PD673
Design and Selection of Heat Exchangers

Days 1 & 2

- Conduction of heat through a plane wall
- Conduction of heat through a cylindrical wall
- Convention of heat transfer-general problem
- Convection heat transfer-problem formulation and solution
- Optimum thickness of pipe insulation
- Double pipe heat exchangers
  - Analysis of double pipe heat exchangers
  - Temperature profiles
  - Effectiveness-NTU analysis
  - Design Considerations
- Shell and tube heat exchangers
  - Analysis of shell and tube heat exchangers
  - Effectiveness-NTU analysis
  - Increased Heat recovery in shell and tube heat exchangers
  - Design considerations
  - Optimum outlet water temperature analysis
- Plate and frame heat exchangers
  - Analysis of plate and frame heat exchangers
  - Effectiveness-NTU method
- Cross flow heat exchangers
  - Analysis of cross flow heat exchangers
- Examination