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Aggregation behaviour and solubilization capability of mixed micellar systems formed by a gemini lipoamino acid and a non-ionic surfactant

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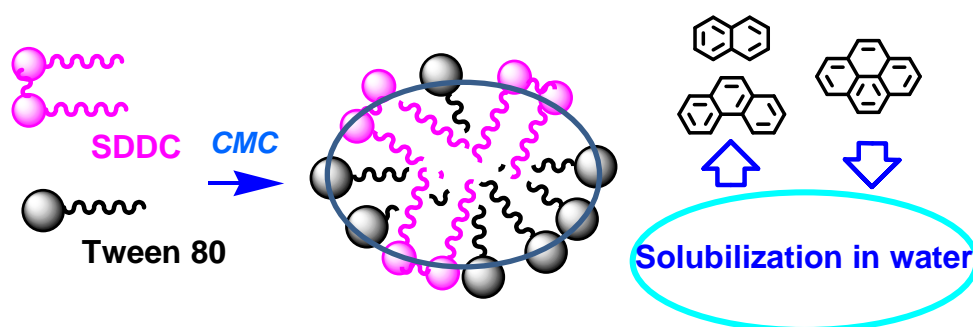
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Graphical abstract



Abstract

In this work we carried out the physicochemical characterization of mixtures of a non-ionic surfactant and a gemini lipoamino acid one. The mixed systems were studied by surface tension measurements, fluorescence quenching and SAXS determinations. Both surfactants formed mixed micelles in different relationships and the properties of the mixtures were more similar to those of their major component. SAXS analysis showed that the micelles were triaxial ellipsoids, type core shell. The mixtures exhibited non-ideal behaviour, as indicated by critical micelle concentrations (*CMC*) lower than those of the individual surfactants, and negative interaction parameters, β .

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