University of Glasgow

Work Placement Risk Assessment form

College of Science & Engineering

School: ***School of Engineering***

Head of School: ***Prof. John Marsh***

Placement Supervisor: ***Mr Douglas Irons***

Trainee Details

Name: _____

Address: _____

Age: _____ ***School:*** _____

Emergency Contact Name: _____

Emergency Contact Number: _____

SECTION A - Description of activities

The activities that will be carried out by the trainee are as follows:-

The trainee will be carrying out some of the following activities depending on the particular work pattern at the time of the placement.

James Watt Nanofabrication Centre (JWNC) **http://www.jwnc.gla.ac.uk**

1. Sample processing for Photolithography
2. Metalizing a sample and performing metal lift off
3. Inspection of samples by Optical and Electron Microscopy
4. Operation of Suss Mask Aligner (MA6)
5. Measurement of micro steps using a stylus profiler
6. Dry etch of substrates using Reactive Ion Etching.

SECTION B - Hazards associated with the activities

The hazards that are listed below may be encountered in association with the activities detailed above. An explanation of the hazard and its method of control is given under each item indicated.

1 & 2 Contact with solvents i.e. Acetone and Methanol and a polymer based photoresist compound which contains the solvent Propylene glycol monomethyl ether acetate

2 A high power electrical supply is in use.

3, 4 & 5 No significant hazard

6 Minimal risk, gases and RF generators are used in this lab but all contained within the equipment.

General
When working in a cleanroom environment it is necessary to wear over-suits, hats and overshoes. This is both to prevent contamination of the clean environment and give some protection from chemical spillage.

1 & 2 The trainee will have the hazards described and be shown the correct method to avoid exposure. The appropriate protective equipment will be provided and all work involving chemicals will be done inside the controlled environment of an extracted wet bench cabinet.

2 & 6 The trainee will have the hazard described and be shown the correct method to avoid risk of injury. The machine parts carrying dangerous currents are completely enclosed and safe working practices are rigorously adhered to.

SECTION C - General precautions for protection of trainee from risk

The following general precautions will be taken to prevent the trainee suffering harm from the hazards indicated.

Training: Before embarking on any of the above activities the trainee will be shown the correct approach and have the hazards explained by a qualified and experienced technician in the area.

Supervision: Whilst in the JWNC area the trainee will be under the general supervision of the senior technician who may delegate the training and direct supervision to an experienced technician under his charge. The trainee will be supervised at all times while working in the area.

Protective Equipment: A cleanroom suit, gloves, mask and hat will be provided as appropriate and worn by the trainee whilst working in the area.
All chemical work will be done inside the appropriate cabinet.

Signature of Assessor: _____ *Date:* 23/5/11

Signature of Placement Supervisor: _____ *Date:* 23/5/11.
(if different from Assessor)

Should you wish to discuss any aspect of this placement, please contact : Douglas Irons – Tel. 0141 330 5251