

Abstract Submitted
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Drop Impact of Viscous Suspensions on Solid Surfaces DANIEL BOLLEDDULA, ALBERTO ALISEDA, Department of Mechanical Engineering, University of Washington — Droplet impact is a well studied subject with over a century of progress. Most studies are motivated by applications such as inkjet printing, agriculture spraying, or printed circuit boards. Pharmaceutically relevant fluids provide an experimental set that has received little attention. Medicinal tablets are coated by the impaction of micron sized droplets of aqueous suspensions and subsequently dried for various purposes such as brand recognition, mask unpleasant taste, or functionality. We will present a systematic study of micron sized drop impact of Newtonian and Non-Newtonian fluids used in pharmaceutical coating processes. In our experiments we extend the range of Ohnesorge numbers, $O(1)$, of previous studies on surfaces of varying wettability and roughness.

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