

A “Center-determination” Phenomenon of C₁₃H₂₇CO-Gly-Ala-Ala Lipotriptides: Relationship between Molecular Chirality and Handedness of Organic Self-assembly

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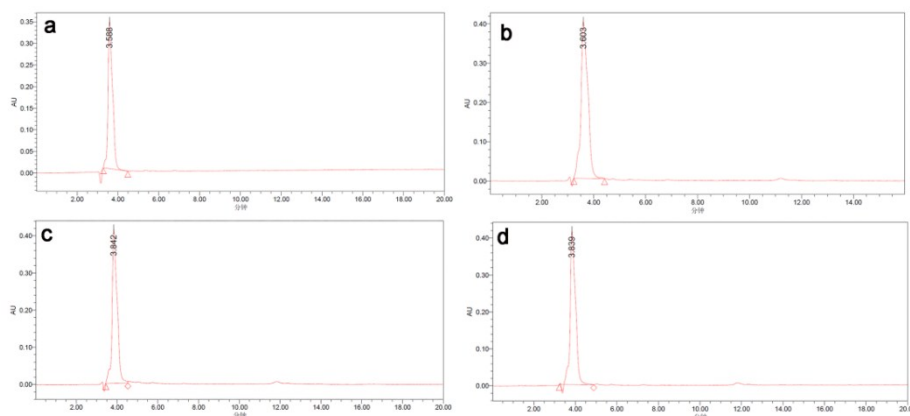


Fig. S1 HPLC data of the lipotriptides (a) *NLL-1*, (b) *NLD-1*, (c) *NDL-1* and (d) *NDD-1*.

Table S1 MGCs of the lipotriptides in organic solvents.

	<i>NLL-1</i>	<i>NDD-1</i>	<i>NLD-1</i>	<i>NDL-1</i>
DMF	Solution	Solution	Solution	Solution
DMSO	Solution	Solution	Solution	Solution
THF	Solution	Solution	Solution	Solution
Methanol	Solution	Solution	Solution	Solution
Toluene	20	20	20	20
<i>n</i> -Propanol	Precipitate	Precipitate	Precipitate	Precipitate
1,4-Dioxane	45	45	40	40
Acetone	Insoluble	Insoluble	Insoluble	Insoluble
Cyclohexane	Insoluble	Insoluble	Insoluble	Insoluble
Ethyl acetate	Insoluble	Insoluble	Insoluble	Insoluble
Acetonitrile	Insoluble	Insoluble	Insoluble	Insoluble

The data shown in the above table refer to the minimum gelation concentrations (MGCs) (g L^{-1}) of the lipotriptides in the listed organic solvents at 25 °C. Solution: no gelation occurred at a concentration of 30 g L^{-1} .

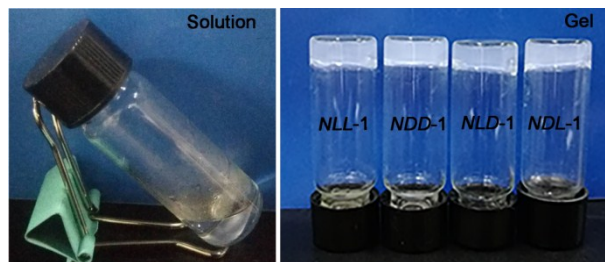


Fig. S2 The photographs of the lipotriptides solutions (70 °C) and gels (25 °C) in mixed solvent of methanol/water (6/4, v/v).

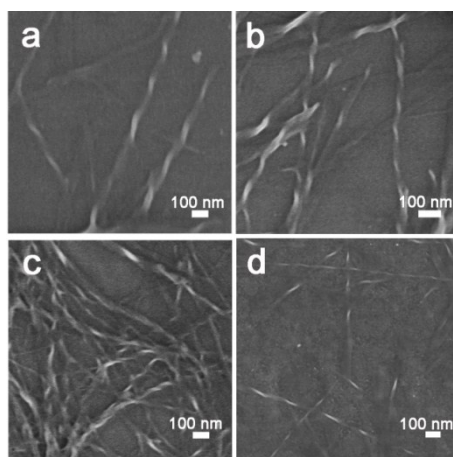


Fig. S3 FE-SEM images of the gels prepared in a mixture of methanol/water (6/4, v/v) at a concentration of 10 g L⁻¹. (a) *NLL-1*, (b) *NLD-1*, (c) *NDL-1* and (d) *NDD-1*.

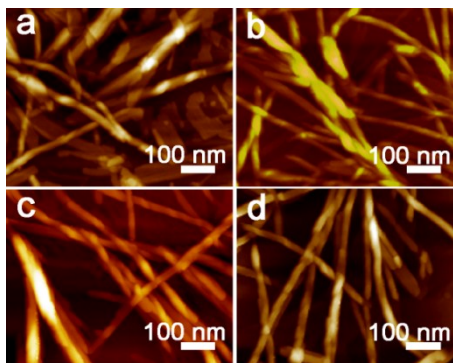


Fig. S4 AFM images of the xerogels prepared in a mixture of methanol/water (6/4, v/v) at a concentration of 10 g L⁻¹. (a) *NLL-1*, (b) *NLD-1*, (c) *NDL-1* and (d) *NDD-1*.

