UNIVERSITY OF CAMBRIDGE
DEPARTMENT OF ENGINEERING

4TH YEAR PROJECT HAZARD ASSESSMENT FORM

Project Code: C-yysh2-3	**Project Location**: Nanoscience Centre
Student Name: Lorcan Nicholls	**Student Email**: ln356@cam.ac.uk
Supervisor Name: Yan Yan Shery Huang	**Supervisor Email**: yysh2@cam.ac.uk
Brief Description of Project: To develop a 3D printable magnetically-responsive hydrogel composite capable of supporting cell proliferation in bioprinting experiments.	

Hazard identification (*the following examples are not an exhaustive list*):

Are there any hazards which are likely to be encountered during the project? **YES** ☑ **NO** ☐ **(Tick box)**

If YES then please provide further details under the headings below.

Electrical: (e.g. electric shock, equipment operating at voltages >1000v, working on exposed circuits with voltages >50v etc)

Electric shock from 3D printer, working with electromagnets, electrospinning

Hazardous Substances: (e.g. harmful, toxic, flammable, sensitiser, carcinogenic, explosive, corrosive etc)

Various chemicals: irritants, volatile

Gases: (e.g. asphyxiant, flammable, toxic, explosive, oxidising etc)

Laser: (e.g. class of laser etc)

Radiation: (e.g. ionising, non-ionising, electromagnetic fields, x-rays, ultraviolet (UV) etc)

Robotic: (e.g. errors - human/control, mechanical failures, power systems etc)

Controlling robots via code

Mechanical: (e.g. power tools, workshop machinery, powered lifting, etc)

Robot actuators

Biological: (e.g. biological hazards, genetically modified organisms (GMO) etc)

Epithelial cell culture

Physical: noise**,** vibration, high pressures, falling objects collapsing structures, sharp objects, high or low temperatures etc)

Heat from polymer extrusion printer

Other: (e.g. computer use, working at height, confined spaces, lone working, manual handling, slips, trips and falls, dust etc)

DSE (display screen equipment)

Identified risks should be discussed with your supervisor and a safe system of work agreed. A more in depth risk assessment may be required after initial review. Do not proceed until this form is signed off.

For any safety queries contact the Department of Engineering, Safety Office on 01223 (3)32740 or 01223 (7)61455 or email safety-office@eng.cam.ac.uk, Room INO-18 (*Inglis Building Office Floor*).

Signature of Student:	L Marks	Date:	6th October 2023
Signature of Supervisor:	Shery Huang	Date:	07-10-2023
Signature of Safety Office:		Date:	**09/10/2023**