



**NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR**  
(An Autonomous Institute of National Importance Established by the Act of Parliament)

**OFFICE OF THE COORDINATOR TEQIP III**

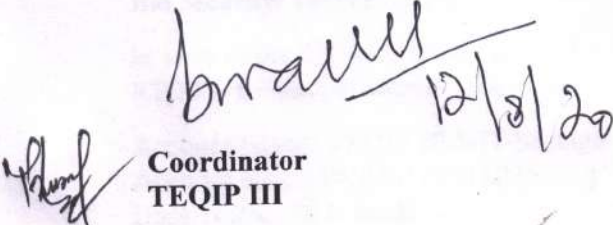
Tel: +91-194-2422032 Extn: 2818, 2814, 2806

Email: [teqip3@nitsri.net](mailto:teqip3@nitsri.net) Website: <http://new.nitsri.ac.in>

No: NIT/TEQIP/20/ 425  
Dated: 12-08-2020

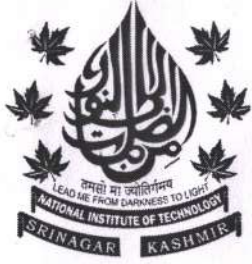
**Corrigendum**

With reference to the Invitation for Bids for the supply of Rotary Evaporator with Vacuum Pump and Recirculation Chiller vide IFB No. TEQIP-III/2020/nits/302 Dated 20-07-2020, the commercial and technical specifications have been revised and can be found at Annexure I and II.

  
Coordinator  
TEQIP III

Copy to :

1. Dr M A Rather, Head Chemical Engineering Department.
2. Chairperson CSC with the request to upload the corrigendum on Institute Website.
3. Concerned File.



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Annexure I

### Qualification Criteria:

1. The supplier should have an Average turnover of Rs. 05 crores in the last 3 years.
2. Similar equipment should have been supplied to NITs, IITs and Govt R&D's.

### Bid Security/ Tender Fee:

In view of the COVID 19 Crises, the Bid Security/ Tender Fee can also be transferred through NEFT/ RTGS in the bank account details given below:

Account Name: TEQIP III NIT Srinagar

Account No.: 0391040100011025

Bank Name: J&K bank

Branch: REC Srinagar

IFSC Code: JAKA0RECSGR

MICR Code: 190051054





The payment receipt may be sent to the office of TEQIP III through mail ([teqip3@nitsri.ac.in](mailto:teqip3@nitsri.ac.in)).

*Handwritten signatures and a long horizontal line in blue ink.*

**Pre-bid Statement "Rotary Evaporator"**

**Annexure II**

Desired by Global Teknologies& Solutions, 304 - AnsalsSundaram, RDC Rajnagar, Ghaziabad - 201002 (U.P.)	Decision
1. <u>Rotation speed may be upto 250 RPM instead of 280 RPM.</u>	Accepted with flexibility. 250 to 280 RPM
2. <u>Stroke distance may be upto 130mm.</u> (It reduces the chances of breakage of flask and RE can in kept in small fume hood also.	Accepted with flexibility. More than 130mm
3. <u>Bath temp range may be 180C instead of 220C.</u> (no applications required the temp more than 160C. RE works under vacuum which reduces the boiling temperature)	Accepted. Between and including 180 °C - 220 °C
4. <u>Bath capacity may be 4 litres instead of 4.5 litres.</u>	Accepted. 4- 4.5 litres
5. <u>53 Integrated database pressure curves instead of 43 only.</u> (It will cover all kinds of solvents for the wide range of sample applications)	Accepted. At least 43 database pressure curves.
6. <u>Vacuum pump ultimate vacuum 10 mbar</u> instead of 5mbar. ( it covers all the applications)	Not Accepted. Ultimate vacuum of 5 mbar.
7. <u>Chiller temperature range may be - 20C</u> instead of -10C. (Few low boiling solvents need the temperature upto -20C otherwise its vapors could not be condensed)	Chiller temperature range -20 °C to -10 °C.
8. Further, we would like to request to add the following specifications:  <ul style="list-style-type: none"> <li>- <u>Removable SS bath pan</u> for easy cleaning and water replacement of bath.</li> <li>- <u>Water/ Oil Bath may have Auto stop and Auto start</u> feature for time and power saving.</li> <li>- <u>Evaporation flasks have built in flask remover</u> to remove the evaporating flask from RE.</li> <li>- <u>Rotary joint's adjustable locking position</u> up to 80 mm; useful when using different capacity evaporating flasks.</li> <li>- <u>Automatic distillation with in-built 53 solvents data.</u></li> <li>- <u>Inbuilt Vapour temperature sensor.</u></li> </ul>	No addition further addition in specifications is required

