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Detecting densified zone formation in membrane-assisted fluidized bed reactors through pressure measurements

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Abstract

This work reports the results of an experimental investigation on densified zone formation in a membrane fluidized bed reactor using combined pressure fluctuation and PIV (Particle Image Velocimetry) measurements. A pseudo 2D experimental setup was used, where porous plates on the back plate of column mimicked gas extraction through flat vertically inserted membranes.

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