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## Design of Lead-Lag Based Internal Model Controller for Binary Distillation Column

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**Abstract :** Lead-Lag based Internal Model Control method is proposed based on Internal Model Control (IMC) strategy. In this paper, we have designed the Lead-Lag based Internal Model Control for binary distillation column for SISO process (considering only bottom product). The transfer function has been taken from Wood and Berry model. We have find the composition control and disturbance rejection using Lead-Lag based IMC and comparing with the response of simple Internal Model Controller.

Keywords: SISO, lead-lag, internal model control, wood and berry, distillation column

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