

**Pressure Drop Laboratory**  
FABE 325 – Dr. Gönül Kaletunç  
TA – Kelley Yosick  
Winter 2003

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**Objectives:**

1. To study the pressure drop due to friction and elevation change in piping systems.
2. To determine the power requirements of a pump.

**Procedure:**

- Set the pump speed
- After steady flow is achieved, measure pressure at various points in the pipe and the flow rate using the rotameter.
- Repeat this procedure for five different pump speed settings.

**Calculations:**

- 1) Prepare a diagram of the set-up by clearly marking all of the elements in the set up.
- 2) Calculate and compare the pressure drop in 1 and 1.5 inch diameter pipes.
- 3) Calculate the pressure drop due to elbows in the set up.
- 4) Calculate the power of the pump.

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**FABE 325 WI03**  
**Lab Groups and Projects for Rheology Lab**

9am –10:00am	<b><u>Group 1 &amp; Group 2</u></b> 0.8% CMC solution	Ryan Gierhart Hadi Gani Brian Henslee
		Jacob Preston Eric Neer Chitra Kusnadi
10am –11am	<b><u>Group 3 &amp; Group 4</u></b> 0.8% CMC solution	Issac Schroeder Susan Martin Cole Sanford
		Brian Moeller Alex King Michael Podrosky
11am –12:00pm	<b><u>Group 5 &amp; Group 6</u></b> 0.8% CMC solution,	Erik Gracely Molly Heller Megan Clary Nicholas Bucurel
		Clayton Bettin Ethan Schneider Scott Smith Julia Valigore