

NATIONAL UNIVERSITY OF SINGAPORE
FACULTY OF SCIENCE

Activity-Based Risk Assessment Form			
Name of Department	Chemistry	Name and Location of Lab	S7-04
Name of Laboratory	Advanced Chemistry Teaching Lab	Name of PI	Dr Foo Maw Lin
Name of Researcher/LO	Leng Zhi Jin, Wong Ling Rong	Name of Activity/Experiment	CM3292, CM5176 GIST Electrical Characterization of Solar and Hydrogen Fuel

No	Description/Details of Steps in Activity	Hazards	Possible Accident / Ill Health & Persons-at-Risk	Existing Risk Control (Mitigation)	Severity	Likelihood (Probability)	Risk Level	Additional Risk Control	Person Responsible	By (Date)
1	Operation of the solar cell by using lamp illumination	Illumination hazard: light from 150 W halogen lamp	temporary blindness and eye damage	Black cloth is used to isolate stray light from the lamp. Polarized safety glasses must be worn when switching the lamp on and off.	2	1	2			
		Electrical hazard	Electrocution	Wires are colour coded and insulated.	1	1	1			
2	Operation of hydrogen fuel cell	Flammable hazard: hydrogen	Fire (flammability lower limit: 4% by vol)	Any evolved hydrogen is immediately drawn out by exhaust overhead venting at 1 m/s. The exhaust is checked to be working before experiment. No open flames are allowed in lab.	2	1	2			
		Electrical hazard	Electrocution	Wires are colour coded and insulated	1	1	1			

Conducted By

Name Dr. Foo Maw Lin

Signature _____

Date _____

Approved By

Name Assoc Prof Jason Yen

Signature 

Approval date 11-Jun-22

Next Revision date 10-Jun-25
(Maximum 3 years)