

FIGURE 13.3 Sketch for the structure of a diblock copolymer micelle with a molten liquid core. The core is free of solvent or tail monomers. (Reprinted with permission from Marques, C.M., *Langmuir*, 13, 1430–1433, 1997. Copyright 1997 American Chemical Society.)

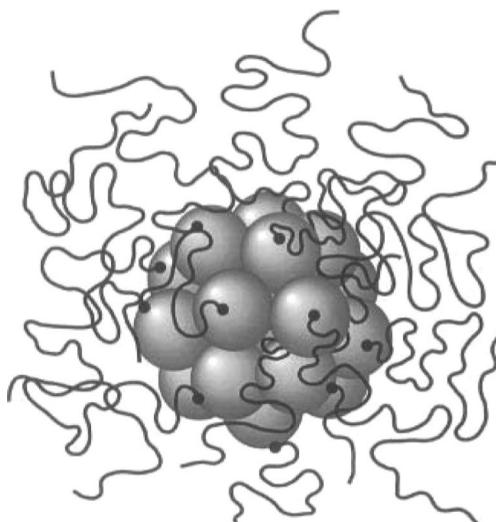


FIGURE 13.4 Core structure of a bunched micelle, which allows for a significant penetration of solvent and tails in the core region. The tails are assumed to be repelled by the beads and therefore to protrude toward the solvent in order to escape confinement. (Reprinted with permission from Marques, C.M., *Langmuir*, 13, 1430–1433, 1997. Copyright 1997 American Chemical Society.)

the micellar aggregation number. As is being discussed, this picture leads to a different micellization scenario and to new predictions for the properties of the micelles.

The process of constructing a bunched micellar core is represented by Marques (1997) as a process by which individual beads are added until saturation or some equilibrium aggregation number is reached. It is assumed that the solid, spherical heads behave like impenetrable, repulsive walls with respect to the monomers from the soluble block. The amount of space filled by the solvent and