



**North Eastern Hill University
Shillong 793022**

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Ref: Chem/MV/SERB/2018-02

**NIT for purchase of Low Temperature Reaction Bath with
In-Built Magnetic Stirrer**

NOTICE INVITING TENDER

Sealed quotations (with separate technical and price bids) are invited from reputed manufacturers/ authorized dealers for supply of instruments for the DST-SERB funded project in the Department of Chemistry, North-Eastern Hill University, Shillong. The instruments along with specifications are listed in the Annexure-I

General terms and conditions

- [1] The tender notice may be withdrawn at any time without assigning any reason thereof.
- [2] The decision of the Departmental Purchase Committee in this matter is final.
- [3] DSIR certificate, road permit, etc. will be provided by the department as and when required.
- [4] The instrument along with required accessories should be delivered in good and working conditions, and installed at the Dept. of Chemistry, NEHU, Shillong without any additional cost.
- [5] The quotation should be drawn in the name of 'Dr. Marappan Velusamy, DST-SERB funded project, Principal Investigator, Department of Chemistry, NEHU, Shillong – 793022, Meghalaya, Email: mvelusamy@gmail.com
- [6] The instrument should have three years warranty.
- [7] A letter from the Principal should also be furnished guarantying that all the terms and conditions agreed by the supplier as written in the quotation as well as in the tender notice will be taken care of by the Principal in the event the supplier departs the Principal.
- [8] Payments terms must be either Letter of Credit or Wire transfer after delivery of the consignment.
- [9] Incomplete offer will be summarily rejected.

[10] The last date submission of quotation is 25/05/2018 by 5:00 pm. Quotation received after the due date will not be entertained.

Sd/-
Dr. Marappan Velusamy,
DST-SERB funded project,
Principal Investigator,
Department of Chemistry
North-Eastern Hill University
Shillong - 793022
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Annexure-I

Low Temperature Reaction Bath with In-Built Magnetic Stirrer

Specifications:

Compact bench top low temperature reaction bath with inbuilt magnetic stirring for continuous use at -78 °C in a chemical laboratory.

1. The instrument should be compact bench top and can be fit inside the fume hood.
2. Low temperature and vacuum insulated reaction bath with inbuilt heavy duty magnetic stirrer.
3. Temp control range: 0 to -80 °C or better.
4. Temp accuracy: $\pm 1^\circ\text{C}$
5. Temp Control: PID controller
6. Display: Digital
7. Magnetic Stirrer with Stirring Capacity: 100 ~ 800 rpm
8. Chiller: Air cooling 450 W x 2
9. Heater: 250 W for precise temperature control
10. Reaction bath Volume: 3.5 L or better
11. Applicable reaction vessel: 50 - 500 ml round bottom flask
12. Neck size of container: Dia. 20 ~ 85 mm with variable shutter
13. Should have provision for gas parching, gas flashing (Ar, N₂ etc) and sample addition in enclosed condition without opening the bath shutter.

14. Power: 220 V, AC, 50/60 Hz with Indian plug system.
15. Magnetic Stirrer: 450 W
16. Operation Time: Auto start & stop timed
17. Safety features: Over heat protector, Over-load relay for compressor, Breaker for electrical leakage and excess current, sensor fault, Independent over temperature protector.
18. It's should come complete with lid with variable opening shutter, clamp sets for standard & small flasks.