UNIVERSITI MALAYSIA PAHANG AL-SULTAN ABDULLAH

CENTRE FOR RESEARCH IN ADVANCED FLUID AND PROCESSES
UNIVERSITI MALAYSIA PAHANG AL-SULTAN ABDULLAH
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DOC NO.: FC/F/03
REV: 03
EFFECTIVE DATE:
01/01/2024

EQUIPMENT REQUISITION FORM

STUDENT'S INFORMATION

NAME: .....

ID NO: .....

EQUIPMENT FOR TESTING (Please tick (√) the applicable box)

SEM

- ☐ Hitachi TM3030Plus ☐ Jeol JSM-IT200
- ☐ Surface imaging
- EDX: ☐ Elemental Analysis
  ☐ Mapping
  ☐ Line
- ☐ Coating ☐ Non-coating
- Type of sample: ☐ Powder / Fiber / Solid
  ☐ Metal
  ☐ Film
  ☐ Etc.: .....

DSC

- Ramping: Initial Temperature: .....
  Final Temperature: .....
- Temperature Program (if any):
  .....
  .....
- Heating Rate: .....
- Gas: ☐ Nitrogen
- Gas flow rate: .....
- Type of sample: ☐ Solid ☐ Liquid

FTIR

- Method: ☐ ATR ☐ KBR (for powder only)
- Spectrum: ☐ Absorbance ☐ Transmittance
- Library: ☐ Yes ☐ No
- Spectrum: ☐ Overlay ☐ Stacking
- Type of sample:
  ☐ Powder ☐ Solid ☐ Liquid

TGA

- Ramping: Initial Temperature: .....
  Final Temperature: .....
- Temperature Program (if any):
  .....
  .....
- Heating Rate: .....
- Gas: ☐ Nitrogen ☐ Oxygen ☐ Air
- Gas flow rate: .....
- Type of sample: ☐ Solid ☐ Liquid

UV-VIS NIR

- Wavelength: ☐ Absorbance
  ☐ Transmittance
  ☐ Reflectance (solid/ film)
- Wavenumber: ☐ Scan From: ..... to .....
  ☐ Scan at .....
  ☐ Scan at .....
  ☐ Scan at .....
- Type of sample: ☐ Solid ☐ Liquid

ICP-OES

- Standard 1:
  As, K, La, Li, Mn, Ni, Sr, Zn, Ba, Mg
- Standard 2:
  K, Si, Al, B, Ba, Na, Ag
- Standard 3:
  As, Tl, Cd, Pb, Se

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ROTARY EVAPORATOR • Temperature: …… • Rotational Speed: …….. • Type of sample: □ Liquid	• Standard 4: Ag, Al, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, In, K, Li, Mg, Mn, Na, Ni. Pb, Sr, Tl, Zn • Type of sample: □ Aqueous □ Oil
VISCOMETER • Speed: …….. • Time: …….. • Data Point: …… • Type of sample: ……..	**FLASH POINT** • Expected Flash: …….. • Type of sample: ……..
INCUBATOR SHAKER • Time: …… • Temperature: …… • Type of sample: ……	**FURNACE** • Ramping: …….. • Isothermal: …….. °C …….. hour • Program: …….. …….. • Type of sample: ……..
X-RAY PHOTON SPECTROSCOPY (XPS) • □ Survey scan • □ Survey with narrow scan Expected elements: ..... • □ Mapping • □ Line	**TRANSMISSION ELECTRON MICROSCOPE (TEM)** • □ Standard Imaging • □ Cryo-TEM Imaging • □ Ultra-cryo Microtome
X-RAY DIFFRACTION (XRD) • Analysis: □ Phase Identification □ Quantification • Method: □ Default □ Custom (please fill in the parameter below) • Start angle (°): …… • End angle (°): …… • Step size (°): …… • Time per step (s): ……	**X-RAY FLUORESCENE (XRF)** • Results: □ Elemental □ Oxide • Type of sample: □ Powder □ Liquid • Method: □ Loose powder □ Liquid