





Research article

A review from 1996 to 2021 of tuning methodologies and controller structures applied for an unstable/stable (bio)reactor with imperfect mixing and bypass

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Highlights

- The study system is the Cholette's bioreactor which can be represented by different models.
- Critical review of control structures and tuning methodologies.
- Areas of opportunity for new developments in automatic control of this study system.

Abstract

This paper presents a critical review of tuning methodologies and controller structures applied to the Cholette bioreactor. This (bio)reactor has been studied extensively by the automatic control