JAMES WATT SCHOOL OF ENGINEERING

ROOM 134D (Rankine building)

CODE OF PRACTICE

Version 1.0
Updated July 2020

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Room 134D CODE OF PRACTICE

This document details the Code of Practice that has to be applied to room 134D which is part of the James Watt School of Engineering.

Generic Workshop Practices

1) This code of practice is intended to give guidance on the safe use of room 134D to ensure that staff, students and visitors will not be harmed by any of the processes, materials or tools used in day to day operations.

2) An overriding principle: If you find yourself about to carry out work or deal with equipment or procedures that are new or unfamiliar to you, and you are in any doubt about your experience and knowledge being adequate to safely carry out the work – STOP. Seek expert advice and guidance.

3) Only trained members of staff or students approved by senior members of staff, may use the equipment in room 134D.

4) All Visitors must be accompanied by a trained user and they cannot use any of the equipment in room 134D.

5) All users of the lab should make themselves familiar with all safety documentation applicable to the lab in general, and any specific safety documentation relating to the tools or processes they intend to use. Users should familiarise themselves with emergency exit routes and positions of safety equipment such as mains isolators, fire extinguishers and first aid kits.

6) Work outside normal hours (9am - 5pm) should only be undertaken with the agreement of the lab guardian.

7) Use of Personal Protective Equipment (PPE) is mandatory as indicated for each piece of equipment. If the user is unclear about PPE they MUST seek clarification from a member of senior staff before proceeding with any work.

8) Signage showing Emergency exit routes from the lab is placed besides the entrance door.

9) COVID-19 Social Distancing guidelines and appropriate cleaning practices must be adhered to. (ref Appendix B)

General Housekeeping

1) Work areas, equipment and surrounding floor space should be kept clean and tidy with no trailing cables. Room should be clear of clutter and combustible materials such as cardboard boxes or delivery crates.

2) All materials and chemicals should be stored safely with reference to specific dangers, hazards or toxicities published in the relevant material safety data sheets.

3) Waste materials should be disposed of appropriately, i.e. Wafer fragments should be disposed in the sharp box and gloves, masks and wipes in the bean provided.

4) Food and drink must not be consumed near or within the lab to prevent risk of electric shocks (liquid spillage), poisoning or distraction of others.

Cleaving Substrates

1) Wafers of silicon, III-V and II-VI materials can present a hazard during substrate scribing and cleaving processes. Every effort should be made to minimise the generation of particles and dust from scribing and cleaving processes. Materials such as Gallium arsenide are toxic and must be treated with particular care.

2) Avoid contact with skin. Wear gloves and use a dust/mist/fume respirator when scribing and cleaving any materials.

3) Make sure that the diamond scribe tool does not etch too deeply into the substrate generating excessive quantities of particles.

4) Make sure that the vacuum extract is operating before starting to scribe substrates.

5) Any fragments or waste material needs to be placed in the waste container provided close to the scriber.

6) Carefully gather up any text wipes which may have been placed beneath substrates during the cleaving process and carefully deposit these in the plastic bag in the bean provided.

7) Log book needs to be filled out by all the users.

Appendix A

Fire Extinguishers

- Fire extinguisher are located outside of the lab
- Remember to use only CO2 extinguishers for electrical fires.

Appendix B

COVID-19 Special Measures

As part of the James Watt School of Engineering we are governed by the University of Glasgow overall policy in applying social distancing and cleaning measures to be in place as a result of the 2020 COVID-19 Pandemic.

1) Guidance from the HSE, UK Government and Scottish Government to manage the risk related to Covid-19 pandemic must be applied to the lab. These include physical distancing, frequent hand washing and hygiene measures, cough etiquettes and face covering in enclosed public space. Considerations for codes of practice and risk assessment for the James Watt School of Engineering can be found here.

https://www.gla.ac.uk/schools/engineering/informationforstaff/safety/

2) Physical distancing within the room 134D based on a 2 metre social distancing rule means the following maximum capacity: 1 train user

3) Requests to access the lab will be managed by the Lab Guardian with support from senior member of staff. Collaboration with students, academic and research staff will be required, the lab guardian will establish a rota where necessary.

4) Lab users must wash their hands regularly and wipe workstation surfaces, materials, and equipment at the start of their work and before leaving.

5) Emergency support (First Aiders and Fire Area Officer) might be constrained due to Covid-19 restriction on building capacity. Task risk assessments need to be reviewed to include the above measures and to review with personnel through the risk assessment, which work can be safely undertaken with reduced access to emergency support. A Covid-19 risk assessment template can be found here (https://www.gla.ac.uk/media/Media_723618_smxx.docx).

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Document Revision Control Sheet

Author	Date	Comment	Revision
Charalambos Klitis	July 2020	Document reworked to include COVID-19	1.0