VIRTUAL LAB ON MULTIPHASE FLOW
(Lab Elective II)

II Semester

Course Code: 19ME22M3

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0	3	1.5

Course Outcomes: At the end of the course the student shall be able to

CO1: Examine the Taylors bubble formation in vertical circular conduits and compute its velocity.

CO2: Evaluate the formation of gas liquid two phase flows in vertical tubes and in natural circulation loop.

CO3: Analyze the characteristics of an airlift pump and evaporation losses from a cryogenic vessel.

CO4: Determine the bubble generation, growth and departure from a submerged orifice and steam condensation in micro channels.

CO5: Test for the conductivity probes and signals in two -phase flows.

LIST OF EXPERIMENTS:

1. Rise of Taylor Bubble Through Vertical Circular Conduits
2. Gas-Liquid Two-Phase Flow through a Vertical Tube
3. Evaporation Loss from a Cryogenic Vessel
4. Characteristics of an Air Lift Pump
5. Conductivity Probes and Signals in Two-Phase Flow
6. Bubble Generation, Growth and Departure from a Submerged Orifice
7. Virtual Lab on Steam Condensation in Micro channels
8. Two phase flow in a natural circulation loop

REFERENCES:

1. http://vlabs.iitkgp.ernet.in/mf/#