

Wet systems alive + well!

=> need a workshop to drive thinking in this field

- Delaware } • Forest/Solomon
- } • Viscopack/Vermont

- Greece => Poon ...

2017 => "New Physics"

"Great minds meet Grand Challenges"

=> Simulation of macroscopic systems with hydrodynamics

=> Jim Swann (MIT) Andrew Fiori: "Poster Prize"

=> Role of Interfaces

- ultimately particles
- interfaces will be important!
- wetting, mixing ...

=> Role of particle-fluid interactions in bulk!

- "friction"
- shape, mixed systems.

=> biopharma, food, energy!

emerging fields in fine particle science + technology.

NIIMBL : → biopharma manufacturing @ U. Delaware Feb - 210 million \$ \$...

<http://www.niimbl.us>

Workshop. At AGM2018. Wilson Poon.

"Suspensions and slurries: insights from new physics"



New Physics IFPRI Workshop Brief

Reviews:

- 1) Incorporation/Wetting. "Review of theoretical and experimental study of initial state of solids incorporation into liquids"



Review_brief_solids_incorporation

- 1) Methods (experimental and numerical) for describing wall boundary layer in high shear systems (Extruders or similar systems)



IFPRI review_proposal_MM_v2

- 1) Wetting, dispersion, disintegration, and dissolution of powders and packed beds: reconstitution of biological materials



IFPRI Project Briefs_Wet Systems_Final 062017

1. Investigation of particle characteristics on high solid slurry/paste rheology and final structure



IFPRI Project Wet System Brief_Slurry paste

Erin Russell -> KU Leuven