

Tentative Outline for IFPRI Brief Review on Relaxation of Surface Properties of Dry-Milled Materials

- Abstract
- Introduction
- Material Properties
 - Solid state: Crystallinity
 - Complexity of molecules: organic vs. inorganic
 - Physical and Chemical: Particle size distribution, Composition
 - Mechanical
- Surface particulate properties:
 - Particle morphology: shape, texture, surface area
 - Particle interactions: triboelectrification, adhesion-cohesion, capillary, H-bonding
 - Surface energetics
 - Surface composition
- Overview of Processing
- Milling
- Surface characterization techniques
- Effect of environmental conditions: Relative Humidity and Temperature
- Susceptibility to water sorption
- Consequences, degree and extent, of surface interactions
- Significance of surface relaxation on powder stability, processing and storage
- Summary Points: Fundamentals, Effects and Significance of Particulate Surface Relaxation
- References
- Acknowledgements