Rheometry of Pastes, Suspensions, and Granular Materials: Applications in Industry and Environment
Philippe Coussot

A comprehensive examination of rheometry theory and its practical applications

This publication enables readers to understand and characterize the flow properties of complex fluids and, with this knowledge, develop a wide range of industrial and consumer products. The author fills a gap in the current literature by presenting a comprehensive description of the rheological behavior of pastes, suspensions, and granular materials and by offering readers the rheometrical techniques needed to effectively characterize these materials.

With his extensive experience in both academic and industrial research, the author is able to take the field to a new level in:

* General schematic classification of the behavior of pastes, suspensions, and granular materials
* Systematic review, analysis, and quantification of experimental problems with complex fluids
* Insight into the flow behavior of complex fluids gained through the most recent discoveries and research techniques
* Comprehensive rheometrical analysis of data obtained from research across a broad range of industries

In addition to gaining a thorough understanding of the theory underlining rheometry, readers discover its many practical applications. Throughout the publication, specific examples are provided that illustrate how theory is applied, including examples involving food, civil
engineering, cosmetics, pharmaceuticals, paper coatings, paint and ink, ceramics, sewage sludges, granular materials, and natural materials.

In summary, this publication provides a comprehensive review of the behavior of pastes, suspensions, and granular materials as well as detailed analysis of rheometrical techniques. Everything needed to determine the behavior and movement of complex fluids is provided. It is, therefore, a recommended resource for rheologists, engineers, and researchers, as well as students who deal with complex fluids in product formulation, quality and process control, and process plant design.

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### ABOUT THE AUTHOR

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