

MTRL 467 MEETING MINUTES

Project Name:	Characterization of Heat Transfer for the Finger Water-Cooling Configuration
Group:	Daan Maijer and Jun Ou
Meeting Date and Time:	Jan 24 th 2020, 9:30am
Minutes Prepared By:	Leonardo Walcher

Attendees:

Name	Present	Absent
Daan	X	
Jun	X	
Huayu	X	
Rohan	X	
Bhakthie	X	
Leonardo	X	
Yaning	X	
Andrew	X	

Agenda:

- Access to Ampel
- Outside resources
- Equipment list
- Budget estimation
- Friday 18:00 Proposal

Minutes:

- **Make an appointment with Jun for safety training**
- **Make an appointment with Nisa to discuss about thermal expansion, water source, thermocouple model**
- **Next step:**
 1. Clarify the goal of the experiment
 2. Based on the goal, generate an equipment list containing specific requirements for each tool (size/voltage/power)
 3. Estimate the cost of all equipment and report to Dr. Jun (or Dr. Daan).
 4. With the permission from Dr. Jun (or Dr. Daan), order the equipment (on *MacMaster-Carr/HomeDepot*).
- **Schedule an extra group meeting** (without sponsors) **to discuss equipment list** (by the end of week4)

Notes:

- It's fine to keep the key to AMPEL, but all team members need safety training before lab. (for Andrew: you can get your deposit back when you return the key)
We need Jun help at the beginning with the lab – appointment
- It's hard to find some outside resources related to the system (similar but not same). Jun will send us Nisa's proposal as a reference.
- The lead time of the order from MacMaster should be short (but depends on the equipment)
- In terms of cooling system, vapor is fine and won't be a huge safety concern.
- A budget of \$1000 is reasonable.
- Since time is tight, the goal of this project should be focused on generating a tool to measure the temperature as a function of time for various conditions. (heat transfer analysis needed)

- Run at least 2 tests
- Microstructure is not considered for this project
- Create an equipment list on Excel with the detailed information for each. (eg: heater: quantity_4~8, voltage, geometry)