



UGC-Centre for Advanced Studies in Chemistry
DEPARTMENT OF CHEMISTRY
NORTH-EASTERN HILL UNIVERSITY, NEHU PERMANENT CAMPUS,
UMSHING, SHILLONG 793 022 (INDIA)

Date: 26/11/18

Ref: TSBB/DBT/Equip./26/11/18

Invitation of Expression of Interest

Sealed expression of interests (EOIs) are invited for a **Synthesis Reactor Monowave 50 +P (Anton Paar)** from manufacturer/authorized dealers with the following specifications:

1. System should have conventionally heated reactor for condensation reactions, nucleophilic substitutions, cycloadditions, Metal-catalyzed coupling reactions, ionic liquid syntheses, Grignard reactions, Nanomaterial Synthesis etc. under sealed vessel conditions.
2. System should have provision of using borosilicate glass vials (10 ml capacity).
3. System should have Max. Temperature: 250 deg C or higher.
4. System should have Max. Pressure: 20 bar (290 psi) or higher.
5. System should have integrated capacitive touch screen for easy method of programming.
6. System should have integrated display for visual temperature control and reaction progress during the whole experiment.
7. System should have an integrated pressure sensor to measure display as well as document reaction pressure.
8. System should have inbuilt magnetic stirrer device with variable speed from 300 rpm up to at least 1200 rpm or more to ensure uniform temperature in the reaction volume.
9. System should have large inbuilt touch screen display with capability for online graphical display of reaction parameters like pressure and temperature against time and review of previous reaction runs.
10. System should have integrated cooling system (fan).
11. System must include basic tools such as 5# reaction vials G10, 5# silicone cap including PTFE Septum, 1# PTFE Septum d=22 mm (50 pcs), 1# Stir bar 10x3 mm (10 pcs).
12. System should have facility for the direct export of data to RTF or CSV formats via USB ports.
13. Electricity requirements: 230 volts, 50Hz.

14. System should be supplied with additional 100 nos. of borosilicate glass vials of 10 ml capacity with sustainable material of construction and allow for multiple reaction runs to be conducted in the same vial.
15. System should be supplied with a suitable single-phase 5KVA servo stabilizer.
16. The price must be quoted in INR against F.O.R. Department of Chemistry, North-Eastern Hill University, Shillong-793022.
17. System should have comprehensive warranty for five years from the date of installation.
18. Copy of the authorization certificate and proprietary certificate should be attached with EOIs.
19. The payment will be made after installation and satisfactory performance.
20. The decision of the department purchase committee shall be final.

The EOIs must reach **Prof. T. S. Basu Baul, PI-DBT Project, Department of Chemistry, North-Eastern Hill University, NEHU Permanent Campus, Shillong-793022, Meghalaya on or before 7th Dec. 2018.**

Sd/-