

## Hydrogen and Catalysis Laboratory Induction Information

The ISIS Hydrogen and Catalysis Laboratory in R79 is a specially prepared environment for work with  $H_2$  gas. This can be extended to other flammable gasses. For this reason there are different expectations of the users and different constraints on the activities in the lab. Hence this induction leaflet has been produced to highlight the keys areas of operation in the lab. This document should be adhered to alongside the Hydrogen and Catalysis Laboratory safety information.

**Access** – The lab has keypad access to limit the number of people. The key code can be obtained from James Taylor. Access will only be granted after a formal induction to the lab has been completed.

**Equipment bookings** – These should be done in advance by emailing a request to IHCL@stfc.ac.uk. The equipment should NOT be used without a booking.

**Alarm system** – There is a separate alarm system in the R79 lab. This consists of  $H_2$ ,  $NH_3$  sensors and  $O_2$  depletion monitors. Should the alarm be triggered there is an audible and visual alarm. This will co-inside with an increase in the ventilation speed. Should the alarm be triggered evacuate immediately and contact the MCR and James Taylor. Do not re-enter the room until instructed to do so.

**Eye wash location** – An eye wash station is provided above the sink in the large part of the lab (with the fume hoods in it).

**First aid kit location** – A first aid kit is provided and is mounted behind the door to the main lab. Should the first aid kit be used please report this to James Taylor and enter any accidents on the SHE assure website.

**Spill Kit** - A spill kit is provided and is kept in the cupboard under the sink in the large part of the lab.

**Fire extinguishers** are located outside the main door to the lab and by the back door in the lab.

**Fire exit and assembly point** – R79 can be exited through the door at the back of the lab or through the doors at the end of the main corridor. The assembly point is on the opposite side of the car park between R79 and R89

**Emergency shower** – showers are located in the toilets in R79, located next door to the laboratory.

**Equipment faults** – Please report any faults with the equipment. We can't fix them if we don't know about them.

**Gas supplies** – Gas cylinders should be replaced by Support Labs staff. Cylinders are only to be moved by those with gas cylinder training. If you intend to use large quantities of gas please advise James Taylor in advance. If a gas runs out also contact James.

**Cryogens** – Cryogenic materials are only to be used by those who are trained. If you need assistance please contact James Taylor.

A **Risk Assessment** and **Method Statement** must be supplied by the Experimenter for work with all hazardous materials. Consult the Laboratory Manager.

All Samples and reagents must be clearly labelled.

When storing samples in the sample storage cabinet an entry must be made in the sample log book.

**Powders** must be handled in a fume hood. A dust mask is not acceptable.

**Solvents** must be handled in a fume hood. Wear safety glasses.

**Toxic** materials must be handled with gloves. Wear a lab coat, and wash hands afterwards.

**Solvent waste disposal:** use only the bottles provided at the fume hood. For other sample waste disposal contact the Laboratory Manager.

**Sample and reagent disposal:** use only bottles and boxes provided at fume hoods. Clearly label what the material is, provide your name and contact details.

**Broken glassware bins** must be used for immediate disposal of broken or chipped glassware.

Wash bottles must only contain the described solvent.

**Food and drink** must not be consumed in Hydrogen and Catalysis Laboratory.

Out of hours working. Prior arrangement must be made with the laboratory manager.

## **CONTACTS**

**Main Control Room –** x6789 or 01235 446789

**Laboratory Manager** 

James Taylor – x5831 mobile 07909 687374

**Laboratory Cover Contact**Marek Jura – x7093 mobile 07775 821363

**Support Staff** (spills, gas bottle changes)

Rachel Pearce – mobile 07749 435175