

The FIRST BOOK on the INNOVATIVE STUDY of BIOINTERFACES USING BIOPHYSICAL CHEMISTRY

The biophysical phenomena that occur on biointerfaces, or biological surfaces, hold a prominent place in the study of biology and medicine, and are crucial for research relating to implants, biosensors, drug delivery, proteomics, and many other important areas. *Biophysical Chemistry of Biointerfaces* takes the unique approach of studying biological systems in terms of the principles and methods of physics and chemistry, drawing its knowledge and experimental techniques from a wide variety of disciplines to offer new tools to better understand the intricate interactions of biointerfaces. *Biophysical Chemistry of Biointerfaces*:

- Provides a detailed description of the thermodynamics and electrostatics of soft particles
- Fully describes the biophysical chemistry of soft interfaces and surfaces (polymer-coated interfaces and surfaces) as a model for biointerfaces
- Delivers many approximate analytic formulas which can be used to describe various interfacial phenomena and analyze experimental data
- Offers detailed descriptions of cutting-edge topics such as the biophysical and interfacial chemistries of lipid membranes and gel surfaces, which serve as a good model for biointerfaces in microbiology, hematology, and biotechnology

Biophysical Chemistry of Biointerfaces pairs sound methodology with fresh insight on an emerging science to serve as an information-rich reference for professional chemists as well as a source of inspiration for graduate and postdoctoral students looking to distinguish themselves in this challenging field.

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