Supporting Information

Self-Assembly of a Peptide Amphiphile: Transition from Nanotape Fibrils to Micelles

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SI Fig.1. FTIR spectrum from a 1 wt% solution of C_{16}-KTTKS at room temperature.
SI Fig.2. (a) XRD pattern and (b) Corresponding equatorial (black) and meridional (red) intensity profiles. The primary peak positions (in Å) are indicated.
SI Fig.3. TEM image obtained from a 1 wt% sample of C_{16}-KTTKS.
Details of SAXS model

The SAXS data was modelled using the software SASfit,\(^1\) model “spherical shell ii” with Gaussian polydispersity in radius. This implementation of a spherical shell is parametrised with an outer radius \(R\) and an inner radius \(\nu R\). The scattering contrast relative to the matrix of the core is \(\mu \Delta \eta\) and the one of the shell \(\Delta \eta\):

\[
I(q) = (K(q, R, \Delta \eta) - K(q, \nu R, \Delta \eta(1 - \mu)))^2,
\]

with

\[
K(q, R, \Delta \eta) = \frac{4}{3} \pi^3 \Delta \eta^3 \frac{\sin(qR - qR \cos(qR)}{(qR)^3}.
\]

The fitted parameters were Gaussian height \(N = 1\), width \(\sigma = 0.24\), \(R=2.79\), \(\nu=0.61\), \(\mu =-0.81\), \(\Delta \eta = 0.053\), constant background \(BG=0.05\)

References