



### 400 MHz FT-NMR Spectroscopy Analysis Request Form

**Requestor Details:**

Name : \_\_\_\_\_ Tel. no. : \_\_\_\_\_  
 Address : \_\_\_\_\_ H/P no. : \_\_\_\_\_  
 \_\_\_\_\_ Fax no. : \_\_\_\_\_  
 \_\_\_\_\_ Email : \_\_\_\_\_  
 \_\_\_\_\_

**Sample Details:**

No.	Sample Code	Solvent	Experiment (e.g. <sup>1</sup> H, <sup>13</sup> C, H-H COSY, HMQC & HMBC)	Weight (mg)	Suggested Experimental Time	Charges (RM) <i>*to be filled by officer-in charge</i>
<b>Total</b>						

\* Extra fees will be charged upon the request for NMR tube and solvent used in sample preparation.  
 \* Additional charges will be imposed accordingly if analysis is conducted beyond the suggested experimental time.

**Sample Properties:**

Carcinogenic     Toxic     Corrosive     Flammable     Explosive  
 Odour     Others, specify : \_\_\_\_\_

**Handling Requirements:**

Store samples in the fridge     Store sample in the freezer     Handle sample in the fume hood  
 Handle sample by wearing glove     Other handling instruction : \_\_\_\_\_

Sample to be returned after analysis:     Yes     No    (If No, please enclose disposal procedure in attachment)

\*A postal handling charge of RM 10 will be imposed for returning of sample by post.  
 \*UTAR shall not be responsible or be liable in relation to any loss or damage to your sample.

I agree that all the information provided above are true.

Processed by:

Verified by:

\_\_\_\_\_  
 Signature of requestor  
 Date :

\_\_\_\_\_  
 Signature of officer-in charge  
 Name:

\_\_\_\_\_  
 Signature of HoD/Dean  
 Name :

Date :

Date :

### 400 MHz FT -NMR Spectroscopy Analysis Rate

#### Charges for NMR analysis per sample

Experiment Time	Rate (Ringgit Malaysia)							
	<sup>1</sup> H	<sup>13</sup> C	DEPT	H-H COSY	HSQC	HMQC	HMBC	NOESY
≤ 10 min	50.00	-	-	-	-	-	-	-
≤ 30 min	70.00	80.00	80.00	80.00	80.00	80.00	80.00	-
30 min < x ≤ 1 hr	100.00	100.00	100.00	140.00	140.00	140.00	140.00	200.00
1 hr < x ≤ 2 hrs	-	150.00	150.00	200.00	200.00	200.00	200.00	300.00
2 hrs < x ≤ 3 hrs	-	200.00	200.00	260.00	260.00	260.00	260.00	400.00
3 hrs < x < 6 hrs	-	350.00	350.00	440.00	440.00	440.00	440.00	600.00
Additional hour after 6 hours	-	50.00 per hour	50.00 per hour	60.00 per hour	60.00 per hour	60.00 per hour	60.00 per hour	100.00 per hour

#### Charges for solvent:

<i>Solvent</i>	<i>Rate per sample (RM)</i>
CDCl <sub>3</sub>	45.00
D <sub>2</sub> O	50.00
CD <sub>3</sub> OD	55.00
DMSO- <i>d</i> <sub>6</sub>	60.00
Acetone- <i>d</i> <sub>6</sub>	60.00

#### Analysis request guidelines:

1. Sample(s) sent with incomplete application form will not be accepted.
2. Preparation of sample in a 5 mm outer diameter NMR tube is encouraged.
3. For self-prepared sample, appropriate solvent should be used to obtain better result.
4. 5 mg of sample (at least) is suggested for analysis to obtain practical result.
5. Data acquired will be stored for one month, after which it will be permanently deleted.
6. Upon completion of analysis, an invoice will be issued by Division of Finance, UTAR addressed to the requestor.