Effect of Colloidal Particles on a Drop

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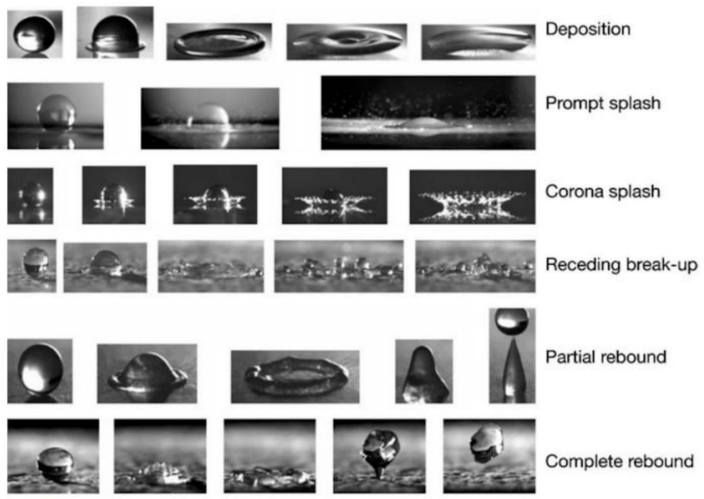
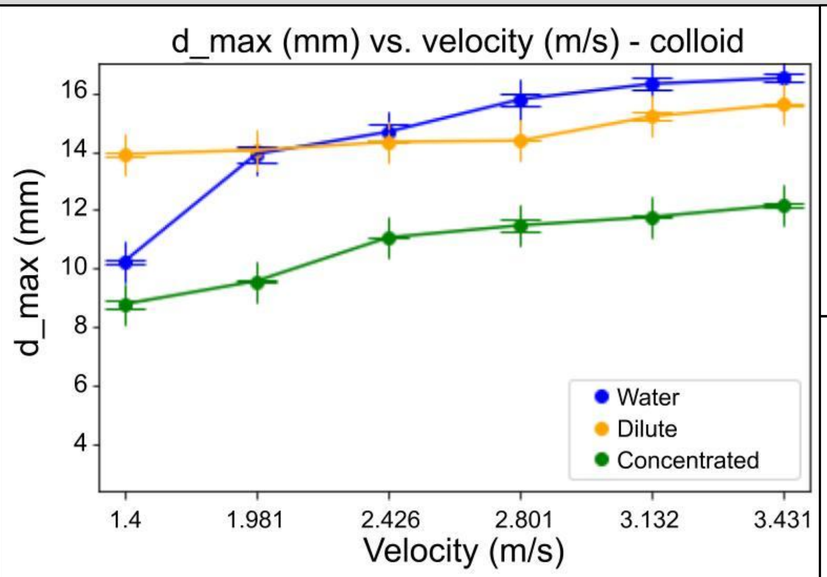
How does the splash of a mixture vary based on concentration of a colloid?

Drop Impact Dynamics



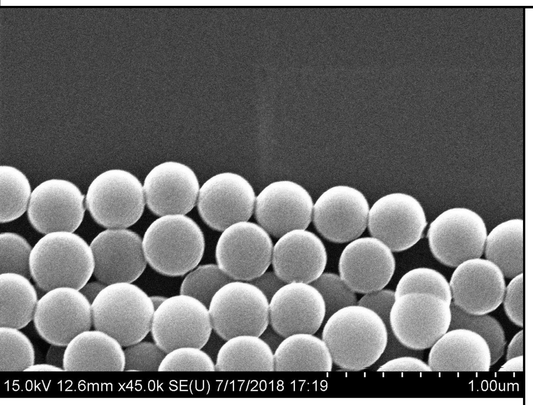


Results and Discussion

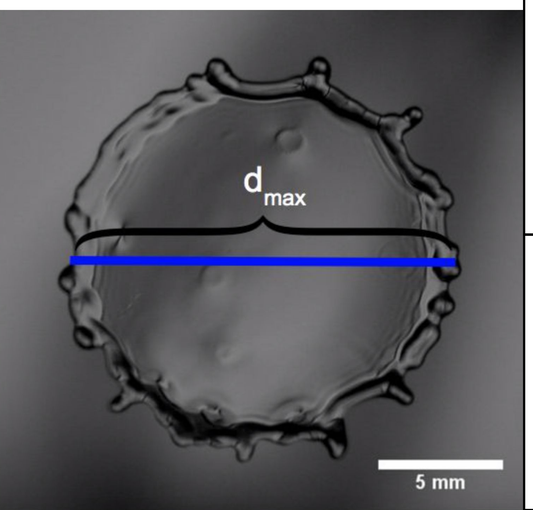
- Greater Concentration → smaller d_max
- Greater impact velocity → greater d_max

Perspective & Outlook

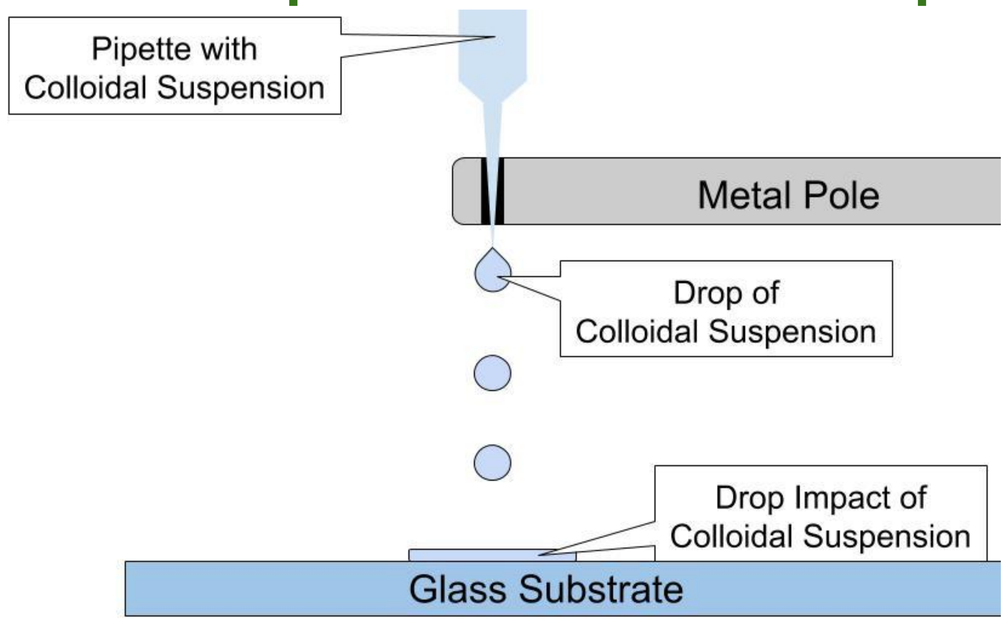
- Effect of concentration of colloids on maximal spread
- Role of impact velocity on impact dynamics
- Effect of size of colloidal particles on impact dynamics



Scanned Electron Microscope (SEM) image of colloidal particles
Courtesy Srishti Arora, PhD.



Maximum Spread of Colloidal Suspension



Acknowledgements

I would like to thank Dr. Michelle Driscoll for her guidance and mentorship and all that she has provided through her lab. I would also like to thank Srishti Arora, Joey McCourt, and Phalguni Shah for their guidance throughout this project.

The study resulting in this presentation was assisted by a grant administered by Northwestern University's Office of Undergraduate Research. However, the conclusions, opinions, and other statements in this publication [or presentation] are the author's and not necessarily those of the sponsoring institution.

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