

## **The effect of bubble distribution inside a food fermentor**

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Aerated food fermenters will be more frequently used in the future in the food industry. Inside these aerobic fermenters the dissolution of oxygen to the fermentation broth is important for the efficient operation of the reactor. Therefore, to make accurate designs for fermenters the local oxygen levels including complex liquids under turbulent conditions needs to be modelled. In this study, the application of Computational Fluid Dynamics (CFD) to aerobic fermentations are investigated when varying parameters such as bubble distribution for different operating conditions of fermenters and investigate the interactions between mixing and oxygen transfer limitation.