

**DSC/MCDSC TESTING & ANALYSIS  
SERVICE**

**For Laboratory Use Only**

Received date :  Accepted  Rejected  
 Ref. no. : DSC/A/20\_\_\_/  
 Quotation no. :  
 Date completed :  
 Total Charge : RM  
 Pan : Own / Dept.  
 Operator :  
 Officer in Charge :  Mr. Hafizie  Mrs. Azlin

**APPLICANT INFORMATION**

NAME :  
 SUPERVISOR :  
 MATRIX NO :  
 Please (√) at the relevant box:  
 RESEARCH ASSISTANT  
 UNDERGRADUATE / PROJECT STUDENT  
 POSTGRADUATE (Master/PhD)  
 OTHERS (Postdoctoral/Lecturer)  
 CONTACT NO. :  
 EMAIL :

**SAMPLE INFORMATION**

Type of samples  
 polymeric materials  
 pharmaceuticals  
 food  
 pure organics  
 composite  
 others  
 Sample Form  
 Solid  
 Powder  
 Liquid  
 Remaining Sample  
 Collect  
 Waste

**DETAILS OF ANALYSIS**

Sample Name/Code	Thermogravimetric Analysis (TGA)	Differential Scanning Calorimeter (DSC)			
	<sup>1</sup> Decomposition Temp. °C	Start Temperature, °C (max. -60°C)	End Temperature, °C (max. 450°C)	Scan Rate, °C/min	Gas Flow Rate (ml/min)

**Program Parameters for DSC:**

- Heat Only  
 Heat – Cool  
 Heat – Cool – Heat  
 .....

<sup>1</sup> Compulsory to fill up. Please attach TGA result. Officer will rejected if no TGA result is attached.

**CONFIRMATION OF USING SERVICE**

Applicant signature : \_\_\_\_\_

Date : \_\_\_\_\_

## RESEARCH FUND INFORMATION

- (1) For HIR, please issue Journal Transfer Form and complete the form. Send a copy of completed form to DSC laboratory. For Internal Grant (UMRG, PPP, BKP, .) and External Grant (SCIENCE Fund, FRGS, .)

### Please do fund transfer to

Account : BUKU PETUNJUK JABATAN KIMIA J-21030-UM.0000003/KWJ.NP.BP  
 Revenue Code : H724001  
 Description : Usage of DSC instrument  
 Amount : As per service charge

- (2) Service charge as follow. For **latest charge** please refer to Chemistry Department Central Facility Website : cenfac.um.edu.my

Equipment	Price (RM/sample/scan)					
	Final Year Project (FYP)		Chemistry Department		Faculties within UM	
DSC	30.00 (use own pan)	50.00 (use department pan)	50.00 (use own pan)	80.00 (use department pan)	80.00 (use own pan)	110.00 (use department pan)

### \*Tzero Pan & Tzero Hermetic Lid

- (3) Application forms that do not specify the decomposition temperature along with **evidence from journals/TGA analysis results** will be REJECTED immediately
- (4) The print-out Invoice Commitment must be approved by Supervisor and Head of Department.
- (5) Please submit together with the application form.

**We agree to make the payment in accordance to the service charge issued by Department of Chemistry, Faculty of Science, University of Malaya**

RESEARCH GRANT NAME : RESEARCH GRANT NO. :

SUPERVISOR'S SIGNATURE : DATE :  
& OFFICIAL STAMP

## IMPORTANT INFORMATION

- Minimum sample weight is 10mg.
- Maximum temperature allowed is 450°C for DSC.
- Standard scan rate 10°C/min.
- Training will be provided upon request. Trained users are fully responsible for the instrument and only allowed to use the instrument with the permission and supervision of DSC staff.

For any queries please contact:

Resource person	Name	Phone	Email
Assistant Science Officer	Muhamad Hafizie Muhamad Sofi	03-7967 7022 ext: 2120	fiziekedah@um.edu.my
Assistant Science Officer	Noor Azlin Binti Che Din	03-7967 7022 ext: 2122	azlin_cd@um.edu.my
Science Officer	Muhammad Fauzan Zainudin	03-7967 7022 ext. 2539	fauzan@um.edu.my
Supervisor	Dr. Shameer Hisham	03-7967 4081	shameerh@um.edu.my

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 Chemistry Department  
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