

## Inspection Checklist – Materials Science – 2<sup>nd</sup> Floor – Area 1 – Long Form

Date: \_\_\_\_\_ Rm # : 2C19, 2C19.1, 2C24, 2C25, 2C25.1, 2C25.2, 2C25.3, 2C25.4, 2C27, 2C26, 2C26.1, 2C32, 2C34

Supervisors: Rob Peace, Akindele Odeshi, Ike Oguocha, Qiaoqin Yang, Jerzy Szpunar

Inspection conducted by: \_\_\_\_\_ Inspection reviewed by: \_\_\_\_\_

Acceptable/Marginal/Unacceptable/Not Applicable

<b>1.0 Laboratory Housekeeping &amp; Practices</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
1.1 No Food or drink in labs (i.e. refrigerators or microwaves)					
1.2 Lab and storage areas uncluttered (i.e. aisles and exits free from obstructions)					
1.3 Glassware free from cracks, chips, sharp edges and other defects					
1.4 Containers used to collect broken glass labeled and appropriate					
1.5 Adequate lighting, ventilation and temperature control in work area					
1.6 Lab bench coverings in good condition					
1.7 Other					

<b>2.0 Personal Protective Equipment (PPE)</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
2.1 Lab coats/uniforms stored separately from street clothes					
2.2 Protective clothing available and appropriate for the type of work being conducted (i.e. gloves, goggles, safety glasses, boots, lab coats, face shields, etc.)					
2.3 Other					

<b>3.0 Hazard Communication &amp; Storage</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
3.1 Appropriate warning signs (biological, chemical, radiological) and labels posted where required (i.e. cupboards, fridges, entrances to laboratories, etc.)					
3.2 Chemical inventory list available and updated (includes chem. name, location & volume)					
3.3 Incompatible substances segregated					
3.4 Corrosives and flammables stored below eye level					
3.5 Hazardous substances used/stored in the laboratory limited to small quantities					
3.6 Tops of cabinets and shelves free from stored items (i.e. 45 cm space between ceiling and items)					
3.7 All hazardous substance containers labeled appropriately (i.e. WHMIS labeling requirements)					
3.8 Fume hoods are not used as storage locations					
3.9 Hazardous substances not stored under sinks					
3.10 Flammable liquid storage cabinets closed and are properly labeled					
3.11 Flammables stored on open shelves in glass or plastic containers within permissible quantities (limit ≤ 50L)					
3.12 Warning signs posted on storage areas (e.g. refrigerators), equipment and laboratories consistent with hazards within					
3.13 Other					

<b>4.0 Waste Handling: Non-Hazardous, Biological, Chemical, Radiological</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
4.1 Hazardous wastes not allowed to accumulate in the lab; disposed of regularly					
4.2 Waste containers labeled according to the Hazardous Waste Disposal Manual					
4.3 Is secondary containment provided for chemical containers stored on the floor					
4.4 Other					

<b>5.0 Compressed Gas Cylinders</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
5.1 Gas cylinders properly secured to prevent falling (secured with a strap or chain)					
5.2 Cylinder caps applied when cylinders not in use or in transport					
5.3 All gas cylinders properly marked as to their contents					
5.4 Hoses, tubing and regulators in good condition					
5.5 Other					

<b>6.0 Means of Egress and Emergency</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
6.1 Emergency response and evacuation plans available (i.e. fire, power outage, spill, etc)					
6.2 Emergency Contact Information form posted and current					
6.3 Spill response kits available for the appropriate hazards and routinely inspected					
6.4 Other					

<b>7.0 Safety Equipment</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
7.1 Safety showers and eyewash stations clearly labeled, checked monthly and free from obstructions					
7.2 Charpy tester properly stored – chained and locked when not in use					
7.3 Fire extinguishers checked annually and free from obstruction					
7.4 First-aid supplies and register (logbook) readily available and clearly labeled					
7.5 Fume hood sash and inflow annually tested					
7.6 Other					

## Free Standing and Bench Tools

<b>8.0 Drill Press</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
8.1 Drive mechanism guarded - no open belts, gears or chains					
8.2 Tool bit removed after use					
8.3 Fillings and tailings cleaned up after use					
8.4 Emergency stop is in good condition and functional – easily accessible					
8.5 Free standing drill press is stable – free standing drill presses are top heavy and may tip if not secured or mounted to adequate base					
8.6 Other					

<b>9.0 Chop Saw – Wood/Abrasive/Metal</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
9.1 Functioning blade brake - check					
9.2 Saw Blade has no missing or broken teeth					
9.3 Saw Blade Max RPM does not exceed machine speed					
9.4 Auto guard activates - check					
9.5 Noise level indicated					
9.6 Other					

<b>10.0 Sanders – Belt and Disk</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
10.1 Drive mechanism guarded – no open belts, gears or chains					
10.2 Power supply cord in good condition and hard wired to machine – no cuts or exposed external wires					
10.3 Other					

<b>11.0 Hydraulic Equipment – Press / Roll mill</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
11.1 Emergency stop easily accessed and functions					
11.2 Hydraulic hoses/lines in good condition – no leaks, cracks or bulges					
11.3 Drive pumps shafts/couplers guarded					
11.4 Other					

<b>12.0 Work Shop House Keeping</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
12.1 Slip, Trip and Fall hazards removed					
12.2 Racking/shelves secured to wall or bracketed – very critical if narrow and tall					
12.4 Isles kept clear and exits not blocked					
12.5 Cords, wires and hoses stored when not in use (coiled)					
12.6 Cords secured down when exposed to foot traffic					
12.7 Other					

<b>13.0 Electrical</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
13.1 Access to electrical panels not blocked or covered by materials – 1 meter in-front must be clear at all times					
13.2 Cords in good condition					
13.3 Extension cords not a trip hazard or used with high current devices					
13.4 Other					

<b>14.0 Ovens/Forges</b>	<b>A</b>	<b>M</b>	<b>UA</b>	<b>N/A</b>	<b>Comments</b>
14.1 Protective heat resistant gloves are readily accessible and in good condition					
14.3 Heat resistant aprons- good condition with no holes, rips or tears					
14.5 Furnace wall lining in good condition					
14.6 Other					

**This inspection list is in no means exhaust all possible hazards or areas of concerns as a complete checklist. Further items can be and should be added if necessary.**

<b>Miscellaneous &amp; Notes</b>