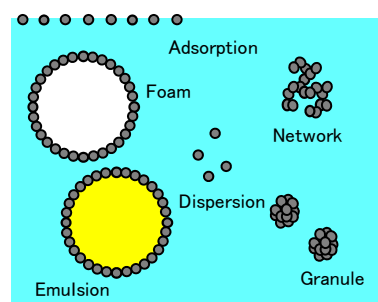


Group name	Soft Interface Chemistry Group
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Main Subjects	<ol style="list-style-type: none"> 1. Self-assembly of surfactants and solid particles 2. Interfacial phenomena at biological surfaces 3. Emulsions and dispersions

Content

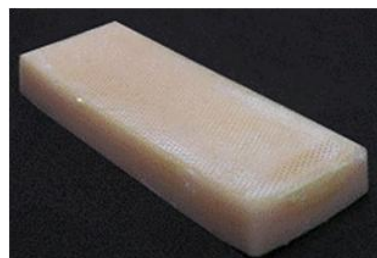
1. Self-assembled behavior of solid particles

The solid particles are adsorbed at the interfaces and form self-assembled structures when the particles have suitable wettability. In recent years, some scientists have used these structures as templates of functional composite materials. We have studied their adsorption and self-assembled behaviors. The present results are valuable to prepare composite materials, medicine, or cosmetics.



2. Tactile texture of materials

Artificial skin having human skin-like texture is necessary for the development of tactile evaluation systems and for robots that have physical contact with humans. We developed a novel type of artificial skin designed by emulating the surface shape pattern and elastic structure of the human skin.



3. Preparation methods of soft materials

We have developed preparation techniques of emulsions, dispersions, and fine particles. Surfactant-free carbon fine particle dispersions and lubricant organic particles have been developed recently.

