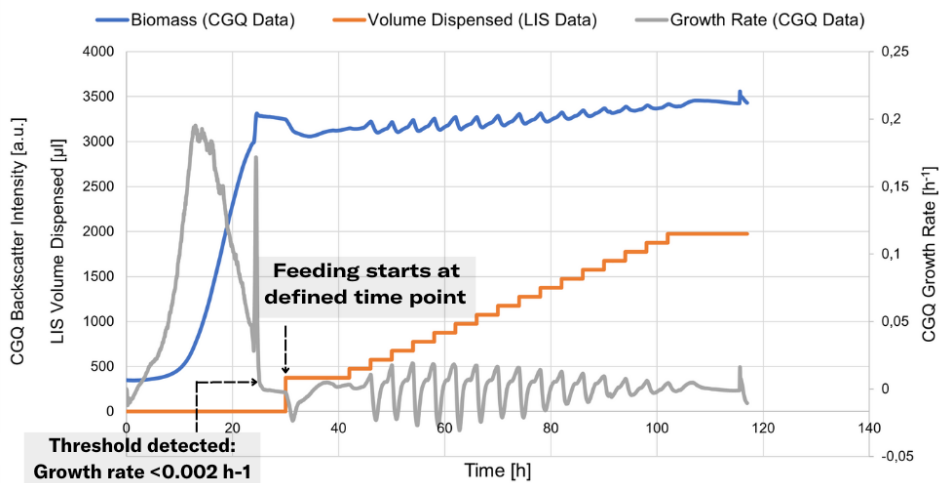


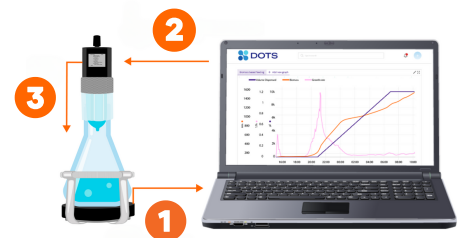
Improved Induction Screenings for a Successful Protein Production in *Pichia pastoris*

Biomass-based Feeding: Methanol Induction with *Pichia Pastoris*

Dr. Christina Dickmeis, a Senior Research Scientist at sbi, utilized biomass-based feeding to initiate methanol induction at the optimal time - once cell growth on the primary substrate (glycerol) was completed and sufficient biomass was generated, indicated by a reduction in growth rate.



Biomass-based Feeding



- 1 Real-time Biomass Monitoring
- 2 Biomass Threshold Detected
- 3 Feeding Of Liquid

Results

The implementation of biomass-based feeding in shake flasks and the continuous online acquisition of data from different experiment runs allowed Christina to test different methanol induction strategies and find out which profile results in the highest protein yield. The acquired data provided critical information to further characterize the bioprocess with an improved outcome.



20x

Increase of Active Protein Yield



9x

Faster Than Manual Sampling