Supporting Information for:

Yield Stress Dependent Foaming of Edible Crystal-Melt Suspensions

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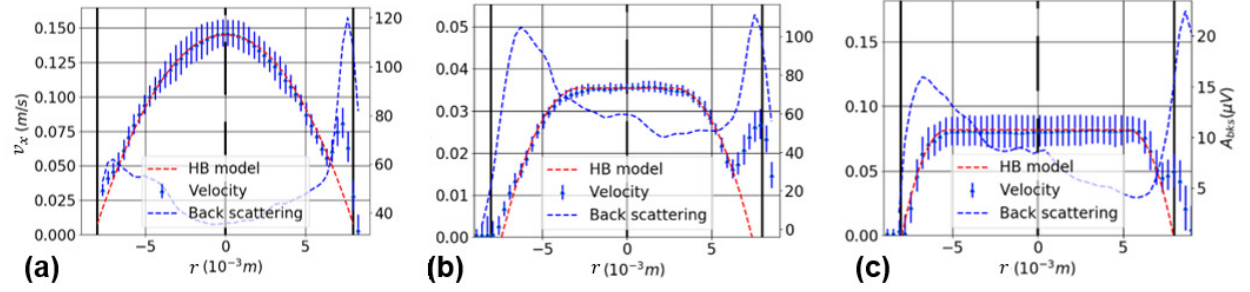Phone: + 41 44 632 97 10

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Figure S1: The fluid velocity ν_x on the left y-axis and the back scattering amplitude A_{bks} on the right y-axis as function of the pipe radius r for PKO CMS crystallized at 430 s^{-1}. Measurement accuracy of the fluid velocity is indicated by the length of the line emerging from the data point. The fitted Herschel-Bulkley velocity profile corresponds to (a) $\Phi_{SFC} = 0.38 \pm 0.16\%$, $\tau_0 = 0.03$ Pa, $K = 0.06$ Pa s^n and $n = 0.96$ (b) $\Phi_{SFC} = 2.34 \pm 0.15\%$, $\tau_0 = 2.50$ Pa, $K = 0.31$ Pa s^n and $n = 0.91$ (c) $\Phi_{SFC} = 12.34 \pm 0.66\%$, $\tau_0 = 72.39$ Pa, $K = 0.89$ Pa s^n and $n = 0.76$
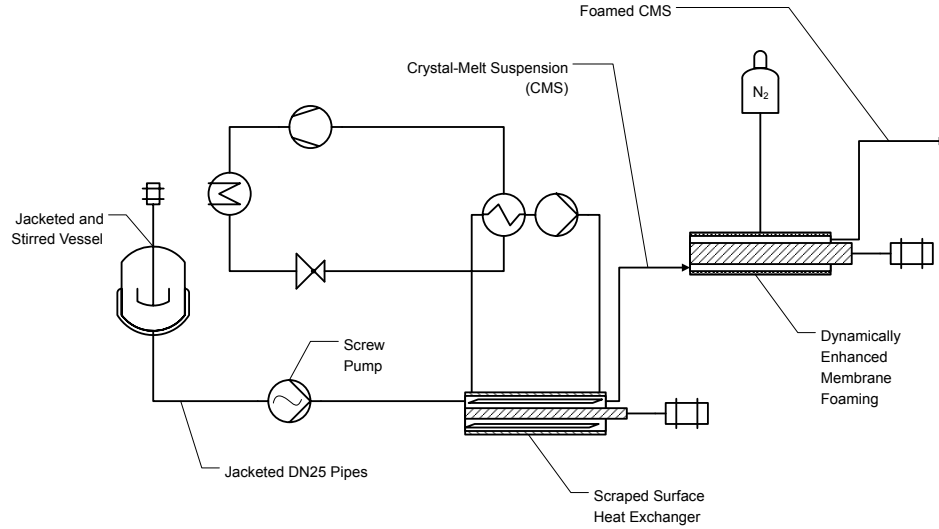

