**Chemical Engineering Local Lab Induction Checklist – X-Ray Labs**

All new people working in labs (including visitors, MScs, MEng, PhD, Postdocs) must be given a local lab induction on their first day working in the lab. Research groups may edit the form to remove any items which are not relevant and add those which they wish to cover.

Other mandatory safety training for lab users is:

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| - Guided Local Fire Induction (Area Safety Representative) | - Laboratory Safety In Chemical Engineering (Moodle) |
| - Basic Fire Safety (Moodle) | - Risk Assessment Workshop (new PhD/MSc only) |
| - UCL Safety Induction (Moodle) | **- Safe Use and Management of X-Rays** |
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|  | Topic | Covered?  |
| 1 | **Location of nearest first aid box*** Inform DSO to buy replacement materials if used.
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| 2 | **Name and usual location of nearest first aider*** Point out the sign near the first aid kit.
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| 3 | **Location of nearest phone and emergency contact list*** Contact list should be by phone.
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| 4 | **How to report incidents*** Use RiskNET, search UCL website for ‘report an incident’.
* Must report all near misses, hazard observations, and accidents.
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| 5 | **Place for storage of PPE** * Lab users should have hooks for lab coat storage. Do not wear lab coats in offices.
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| 6 | **Where to find PPE for visitors*** There should be some spare lab coats available on a hook and goggles in a container.
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| 7 | **When to wear which type of PPE*** Refer to signs on door.
* In most labs people must always wear safety glasses & lab coat when working in lab and additional PPE for specific tasks (e.g. handling liquid nitrogen).
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| 8 | **How to get lab coats washed*** Leave in yellow bin near LB26.
* Inform Nick/Ralph when nearly full.
* Laundry takes ~ one week so everyone should have a spare coat.
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| 9 | **Access arrangements to lab*** Key or code to get in door. Keys issued by Simon on completion of safety training.
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| 10 | **Procedure for lone working and out of hours working*** Normal hours 8 am to 7 pm, no lone lab work at weekends or after 7 pm.
* High risk tasks may be unsuitable for lone working during normal working hours.
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| 11 | **Storage locations for different types of chemicals used in lab and how they must be segregated*** Flammables separate from oxidising agents and strong acids.
* Acids separate from bases.
* Chlorinated organics separate from other organic liquids.
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| 12 | **Location of rubbish bins and what can go in each bin*** General waste bins, hard yellow plastic bins (hazardous sharps), yellow bags (contaminated non sharps), glass bin (clean broken glass only).
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| 13 | **Where to dispose of chemical waste in lab*** e.g. liquid waste containers (keep in fume cupboard if flammable/smelly).
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| 14 | **Emergency stops on equipment*** How to trigger an emergency stop on equipment.
* Never to override equipment interlocks.
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| 15 | **Dose Badges*** Requirement to wear dose badges
* Or the importance of not moving dose badges next to equipment.
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| 16 | **All users of x-ray equipment to have read and signed local rules*** Should be displayed in prominent place in lab.
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| 17 | **Location of gas alarm panel and beacons*** Show where these are.
* What are normal readings for each gas?
* All beacons should be labelled.
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| 18 | **Action in case of gas alarm sounding*** Leave room immediately.
* Turn over warning sign on door to prevent others entering.
* Inform DSO.
* Event should be logged online (type of incident depends on whether there was a real gas leak or not).
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| 19 | **Local arrangements for using compressed gases*** Who orders gases for your lab.
* Who can move cylinders (must be trained).
* Who can fit regulators (must be trained).
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| 20 | **Procedure for risk assessments*** RiskNET for all assessment submissions, paper copies also kept in lab.
* Where in lab are printed copies kept?
* Laser/radiation assessments have different form.
* Assessments to be signed off by supervisor.
* Important to communicate risks to others in lab.
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| 21 | **Location of spill kit*** Should not be difficult to find or access. Pull off tag to open.
* Inform DSO to buy replacement materials.
* Report on RIskNET.
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| 22 | **Action in event of chemical spill*** Depends on material and size of spill.
* For large/dangerous spills it may be necessary to immediately evacuate.
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| 23 | **Electrical safety standards expected*** Multisocket extensions: Do not cause trip hazards with cables, do not leave directly on floor when powered, do not use to power high current devices (e.g. heater).
* Do not do mains wiring without supervision by electronics technician.
* Do not buy equipment directly from outside UK/EU.
* All equipment should be PAT tested before use.
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| 24 | **Describe visual electrical safety check before use of equipment including PAT test labels*** Check condition of cable, casing, plug and do not use equipment if casing broken or inner wires exposed.
* Red PAT test labels indicate failure – do not use failed equipment.
* Some labels are yellow indicating test date.
* If equipment has not been tested in 5 years it needs re-testing.
* Some equipment may need testing sooner (e.g. hand-held).
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| 25 | **Procedure for running experiments overnight*** Overnight experiment permit describing safe shut down procedure and approval from supervisor.
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| Name of new starter: |  | Signature of new starter: |  |
| Lab induction is for Room Number: |  | Date: |  |
| Name of person providing training: |  | Signature of person providing training: |  |

On completion this form should be handed to the DSO/DDSO or emailed to chemeng.safety@ucl.ac.uk.