inverted micelle

**Synonyms:** inverse micelle, reverse micelle (or reversed micelle)

The reversible formation of association colloids from surfactants in non-polar solvents leads to aggregates termed inverted (or inverse, reverse or reversed) micelles. Such association is often of the type:

\[
\text{Monomer } \rightleftharpoons \text{ Dimer } \rightleftharpoons \text{ Trimer } \rightleftharpoons \ldots \text{ } n\text{-mer}
\]

and the phenomenon of critical micelle concentration (or an analogous effect) is consequently not observed. In an inverted micelle the polar groups of the surfactants are concentrated in the interior and the lipophilic groups extend towards and into the non-polar solvent.

**Source:**
PAC, 1994, 66, 1077 (Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)) on page 1126