

Dear Students,

I hope you all are doing good. I will be sharing the resources for the next module.

Minimization of water and heat consumption: Process Integration and water pinch technology for minimizing water and heat consumption; data extraction, minimum fresh water target with and without reuse: limiting water profile, concentration-composite curve, concentration-interval diagram, block diagram, grid diagram, mass-content diagram, network design, network evolution: loop identification and loop breaking.

Attached is the resource book ‘Chemical Process Design and Integration’ by Robin M. Smith (*attached as HEN*). You’re supposed to read thoroughly Chapter 18: Heat Exchanger Networks IV – Network Design (18.1 – 18.7) and Chapter 26: Water System Design (26.6 – 26.12). There is a course ‘Process Integration’ on NPTEL (<https://nptel.ac.in/courses/103/107/103107093/>) which you may refer to understand and implement pinch technology to heat exchanger networking (*Pinch Design Method for HEN Synthesis*).

In case you’ve any problems, please also email me on fatima@nitsri.ac.in.

Stay safe.

Best,

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