DESCRIPTION

From blood to milk, pumice to gelatine, most scientists interact with colloids on a daily basis without any real knowledge of their nature. Building on the success of the first edition, *Colloids and Interfaces with Surfactants and Polymers Second Edition* is a user-friendly, non-technical introduction to colloids and interfaces.

Includes:

- Many practical examples of colloid and interface science
- An enhanced section on fluorescence microscopy, a widely used technique in biological systems for the optical imaging of cellular structures
- A new section on phenomenology (the principle of time/temperature superposition), which enables the experimentalist to extend the frequency range of their rheological instruments
- New information on sedimentation and strategies for the control of sedimentation, which is critical in many dispersions of commercial importance
- Fresh treatments of traditional theoretical topics like the electrical double-layer, colloidal interactions, wetting behavior and light scattering, as well as more recent advances in polymer science, statistical mechanics and the use of neutrons
In-depth discussions of widely used techniques with mathematics used in a straight-forward way so quantitative descriptions of colloid and interface properties can be derived.

*Colloids and Interfaces with Surfactants and Polymers Second Edition* explains all the fundamental concepts of colloids and interfaces as well as detailing some of the more advanced aspects which might be useful in specific applications. Intended for undergraduate and graduate courses in colloids and soft materials, the book is also relevant to those in the chemical, coatings, cosmetics, ceramics, food, pharmaceutical and oil industries.

For Powerpoint slides of all the figures in the book, please see the Instructor Companion website at http://bcs.wiley.com/he-bcs/Books?action=index&bcsld=5121&itemId=0470518804

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**ABOUT THE AUTHOR**

**Dr. Jim Goodwin** is cofounder and Managing Director of Interfacial Dynamics Corporation and is currently employed by Invitrogen. Until 1996, he led research at Bristol University (UK) on the rheology of many types of soft matter and on interparticle forces. He was Deputy Director of the Bristol Colloid Centre. The author has published over 100 articles on topics such as the preparation of polymer colloids, the rheology of clays, latexes, blood, self-associating polymers and microgels as well as particle scattering and the influence of nutrition on multiple sclerosis. Jim has also edited three books on colloidal systems and is coauthor of the textbook *Rheology for Chemists* and author of *Colloids and Interfaces with Surfactants and Polymers: An Introduction.*

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**NEW TO EDITION**

- There will be new information on sedimentation and strategies for the control of sedimentation, which is critical in many dispersions of commercial importance.

- New material will be added on fluorescence microscopy, a widely used technique in biological systems for the optical imaging of cellular structures.

- A short new section on phenomenology (the principle of time/temperature superposition), which enables the experimentalist to extend the frequency range of their rheological instruments, will be included.
FEATURES

• An “accessible and readable” book with a user-friendly, non-mathematical approach, which does not swamp the reader with a mass of difficult details.

• Many practical examples of colloid and interface science will be presented.

• Will include widely used techniques such as rheology in greater depth than other introductory texts.

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