Name of the Laboratory: Mass Transfer Laboratory

Lab code: CHD – 327

Name of the equipments available in the existing laboratory

1. Diffusion of organic vapors (CCL_4) in Air
2. Water Cooling Tower
3. Sieve Plate Distillation
4. Packed Bed Distillation Column
5. VLE Apparatus
6. Mass Transfer with/without chemical reaction apparatus
7. Wetted Wall Column

Name of the experiments:

1. (a) Determination of the diffusion coefficient of an organic vapor in air Diffusion of organic vapors (CCL_4) in Air.
   (b) To study the effect of temperature on the diffusion coefficient.
2. To study the heat and mass transfer in water cooling tower for different flow and thermodynamic conditions.
3. (a) To investigate the basic principles and calculation techniques of Sieved plate distillation.
   (b) To determine the number of theoretical plates via the McCabe-Thiele Method and to determine the column efficiency.
4. (a) To investigate the basic principles, calculation techniques and efficiency of column of packed bed distillation.
5. To prepare the VLE curve for CClO4-tolune mixture.
6. To study the dissolution of benzoic acid in aqueous NaOH solution without chemical reaction and with chemical reaction.
7. To study the evaluation of mass transfer coefficient in wetted wall column.