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Study of Jamming Front Propagating in Particle-Suspended Solutions YOUJING GUO, XIAORONG WANG, Department of Chemistry, Tongji University, Shanghai, YONGLI MI, Department of Chemical Engineering, HongKong University of Science and Technology, HongKong — Dense suspensions under shear or impact may show sudden thickening or solidification. This solidification front was proposed to propagate at a rate that would be fast but finite. A direct observation of this rapidly jammed mass around an intruding object would be very important. In this study, we report a simple experiment that is able to provide a direct observation of the shape, the size, the composition, and the propagation rate of a quickly jamming front. Our results suggest that the shape of the jamming front depends solely on the shape of the flow vector fields.

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