

358c Innovative Process Flowschemes Using Advanced Fractionation Techniques

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UOP licenses process technology to the refining, gas processing, and petrochemical industries. In recent years, several new flowschemes have been developed that make use of advanced fractionation techniques. These advanced techniques include:

- o Dividing wall or split shell columns to combine multiple fractionation tasks into a single column
- o Advanced ideas for heat pumps to improve heat integration in a process unit
- o Novel internals to increase the column capacity
- o Novel materials to provide better heat transfer in a column condenser or reboiler

These ideas offer significant savings in capital costs, energy costs, or both, and often have additional benefits, such as a reduction in plot space requirements or relief loads. Examples will be shown to indicate where these techniques can be applied to develop new and innovative process flowschemes.