

Meeting Minutes

Course: Honours Engineering Research Project (Leaky Tank Mystery)

Minutes Documented By: Michael Stefani

Meeting No: 9

Date of Meeting: 26/08/2024

Location: Remote/Online

Time: 2:30 pm

1. Attendees

<i>Present</i>	<i>Apologies</i>	<i>Absent</i>
Eric Tsoukatos (ET)		
Michael Stefani (MS)		
Prof Derek Abbott		

2. Previous meetings corrections

- No corrections

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3. Meeting Notes, Questions, Decisions, Issues

- **COMSOL Simulation**

- MS and ET have been using COMSOL software to model and simulate the problem
- Simulations of water tanks with differing sizes are to occur

- **MATLAB Simulation**

- MS has begun calculations on MATLAB to determine the ideal tank size
- Results obtained from this method can be used to compare to other methods
- Graphs of the effect of variables on movement of the tank to be produced

- **Physical Tank**

- Size of tank to be finalised and engineering drawings to be provided to the workshop team
- Complete purchasing forms for any materials requiring external purchase
- Submit engineering drawings to the workshop for preliminary tank for testing to begin

- **Laminar Flow Research**

- Investigate requirements for laminar flow to be achieved
- Contact Adelaide Uni lecturer for advice on how to design tank hole

- **Wikipedia Page**

- Add progress to wiki page provided by Prof Abbott

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4. Action Items			
<i>Action</i>	<i>Assigned to</i>	<i>Due Date</i>	<i>Status</i>
Complete COMSOL simulations for models of differing size to optimise the ideal size of the equipment to be used	All	9/09/2024	In Progress
Begin using MATLAB and simulate the experiment to illustrate the expected results	All	9/09/2024	In Progress
Continue gathering any components or necessary apparatus required to simulate the experiment.	All	16/09/2024	In Progress
Provide technical resource team with a detailed plan of what is required to be built, this includes a list of materials, dimensions and and required components.	All	2/09/2024	In Progress
Add progress to Wiki page, starting from week 1 to present	All	2/09/2024	In Progress
Add regular updates to the weekly diary on Wiki page	All	2/09/2024	In Progress
Complete external purchases and filling in of relevant purchase forms.	ET	9/09/2024	In Progress
Investigate requirements for laminar flow to be achieved	All	9/09/2024	New
Contact Fluid Dynamics lecturer for advice on tank hole design	All	9/09/2024	New