



**Department of Mechanical  
Engineering  
Faculty of Industrial Technology  
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## STANDARD OPERATING PROCEDURE

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Head of Laboratory

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### Operation Of Reynolds Apparatus

Laboratory : Fluid Mechanics and Machineries \_\_\_\_\_

<b>HAZARD POTENTIALS</b>	Fluid leaks can damage electrical equipment. Loose wires in the system can cause electric shock.
<b>PERSONAL PROTECTIVE EQUIPMENT (PPE)</b>	Eye protection (safety glasses, goggles, etc.). Wearpack (protective clothing). Hair protection (hair net or hat). Shoes and gloves. First aid kit.
<b>BEFORE OPERATING THE MACHINE</b>	Ensure that the practical equipment and work area are clean, and all personal protective equipment (PPE) is worn. Sleeves must be securely rolled up. Check for any leaks in the practical equipment
<b>NEVER</b>	Operate the equipment without wearing personal protective equipment (PPE). Ignore damaged or exposed electrical wiring. Allow fluid leaks to persist.
<b>STEPS FOR USING THE EQUIPMENT</b>	<ol style="list-style-type: none"> <li>1. Connect the equipment's water pipe installation to the water source.</li> <li>2. Adjust the water flow by changing the valve opening position on the flow meter until the water flow reaches 30 liters/hour.</li> <li>3. Fill the ink tube with red ink.</li> <li>4. Open the red ink tube valve.</li> <li>5. Observe the resulting flow pattern.</li> <li>6. Record the observation results on the provided observation sheet.</li> <li>7. Increase the water discharge by 10 liters/hour until it reaches 250 liters/hour</li> </ol>
<b>AFTER USE</b>	Release any trapped air from the equipment. Clean any remaining ink from the ink tube. Check and clean the equipment and work area.