Break of cost may be provided as:

Sr. no.	Item	Qty.	Rate	Price
1	Ion Exchange columns	5 nos.		
2	Stands for IX columns	5 nos.		
3	Peristaltic pump	2 nos.		
4	Tygon tube (ID: 3.2mm, OD: 6.4mm)	15 m		
5	Tygon tube (ID: 4.8mm, OD: 8.0mm)	15 m		
6	Tube pinch clips	25 nos.		
7	Calibrated glass beakers with notch (2L)	2 nos.		
8	Inline filters	100 nos.		
<b>Other charges</b>				
<b>Total Cost</b>				

4. NIT will be issued to eligible tenderers from 17/12/21 to 24/12/21.

5. Sealed quotation shall reach the following address on or before 28/12/21 by 14:00 hr.

**Trushit Makwana**

SO/E, PSDD,

Room no. 204, CDCFT, WIP Complex,

BARC, Trombay, Mumbai-400 085

Tel: 022-25591392

6. Taxes, duties and other charges applicable, if any, shall be indicated separately.
7. Quotation shall be sent by Indian speed post.
8. The work shall be completed within two calendar months from issue of work order.
9. The offer shall be valid for a period of thirty days and in case of placement of the work order, shall remain firm till the completion of the work.

*Trushit*  
16/12/21  
**Trushit Makwana**  
SO/E

-----  
-----  
-----  
-----

## Technical Specification

Fabrication and supply of the Ion Exchange (IX) column setup as per the attached technical specification without any free issue material.

### 1) Ion Exchange columns: 5 nos.

- a) Size: ID 25mm, Height: 300mm
- b) MOC: Borosilicate Glass
- c) To closure: Glass cap with SS spring support
- d) Resin support: Borosil sintered glass frit (G2)
- e) Nozzles: Two at the top and two at bottom
- f) End connection: Compatible with 3.5mm ID tube

### 2) Stands for IX columns: 5 nos.

- a) MOC: SS
- b) Compatible to hold above columns suitably

### 3) Peristaltic pump: 2 nos.

- a) Flow capacity: 0.1-500 mL/hr
- b) Operating point: 0.5-100 mL/hr
- c) Rotation speed: 0.1-300 rpm
- d) Enclosure MOC: SS304
- e) Roller MOC: SS304
- f) No. of rollers: Four for non-pulsating flow with spring loaded track
- g) Flow control by rpm as well as mL/hr
- h) Display: LED
- i) Power supply: 1 $\emptyset$ , 220V, 50Hz

### 4) Tygon tube (ID 3.2mm x OD 6.4mm): 15m

- a) Colour: Transparent
- b) Nitric acid compatible
- c) Branded make

### 5) Tygon tube (ID 4.8mm x OD 8.0mm): 15m

- a) Colour: Transparent
- b) Nitric acid compatible
- c) Branded make

### 6) Tube pinch clips: 25 nos.

- a) MOC: SS
- b) Compatible with above tygon tubes

**7) Calibrated glass beakers with notch: 2 nos.**

- a) Capacity: 2L
- b) MoC: Borosilicate Glass

**8) Inline filters: 100 nos.**

- a) Filter media: PVDF
- b) Porosity: 0.45  $\mu\text{m}$
- c) Dia.: 13 mm

*Trushit*  
15/12/21

**Trushit Makwana**  
SO/E, PSDD