

DSC REQUEST FORM FOR INTERNAL USER

Instrument Details:

- **Instrument Name:** Differential Scanning Calorimetry
- **Model:** Thermo Plus EVO2
- **Make:** Rigaku
- **Analysis Temperature Range:** -150°C to 700°C

Instructions:

1. Sample form: Powder (~25 mg).
2. The analysis cannot be carried out if the temperature range and the heating rate/heating cycle are not specified.
3. Explosive, poisonous samples and samples giving rise to toxic/obnoxious gases/fumes on heating cannot be undertaken for DSC.
4. The sample holders are made of Aluminum (Al).
5. To safeguard the instrument from damage, it is essential to state the decomposition products associated with the heating cycle of your sample. Functional groups that might potentially explode or form foams (e.g., Azide, Perchlorate, poly-nitro, nitrogen-rich compounds) are strictly prohibited.
6. To repeat the sample analysis, the student must fill out a new request form and wait for their turn.
7. **TGA data is mandatory** for any DSC analysis. Without TGA data, DSC analysis will not be performed.

1. Have you recorded the TGA data for your samples? Yes / No

2. Name of the User: _____

3. Roll No: _____

4. User Email ID: _____

5. Mobile Number: _____

6. Department / Institution: _____

7. Name of Guide: _____

8. Guide Email ID: _____

9. Lab Intercom No: _____

10. Nature of Project (Select one):

[1] PhD [2] Dual Degree [3] BTech [4] MTech [5] Consultancy
[6] Sponsored Project [7] Other: _____

12. Number of Samples (Max 3 at a time): _____

13. Sample Code: _____

14. Material Details (Elements/Functional Groups Present):

15. Heating Cycles (If required, please specify):

Example: -

[1] Cycle 1: Heat from RT to 250°C [2] Cycle 2: 250°C to -50°C

[3] Cycle 3: -50°C to RT [4] Other if any cycle _____

16. Heating Rate :10 °C/min

17. Maximum Temperature (in °C): _____

18. Measurement Atmosphere : Nitrogen

19. Additional Information (If any): _____

Note: Data will be shared in ASCII format to the user's email ID provided in the form.