

Determination of Critical Micelle Concentration by Dye Titration

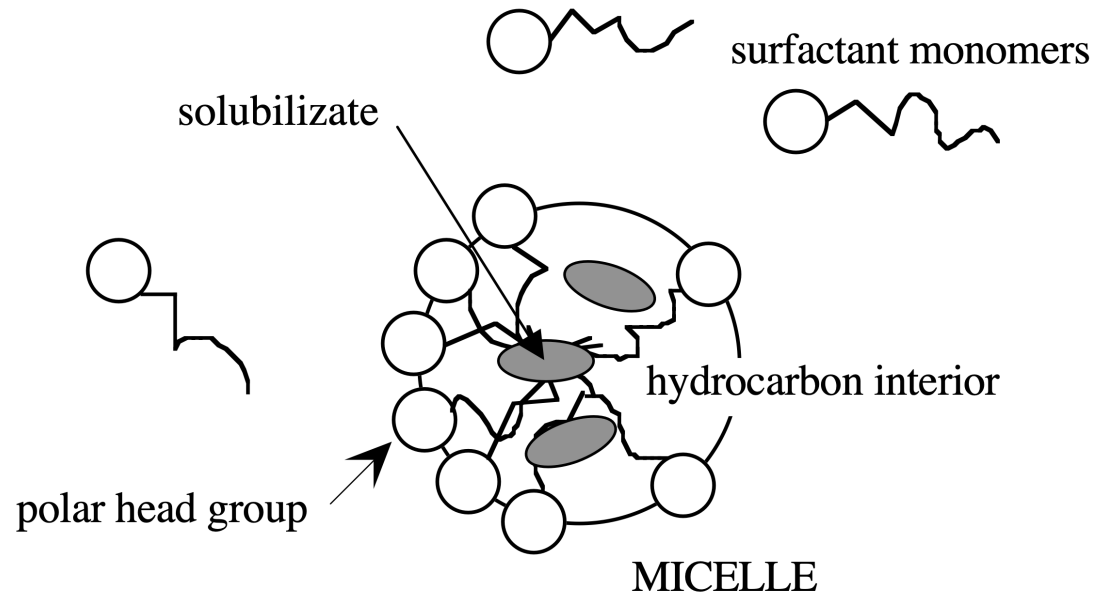
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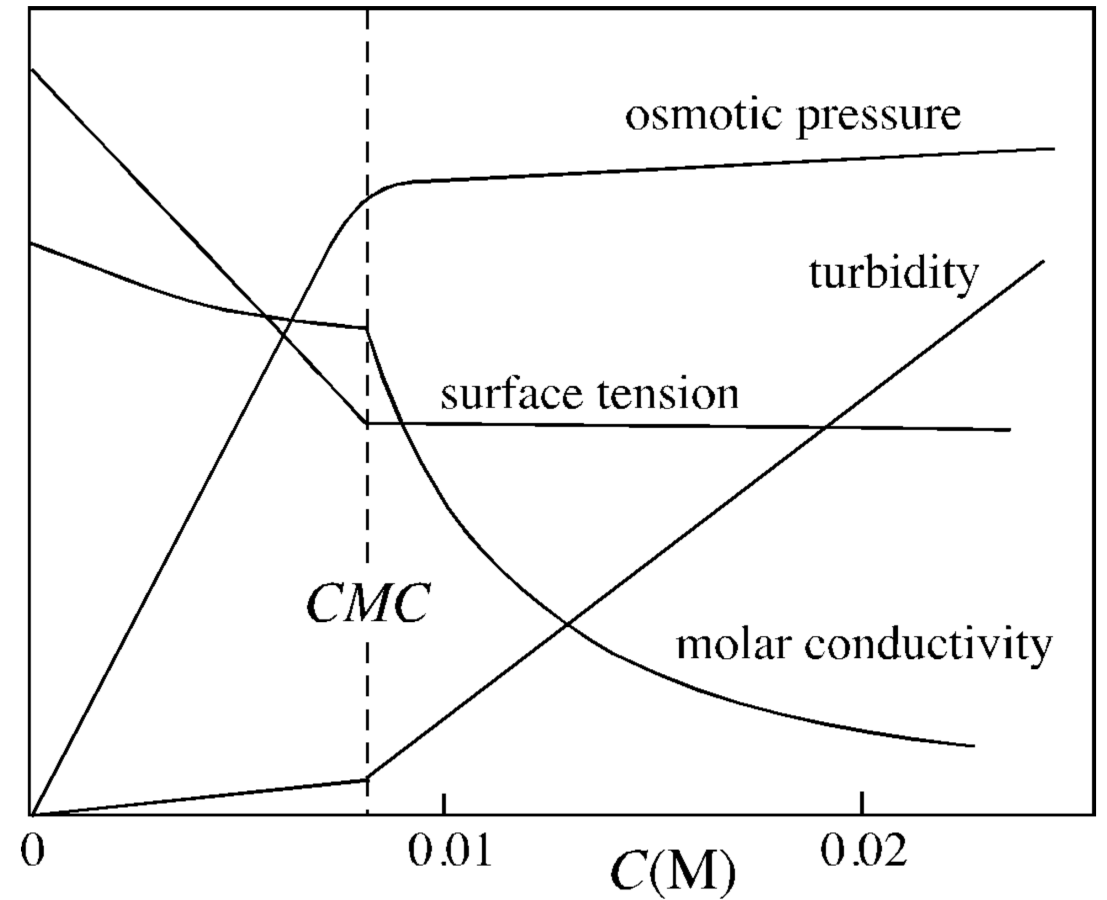
Surface and Colloid Science

Micelle formation changes physical properties

- Micelle formation



- Physical property of SDS at 25 °C



- CMC = critical micelle concentration

Absorbance of pinacyanol chloride dye changes at CMC

- Absorbance at $\lambda = 615 \text{ nm}$

$$A = -\log T \propto C$$

CMC decreases with positive counterion concentration

- CMC dependence on counterion molality

$$\log \text{CMC} = -a \log m^+ - b$$