Department of Chemistry

IIT Bombay

TG-DTA Request Form for Internal User

Instrument Name: TG-DTA (Rigaku) Model: - STA8122
Analysis Temperature Range: Ambient to 1000°C

Instructions:

1. **Sample Form:** Powder (~20 mg).
2. **Temperature Range & Heating Rate:** The analysis cannot be carried out if these parameters are not specified.
3. **Prohibited Samples:** Explosive, poisonous samples, or those releasing toxic/obnoxious gases/fumes upon heating cannot be analysed.
4. **Crucible Materials:** The sample holders are made of Aluminium (Al) and Platinum (Pt). Ensure that your sample does not react with these materials.
5. **Decomposition Products:** You must specify the decomposition products associated with the heating cycle. Any functional groups that may explode or foam are strictly not allowed (e.g., Azide, Perchlorate, poly-nitro, nitrogen-rich compounds).
6. **Low Heating Rate Samples:** If a sample requires a low heating rate and takes longer, it will be scheduled efficiently to utilize instrument time. Such samples will not necessarily be analysed as per the queue.
7. **Repeat Analysis:** A new form must be filled out for each repeat analysis, and the sample will be analysed as per the queue.

All information is mandatory.

Personal Information

1. **Name of the User:** _____
2. **Roll No:** _____
3. **User Email ID:** _____
4. **Mobile Number:** _____
5. **Department / Institution:** _____
6. **Name of Guide:** _____

7. **Guide Email ID:** _____

8. **Lab Intercom No:** _____

Work Request Information

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

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

10. **Sample Code:** _____

11. **Specify decomposition Product.**

_____

12. **Material Details (Elements/Functional Groups Present):**

_____

Experimental Parameters

13. **Heating Rate:**(select only one)
[1] 10 °C/min
[2] 15 °C/min
[3] 20 °C/min
[4] Any Other_____
Note: -Heating rate below 10 °C/min will be charged double the actual analysis charges

14. **Maximum Temperature (°C):** _____

15. **Measurement Atmosphere:** Nitrogen / Zero Air (Select only one)

16. **Additional Information (If any):**

_____

Note: Final data will be shared in ASCII format to your email.