Synopsis of Original Research Paper

Synthesis and properties of the novel bis-ammonium Gemini surfactants without connecting chain.

Tatsuo Oida

Department of Chemistry and Material Technology, Kyoto Institute of Technology

The novel bis-ammonium Gemini surfactants without connecting chain which have a C_{2v} symmetry (C_2 Gemini) were prepared from malonic acid derivatives　It was found that the C_2 Gemini have superior surface activities, such as the remarkably small critical micelle concentration (cmc) and the specially low surface tension at cmc (γ_{cmc}) of C_2 Gemini, similar to that of other Geminis.　Also, it was found that the intramolecular hydrohobic interaction would be very important for the excellent properties of Gemini surfactant.