



**Material Characterization Laboratory (MCL)**  
 Department of Chemical and Environmental Engineering  
 Faculty of Engineering, Universiti Putra Malaysia  
 43400 UPM Serdang, Selangor, Malaysia  
 Tel:603-89471595 Fax:603-86567120 Email:kkamcl1595@gmail.com

**F3-A**

**Job Number**  
 20\_\_\_/FK/MCL/J\_\_\_

**APPLICATION FOR TESTING SERVICES FORM****APPLICANT**

Organization and Address : \_\_\_\_\_  
 \_\_\_\_\_  
 Name : \_\_\_\_\_  
 Tel. No. : \_\_\_\_\_  
 E-mail Address : \_\_\_\_\_  
 Requirements :  Testing  Raw Data  Test Report  
 Others (please specify): \_\_\_\_\_

**SAMPLE/PRODUCT INFORMATION**

Sample Name : \_\_\_\_\_  
*(if more than one, please attached with a list of sample)*

Test Methods : \_\_\_\_\_

Number of Sample : \_\_\_\_\_

**SAMPLE DISPOSAL BY:**  
 Laboratory (with cost of RM \_\_\_\_\_)  
 Customer (within one month from issuance of test report)

Description of samples:  
*(weight, volume, size, expiry date, etc.)*

**COVENANT OF APPLICANT****TYPE OF PAYMENT**

**By signing this form I take full responsibility for the payment of the services rendered.**

Signature of applicant and official stamp:

Date :

- VotNo:** \_\_\_\_\_ - \_\_\_\_\_ (PTJ)
- Cheque/Bank Draft/Postal Order**  
*(payable to BENDAHARI UPM)*
- Cash Receipt from Bendahari**
- Bank Transfer (CIMB Bank)**  
 KIRA-KIRA UNIVERSITI PUTRA  
 MALAYSIA  
 1215-0005004-05-0

**Local Order (LO)/Purchase Order (PO)**

Address to:  
 BENDAHARI UPM,  
 BANGUNAN PENTADBIRAN,  
 UNIVERSITI PUTRA MALAYSIA,  
 43400 UPM SERDANG,  
 SELANGOR DARUL EHSAN, MALAYSIA.

**FOR LABORATORY USE**

	Yes	No	Remarks (guide)		Yes	No	Remarks
Sample (Adequate)	<input type="checkbox"/>	<input type="checkbox"/>	<i>(weight, volume, size, expiry date, etc.):</i>	Any equivalent method	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of sample (Acceptable)	<input type="checkbox"/>	<input type="checkbox"/>	<i>(liquid/solid/gas/wet/dry):</i>	Competence Personnel	<input type="checkbox"/>	<input type="checkbox"/>	
Appropriate method	<input type="checkbox"/>	<input type="checkbox"/>	<i>(equipment):</i>	Others/Subcontract	<input type="checkbox"/>	<input type="checkbox"/>	
Toxicity/Hazardous	<input type="checkbox"/>	<input type="checkbox"/>	<i>(biohazard/carcinogen/radioactive etc.):</i>	Commencement of Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Inform Customer <input type="checkbox"/> Return Sample <input type="checkbox"/> Others
<b>DATE OF SAMPLE RECEIVED:</b>	<b>SAMPLE DISPOSAL BY CUSTOMER ONLY:</b>  Received by : _____  Customer's Signature Name: _____ Date: _____						
<b>EXPECTED TIME OF COMPLETION (AGREED) :</b>							
Reviewed by : TM/DTM/Technical Staff  _____ Date :							

\* Please refer Page 2 for list of testing



**Material Characterization Laboratory (MCL)**  
 Department of Chemical and Environmental Engineering  
 Faculty of Engineering, Universiti Putra Malaysia  
 43400 UPM Serdang, Selangor, Malaysia  
 Tel:603-89471595 Fax:603-86567120 Email:kkamcl1595@gmail.com

# F3-A

**Job Number**  
 20\_\_\_/FK/MCL/J\_\_\_

### TESTING FACILITIES

*Please Mark (✓) Test(s) Required*

#### Material Characterization Laboratory (MCL)

Block J2.1, Department of Chemical and Environmental Engineering

#### 1. Chemical Compositional Analysis

- |                                 |                                       |                                  |
|---------------------------------|---------------------------------------|----------------------------------|
| <input type="checkbox"/> GC/FID | <input type="checkbox"/> GC/TCD       | <input type="checkbox"/> GC/MS   |
| <input type="checkbox"/> GC/ECD | <input type="checkbox"/> HPLC/ELSD/RI | <input type="checkbox"/> HPLC/UV |
| <input type="checkbox"/> FTIR   | <input type="checkbox"/> FPLC         | <input type="checkbox"/> UV/Vis  |

#### 2. Elemental Analysis

- |                              |                              |                             |                              |                             |
|------------------------------|------------------------------|-----------------------------|------------------------------|-----------------------------|
| <input type="checkbox"/> Pb  | <input type="checkbox"/> Fe  | <input type="checkbox"/> Cd | <input type="checkbox"/> Cr  | <input type="checkbox"/> Mn |
| <input type="checkbox"/> Cu* | <input type="checkbox"/> Zn* | <input type="checkbox"/> Sn | <input type="checkbox"/> Ag  | <input type="checkbox"/> Al |
| <input type="checkbox"/> As  | <input type="checkbox"/> Hg  | <input type="checkbox"/> B  | <input type="checkbox"/> Ni* | <input type="checkbox"/> Ba |
| <input type="checkbox"/> Be  | <input type="checkbox"/> Bi  | <input type="checkbox"/> Ca | <input type="checkbox"/> Ga  | <input type="checkbox"/> K  |
| <input type="checkbox"/> Li  | <input type="checkbox"/> Mg  | <input type="checkbox"/> Mo | <input type="checkbox"/> Na  | <input type="checkbox"/> Rb |
| <input type="checkbox"/> Se  | <input type="checkbox"/> Sr  | <input type="checkbox"/> Te | <input type="checkbox"/> Ti  | <input type="checkbox"/> V  |

#### 3. Thermal Analysis

- DSC\*    TGA    CHN    S    DMA

#### 4. Imaging Analysis

- SEM                       SEM/EDX                       SPM  
 Light Microscope

#### 5. Laser/X-ray Analysis

- Particle Size Analyser                       XRD

#### 6. Water Analysis

- BOD                       TOC                                       Turbidity  
 COD                       TSS                                       TDS  
 pH                       Elemental (*see no.2*)

#### 7. Surface Area Analysis

- Surface area (B.E.T, Langmuir & Porosity)

\* Accredited to MS ISO/IEC 17025 (SAMM 711)