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Examination of the Angle of Repose in a Vertically Vibrated Container of Granular Materials CARL FAUST, PAUL QUINN, Kutztown University of Pennsylvania — Experiments are conducted using various granular materials subject to a vertical vibration. The angle of repose is studied while varying certain parameters of the system, such as vibration amplitude, vibration frequency, initial height, grain size, container size, and container shape. Empirical relationships are found for the angle of repose as a function of each of these variables. Precession of the angle of repose is also examined, particularly as a function of grain size.

> Paul Quinn Kutztown University of Pensylvania

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