PRACTICAL RHEOMETRY FOR SUSPENSIONS AND OTHER FUN COMPLEX SYSTEMS

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ABSTRACT

Industrial operators use various instruments and geometries to analyze the rheology of commercial products. The latter may include suspensions, colloidal dispersions and solutions, for example. Product formulations vary widely, and their rheological behavior is often complicated. Measurement techniques may be relatively simple for quick QC/QA checks, or more sophisticated, for R&D or process engineering, for example. 3-D Printing or Additive Manufacturing allows the creation of complex geometries that extend the utility of existing equipment. This talk presents rotational and oscillatory shear data for a few different materials, illustrating some different techniques, rheometric tools and material behaviors.