

OTHER POLYMER SOLUTIONS

In order to incorporate the effect of viscoelasticity on gas holdup and backmixing, experiments were performed with PAA (polyacryl amide) and PEO (polyethylene oxide) polymer solutions. Both solutions showed a consistent increase in gas holdup values with an increase in the concentration. The dispersion coefficients did not show any significant effect of concentration. However, both polymer solutions exhibited profuse foaming tendencies, and the foam was so stable that the experiments had to be abandoned because of the experimental difficulties. Thus the data were not very reliable and these systems are, therefore, not recommended for future studies.

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NOTATION

C_o	= constant in eq. 2
C_1	= constant in eq. 2, m/s
d_c	= diameter of column, m
g	= gravitational constant, m/s ²
$u_{b\infty}$	= bubble rise velocity, m/s
V_c	= liquid circulation velocity, m
V_G	= superficial gas velocity, m/s
V_L	= superficial liquid velocity, m/s
ϵ_G	= gas holdup
$\dot{\gamma}$	= shear rate, s ⁻¹

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Correction

In the Table of Contents for the January 1985 issue, an R&D note entitled "Effect of Pore Structure on Particle Ignition During Exothermic Gasification Reactions" by Jow-Lih Su and D. D. Perlmutter was not included.