## Revised Technical Specifications

S.No	Description of Equipment	Specifications	Quantity
1.	<p style="text-align: center;"><b>Rotary Evaporator with vacuum pump and recirculation chiller</b></p>	<p style="text-align: center;"><b><u>ROTARY EVAPORATOR</u></b></p> <p>Electronic lift with provisions for automatic lifting of the flask in case of power failure.            Rotation speed 250 -280 rpm or better with microprocessor control.            Vertical Glass Assembly P&amp;G coating with cooling surface area of 1500 cm<sup>2</sup> or better            Large top hole Vertical condenser with Screw cap with 3.1 mm glass wall thickness. End stop positioner adjustable via button within a range of 170 mm with a stroke distance of more than 130 mm.            Multifunctional combi-clip for easy removal and fixation of evaporating flask            7-stage adjustable immersion angle for the use of different flask sizes with maximum adjustable angle of 40 degrees. Digital display of set and actual bath temperature, rotation speeds and lift position.            Microprocessor controlled bath temperature ranging from ambient to 180 or 220 deg C with an accuracy of ± 1 deg C. Transition of heating bath data to interface through Infrared Communication. Automatic over heat cut-off protection Cordless heating bath for easy emptying and filling of water bath without removing electrical cables.</p> <p>Bath capacity- 4 to 4.5 Litres or better.</p> <p>Evaporating flask from 50-5000 ml usable on the same joint adapter without additional connections.            1 liter Evaporating Flask and Receiving Flask should be provided in standard scope of supply. IP 21 Protection Class for liquid and solid protection</p> <p><b><u>VACUUM CONTROLLER</u></b>            Control unit with LCD 4.3" display for centrally controlling all process parameters of a Rotavapor like rotation speed, bath and coolant temperature, pressure, process time etc.            Manual management of pressure settings and aeration with timer function            Clock-wise and anti-clockwise rotation of evaporating flask for a defined time range.            Integrated aeration valve and precision pressure sensor.            Automatic aeration when pressure is above 1400 bar.            Integrated solvent 43 database methods for setting up dynamic distillation conditions.            Integrated wear part library for common wear parts with order code.            Integrated leak test to check possible leaks.            Measuring range: 1400- 0 mbar.            Control range: ambient to 0 mbar.            Measuring Accuracy: ± 2 mbar            Remote control of Rotavapor, Pump and Chiller. Woulff bottle included with IP 21</p>	01

Handwritten signatures and initials in blue ink, including a large signature that appears to be 'M. S. B.' and other smaller initials.

**VACUUM PUMP**

Single stroke, Two Stage (Heads) Speed control vacuum pump with a flow rate of 1.8 m<sup>3</sup>/h.

Ultimate vacuum – 5± mbar ± 2 mbar

Chemically resistant diaphragm made of PTFE

Glass window to check solvent build up and contamination.

Sound Level adjustable as per EN 61010-1 between 32-57 dBA. Power saving mode.

**Re-circulating Chiller**

Compact and Robust Re-circulating Chiller with a cooling capacity of 550 Watts at 15<sup>0</sup>C

Temperature Range: -20 or -10 to 25<sup>0</sup>C

Temperature display resolution 0.1 °C

Pump Capacity: 2.5 liters/min at 0.6 bar

Coolant: CFC Free

Built-in features like ECO mode, temperature lock and instant start with dynamic pressure adjustments.

The equipment should be provided with all necessary accessories and spare parts for a fully functional unit. List of consumables and spare parts along with operation and service manuals should be provided along with the instrument.

**NOTE:**

- 1) All Models, accessories and spare parts should be from the same manufacturer.
- 2) Specifications will be accepted from original Manufacturer only. Same will be confirmed from his own literature .

*ME*

*AS*

*M*