UNIVERSITY OF LIVERPOOL

DEPARTMENT OF ELECTRICAL ENGINEERING AND ELECTRONICS

YEAR 3 BENG/MENG Project Safety Risk Assessment 2015/16

The Management of Health and Safety at Work Regulations require that a risk assessment is carried out before work starts. For guidance on risk assessment see Safety Circular SC42/3.

STUDENT NAME: Junming ZHANG ID No: 201138928

LOCATION WHERE WORK IS TO BE UNDERTAKEN: Computer lab. SUPERVISOR Mark Bowdea

TITLE OF PROJECT: Development of a C++ - based user- interface for a plasma simulation tool

Description of Work Undertaken

Familiar with the properties and background of gas discharge. Using PLASIMO which is the plasma simulation software to obtain a series of output data. Then using C++ software to develop a user-friendly interface to pick up the significant output data and display them to user intuitively.

Main hazards of the work/project *(Consider: people who can be affected, equipment used, materials handled and environment hazards)*	**Controls required** *(Consider: appropriate physical, procedural and behavioural controls).*
- standards of prolonged Komputer use.	- standard controls for computer use - regular break. - appropriate workspace

All boxes must be ticked in the following section to indicate either YES or NO.			
	NO	**YES**	**If you have ticked YES please follow the hyperlinks in the attached document, complete and return supplementary paperwork and/or implement and adhere to the guidance given.**
Will work require the lifting of weights (heavier than 15kg)	✓		SC44-5 Manual Handling
Use lasers of any kind?	✓		Laser Risk assessment Laser Local rules Laser Registration form Read CoP & AURPO
Use gas cylinders or compressed gas?	✓		Gas Cylinder safety
Use Chemicals?	✓		COSHH SCR18 – COSHH assessment
Use voltages over 30V DC/AC	✓		Electrical Safety Electricity at work
Use Power tools or rotating motors and machines	✓		SCR15-4 PUWER
Use Cryogenic Liquids/gases	✓		Cryogenic liquids and solids
Use Vacuum Systems and pressurised vessels	✓		Vacuum Systems and Pressure vessels
Use Radiation (UV, x-rays, microwaves)	✓		Control of artificial optical radiation at work Radiation safety code of practice Local rules – UV Code of Practice – UV Microwave registration

LEVEL of Supervision?	**A** = Work May not be started without direct supervision
	B = Work may not start without Supervisor advice or approval
	C = No specific extra supervision requirements

Other relevant specific assessments (Local rules)

none.

I can confirm that Hazards identified and precautions specified are appropriate for the task :-

Academic supervisor Signature ..... Date 5/5/2016

Student Signature Junming Zhang

- **A new assessment must be completed whenever there is a change that affects safety**

A copy of this assessment must be dated and signed by the student and supervisor. Please scan this form and submit online on VITAL within one week of selecting the project with your supervisor. Also submit the paper copy to the Student Support Office. If you fail to return the form within one week, your project may be reallocated to another student.

DSE WORKSTATION AND USER RISK ASSESSMENT

NB – if self-assessing, please remember to return your completed form to your DSC who will check and authorise it. Users of laptops and similar devices do not need to complete this form. They should follow the guidance in the relevant generic risk assessment.

Department: Electrical and Electronic Eng	**Assessment date:** 05 / 10 / 2016
Individual: Junming Zhang	**Date of Birth/staff No.:** 01 / 06 / 1994

NB – Section A: texts in bold italics are minimum requirements. Other issues are best practice.

SECTION A – WORKSTATION ASSESSMENT	YES	NO	N/A
Are screen characters appropriate (i.e. clear, of suitable size and stable)?	✓		
Have the monitor brightness/contrast controls been explained?	✓		
Is the screen fully adjustable (i.e. is height adjustable and can swivel/tilt)?	✓		
Is the screen free from reflective glare that may cause discomfort?	✓		
Is the screen size the most suitable for the workstation?	✓		
Is the screen in front of the operator so that twisting is minimised?	✓		
Is the top of the screen at about eye level?	✓		
Is there good colour contrast between screen characters and the background?	✓		
Is the keyboard tiltable and separate from the screen?	✓		
Is there sufficient space in front of the keyboard to rest hands/arms?	✓		
Is the mouse, trackball, etc suitable for the task?	✓		
Is it positioned correctly near to the keyboard?	✓		
Is the desk large enough to allow flexibility in positioning of equipment?	✓		
Is the area under the desk free from obstruction and/or clutter?	✓		
If a document holder is used is it stable and set at the right height?	✓		
Is it possible to arrange the equipment to find a comfortable position?	✓		
Is the work chair stable and does it have five feet?	✓		
Is the chair adjustable in height?	✓		
Is the chair back adjustable in height and tilt?	✓		
Has the individual been shown how to use the controls?	✓		
Where required, is the footrest suitable for the task?	✓		
Can the user change position and move around when seated at the workstation?	✓		
Has excessive contrast between the screen and background been reduced?	✓		
Is the workstation layout positioned correctly to reduce glare problems?	✓		
Are windows fitted with suitable blinds to reduce glare problems?	✓		
Is the general workstation environment suitable for the task?	✓		
Is the software used suitable for the task?	✓		
SECTION B – USER ASSESSMENT			
Is the individual a User i.e. uses the DSE for significant periods on a regular basis?	✓		
Have any bodily aches or pains been experienced when using DSE?		✓	
Does the User have specific problems/impairments that make DSE work difficult? *(NB - this does not refer to a medical diagnosis but rather to a loss of function, or a symptom such as pain, aches, stiffness, or a perception such as "eye strain")*		✓	
Is there control over the speed of DSE work?	✓		
Are other tasks and/or short breaks taken at least every hour?	✓		
Has the individual been informed about DSE risks?	✓		
Has the individual been trained in how to use the software?	✓		
Has the individual been informed about eye/eyesight tests?	✓		
Are problems associated with DSE work reported to the DSC?			✓

Copies to User and Departmental file

SECTION C -ADDITIONAL COMMENTS

Workstation assessment based on PC in EEE 3rd floor computer laboratory.

RECOMMENDATIONS	Responsible person	Timescale
Recommendations should address any issues identified in Parts A, B or C of this form		

Assessors name (print) MARK BOWDEN Signature M Bowden

Date for review 05 / 10 / 2016

Copies to User and Departmental file