

2014-15



FSE X-Ray Analytical Equipment Monthly Monitoring

Procedure to be Followed

- 1.1 Switch each piece of equipment on and set to normal operating settings. Measure background level. At a distance of 3 m from each device check the background level using radiation monitor. Note this count rate in the log-book.
- 1.2 Visually inspect each enclosure for signs of mechanical damage. Record result of visual check in log-book.
- 1.3 Switch each device to the maximum normal settings (kV and mA) and place a test object in the sample chamber. Record the count rate reading around each device.
- 1.4 Check that warning lights (if present on a device) are working
- 1.5 Test any interlocked doors and emergency stop buttons. Testing should be carried out by opening a door and attempting to activate the X-rays or activating the emergency stop and trying to activate the X-rays.

For further information consult the local rules for ionising radiation

* Not yet operational.

Radiation Monitor Serial Number: 032051

November 2014 18/11/14	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 * Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	2	2	N/A	2
1.2 Visual Inspection	✓	✓	✓	N/A	✓
1.3 Count rate at normal operation (counts/sec)	2	2	2	N/A	2
1.4 Warning lights working (Y/N)	Y	Y	Y	N/A	Y
1.5 Interlocks/emergency stops working (Y/N)	Y	Y	Y	N/A	Y
J. McHolsen		J. McHolsen		18/11/14	
December 2014 16/12/14	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	2	2	N/A	2
1.2 Visual Inspection	✓	✓	✓	"	✓
1.3 Count rate at normal operation (counts/sec)	2	2	2	"	2
1.4 Warning lights working(Y/N)	Y	Y	Y	"	Y
1.5 Interlocks/emergency stops working (Y/N)	Y	/	Y	"	/
J. McHolsen					
16/12/14					
January 2015 30/1/15	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	/	2	/	2
1.3 Visual Inspection	✓	/	✓	/	✓
1.3 Count rate at normal operation (counts/sec)	2	/	2	/	2

J. McHolsen

[illegible]

✓ all OK

✓ - Not checked

April 2015 24/4/15	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	2	/	/	2
1.6 Visual Inspection	✓	✓	/	/	✓
1.3 Count rate at normal operation (counts/sec)	2	2	/	/	2
1.4 Warning lights working(Y/N)	Y	Y	/	/	Y
1.5 Interlocks/emergency stops working (Y/N)	Y	Y	/	/	Y
J. M. M. M.					
May 2015 27/5/15	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	/	/	/	2
1.7 Visual Inspection	✓	/	/	/	✓
1.3 Count rate at normal operation (counts/sec)	2	/	/	/	2
1.4 Warning lights working(Y/N)	Y	/	/	/	Y
1.5 Interlocks/emergency stops working (Y/N)	Y	/	/	/	Y

J. M. M. M.

Radiation Monitor Serial Number: 032051

June 2015 30/6/15	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	/	/	2	2
1.2 Visual Inspection	✓	/	/	✓	✓
1.3 Count rate at normal operation (counts/sec)	2	/	/	2	2
1.4 Warning lights working (Y/N)	Y	/	/	✓	Y
1.5 Interlocks/emergency stops working (Y/N)	Y	/	/	✓	Y
July 2015 24/7/15	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	/	/	2	2
1.2 Visual Inspection	✓	/	/	✓	✓
1.3 Count rate at normal operation (counts/sec)	2	/	/	2	2
1.4 Warning lights working(Y/N)	Y	/	/	✓	Y
1.5 Interlocks/emergency stops working (Y/N)	Y	/	/	✓	Y
August 2015	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)					
1.3 Visual Inspection					
1.3 Count rate at normal operation (counts/sec)					

XRF

2

✓

5

Y

Y

J. Madsen

1.4 Warning lights working(Y/N)					
1.5 Interlocks/emergency stops working (Y/N)					
September 2015 n/a/15	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	/	/	/	2
1.4 Visual Inspection	✓	/	/	/	✓
1.3 Count rate at normal operation (counts/sec)	2	/	/	/	2
1.4 Warning lights working(Y/N)	✓	/	/	/	✓
1.5 Interlocks/emergency stops working (Y/N)	✓	/	/	/	✓
October 2015 23/10/15	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	/	/	/	2
1.5 Visual Inspection	✓	/	/	/	✓
1.3 Count rate at normal operation (counts/sec)	2	/	/	/	2
1.4 Warning lights working(Y/N)	✓	/	/	/	✓
1.5 Interlocks/emergency stops working (Y/N)	✓	/	/	/	✓

J. Archdale

November 2015	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	2	/	2	2
1.6 Visual Inspection	✓	✓	/	✓	✓
1.3 Count rate at normal operation (counts/sec)	2	2	/	2	2
1.4 Warning lights working(Y/N)	✓	✓	/	✓	✓
1.5 Interlocks/emergency stops working (Y/N)	✓	✓	/	✓	✓
	10/11/15	6/11/15	10/11/15	6/11/15	10/11/15
	J. M. ...				
December 2015	Bruker D8 Advance ECO XRD	XPS System	Panalytical Minipal 4 X-ray Fluorescence Spectrometer	Phillips CM20 Transmission Electron Microscope	Leo Carl Zeiss) 1455VP Scanning Electron Microscope
1.1 Background Level (counts/sec)	2	/	/	2	/
1.7 Visual Inspection	✓	/	/	✓	/
1.3 Count rate at normal operation (counts/sec)	2	/	/	2	/
1.4 Warning lights working(Y/N)	✓	/	/	✓	/
1.5 Interlocks/emergency stops working (Y/N)	✓	/	/	✓	/
	21/12/15	←————→			
	J. M. ...				

