

## **IFPRI BRIEF TEMPLATE**

Check One:	□Project	⊠Review	□ Collaboration
	□Workshop	□Other	

<b>Descriptive Title</b>	How Does It Feel? – From Rheometry to Mouth and Skin:		
-	Connection to the Methods of Haptics and Leptics		
Working Title <sup>1</sup>	Psycho-Rheology		
Technical Area <sup>2</sup>	W, D, C		
Date	6/26/19 8:43 AM		
Short Description	Rheological properties influence the way our products are perceived		
	by consumers. The science of haptics and leptics relate skin and		
	mouth perception to tribology, rheology, and other physical		
	properties. Consumers seek a variety of responses from our wet and		
	dry particulate products. We seek to understand the academic state		
	of the art in this area, and identify current methodologies for relating		
	physical properties to consumer experience (haptic and leptic		
	evaluations).		
Objectives	1) Current methods in haptic and leptic evaluations. How do		
	we quantify sensory perception?		
	2) Description of relevant human surface geometries and		
	contact mechanisms.		
	3) Description of bio-physical interactions between products		
	and mechano-receptors in cells.		
	4) Evaluations and their connection to physical properties		
	5) Identify gaps to enable future project to link these needs to		
	other product attributes such as delivery.		
Scope	1) Open to all measurement methods, not just rheology		
	2) Materials acceptable for human contact		
	3) Consider range of particulate systems (e.g. sun cream,		
	lipstick, talc, food, suspensions, etc).		

<b>Recommended Contractors (2 or 3)</b> in order of priority				
Name	Institution	Email Address		
Anwesha Sarkar (1 <sup>st</sup> choice)	U. Leeds	A.Sarkar@leeds.ac.uk		
Jason Stokes (2 <sup>nd</sup> )	U. Queensland	jason.stokes@uq.edu.au		
Peter Fischer	ETH	peter.fischer@hest.ethz.ch		
Alex Lips (skin)	U Edinburgh	v1alips@ed.ac.uk		

<sup>&</sup>lt;sup>1</sup> Title used in meeting agendas and file archives <sup>2</sup> One or more from the following list: W = wet systems; D = dry systems; F = particle formation; SR = size reduction; M = modeling; SE = systems engineering

Submitted By:			
Name	Organization		
Rajeev Gorowara	Corteva, <u>Rajeev.l.gorowara@corteva.com</u>		
Roseanna Redfern (guest)	Sherwin-Williams,		
	Roseanna.l.redfern@sherwin.com		
Wilson Poon	U.Edinburgh <u>w.poon@ed.ac.uk</u>		
Daniel Hodgson	U.Edinburgh daniel.hodgson@ed.ac.uk		
Soichiro Makino	U.Edinburgh S.Makino@ed.ac.uk		
Other companies with interest:			
Proctor & Gamble, Keurig, Ingredion,			
Hormel			