# Bernoulli's Theorem Demonstration

COLLEGE OF ENGINEERING

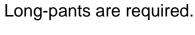
**DO NOT** use this equipment unless an instructor has instructed you in its safe use/operation and has given permission.



Safety glasses may be required in work areas.



Long and loose hair must be contained or constrained.





Appropriate footwear with closed-toe must be worn.



Protective gloves may be required.



Rings and jewellery must not be worn.

## PRE-OPERATIONAL SAFETY CHECKS

- 1. Check workspaces and walkways to ensure no slip/trip-hazards are present.
- 2. Check that all equipment components are in position and are operational.
- 3. Ensure you are familiar with the operation of the equipment.
- 4. Keep table and work area clear of all tools and debris.
- 5. Faulty equipment must not be used. Immediately report suspect equipment.
- 6. Be aware of any other students or personnel in the immediate vicinity and ensure the area is clear before using this equipment.
- 7. Familiarize yourself with all mechanical operations, switches and controls, including potential chemicals that may be used.
- 8. If you have any questions or concerns, ask the laboratory technician or instructor first.

## **OPERATIONAL PROCEDURES**

### NO FOOD OR DRINK PERMITTED NEAR EXPERIMENTS.

- 1. Set the Bernoulli's apparatus on the hydraulic bench.
- 2. Start the pump in the bench and establish the flow through the Bernoulli's apparatus.
- 3. Record the water level in the manometers.
- 4. Use a stop watch to find the time to collect 5 L volume of water in the hydraulic bench. Calculate the flow rate over the weir.

#### HOUSEKEEPING

1. Turn off all equipment once experiment is completed and dispose of chemicals in proper receptacles on completion. Leave equipment and working area in a safe, clean and tidy state.

Fve injuries

2. Keep all walkways and aisles free of clutter and debris.

Chemical exposure on skin

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Electrical shock	Manual handling	Broken glass	
Date of last rev	riow	Signature	

Noise