

## A study of temperature sensor location based on fractal analysis for cascade control schemes in tubular reactors - DTU Orbit (08/11/2017)

### A study of temperature sensor location based on fractal analysis for cascade control schemes in tubular reactors

Temperature sensor location for cascade control schemes in tubular reactors is still an open research problem. Several studies have pointed out that most temperature sensitive zones along the length of the reactor are suitable to this end. In this work, we have studied the problem of sensor location in a cascade control configuration using fractal analysis of time series obtained by random forcing of the jacket reactor. A benchmark dispersion axial model displaying different temperature profiles is used to illustrate our findings.

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