Figure S2: The process and instrumentation scheme for the CMS foam formation set up. The UVP-PD measurement line is not indicated.
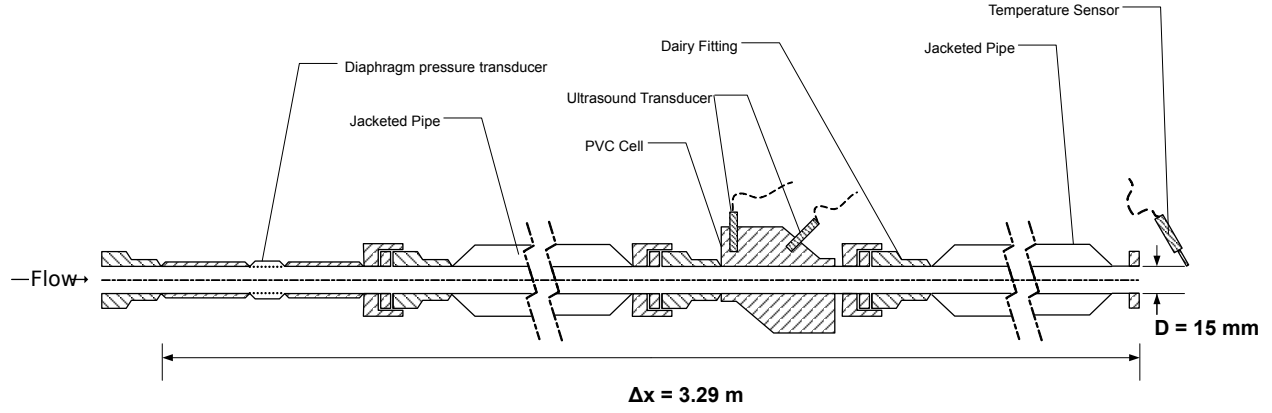
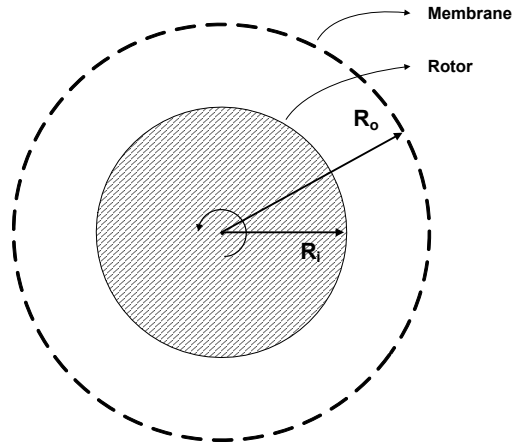Figure S3: Schematic drawing of the UVP-PD measurement set up.

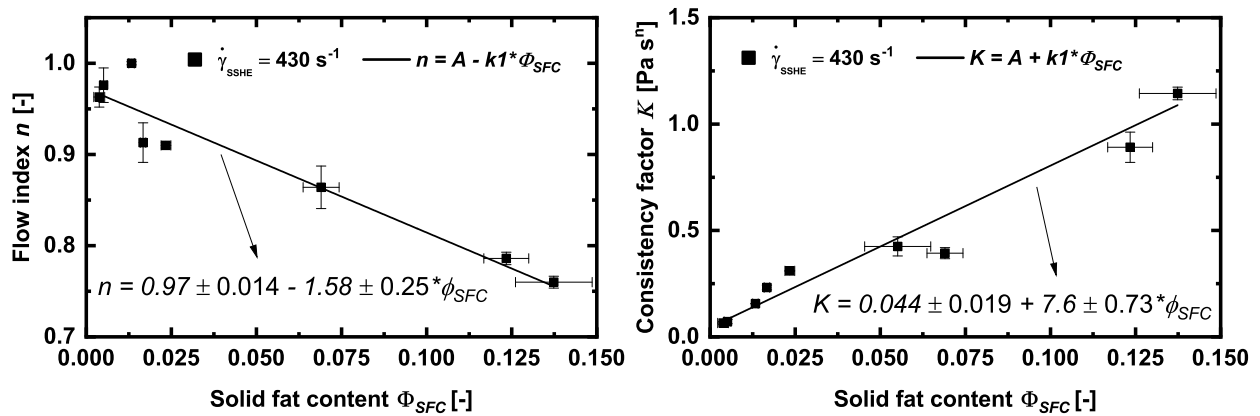Figure S4: Schematic radial cross-section of the dynamically enhanced membrane foaming cell.

Figure S5: The Flow index n as well as the Consistency factor K for PKO CMS crystallized at $430\,\text{s}^{-1}$. Linear regressions for n and K as function of solid fat content Φ_{SFC} are displayed in the graphs with the respective uncertainties.