DESCRIPTION

This systematic introduction to the topic includes theoretical concepts to help readers understand and predict surface forces, while also integrating experimental techniques and practical applications with up-to-date examples plus motivating exercises.

Starting with intermolecular forces, the authors discuss different surfaces forces, with a major part devoted to surface forces between solid surfaces in liquid media. In addition, they cover surface forces between liquid-vapor interfaces and between liquid-liquid interfaces.

ABOUT THE AUTHOR

Hans-Jürgen Butt studied physics in Hamburg and Gottingen, Germany. Then he went to the Max-Planck-Institute of Biophysics in Frankfurt. After receiving his Ph.D. in 1989 he went as a post-doc to Santa Barbara, California, using the newly developed atomic force microscope. From 1990-95 he spent as a researcher back in Germany at the Max-Planck-Institute for Biophysics. In 1996 he became associate professor for physical chemistry at the University Mainz, three years later full professor at the University of Siegen. Only two years later he joined the Max-Planck-Institute of Polymer Research in Mainz and became director for Experimental Physics.
Michael Kappl received his PhD thesis from the Max-Planck-Institute of Biophysics in Frankfurt and worked at the University of Mainz and Siegen. Since 2002 he is a project leader at the Max-Planck-Institute for Polymer Research in Mainz. He concentrates his research activities on Surface Forces and the Interactions of Particle Bubbles as well as Monolayer Particles.

To purchase this product, please visit https://www.wiley.com/en-us/9783527629428