Relay feedback autotuning is extended to the various fields of process control industries. A new time domain technique yields significantly improved accuracy over the conventional relay feedback method by deriving the explicit expressions for unknown process model parameters in terms of the output limit cycle data. Next, the applicability of the relay feedback is shown by identifying nonlinear processes with static nonlinearities. Major design objectives are achieved using online tuning methodology for certain critical applications.

Relay feedback process identification

Utkal Mehta

Relay Feedback Process Identification: Exact Analysis In Time Domain

Utkal Mehta

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