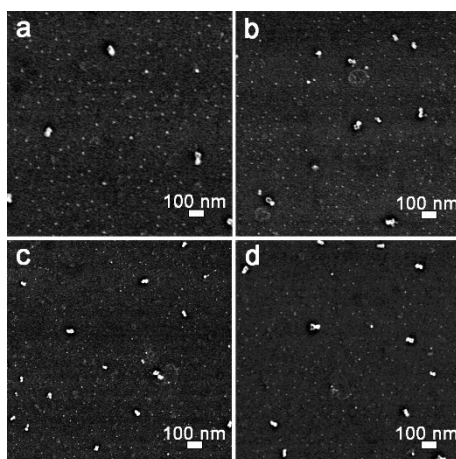


Fig. S5 FE-SEM images of the samples prepared in a mixture of methanol/water (6/4, v/v) at a concentration of 10 g L^{-1} and $55 \text{ }^\circ\text{C}$. (a) *NLL-1*, (b) *NLD-1*, (c) *NDL-1* and (d) *NDD-1*.

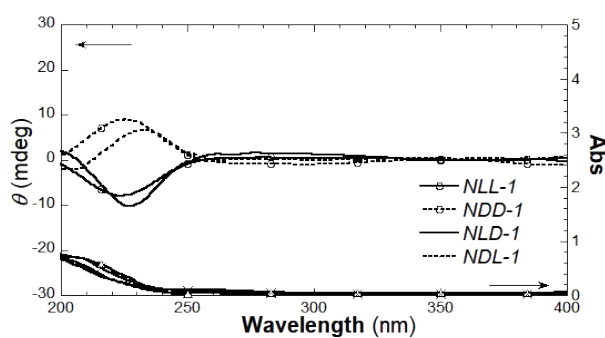


Fig. S6 CD and UV spectra of the sols in a mixture of methanol/water (6/4, v/v) at a concentration of 10 g L^{-1} .

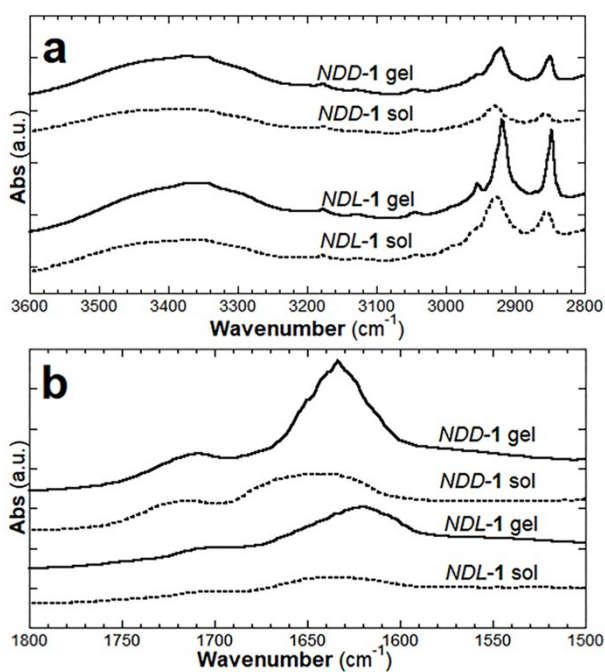


Fig. S7 FT-IR spectra of the sols and gels of *NDD-1* and *NDL-1* in a mixture of $\text{CD}_3\text{OD}/\text{D}_2\text{O}$ (6/4, v/v) at a concentration of 10 g L^{-1} .

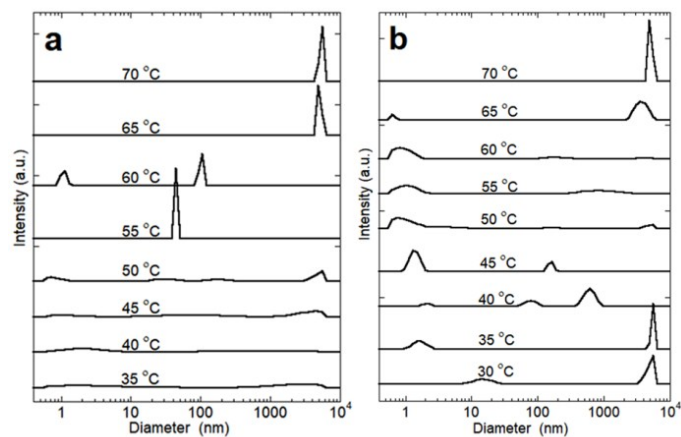


Fig. S8 Particle size distribution graphs of (a) *NLL-1* and (b) *NLD-1* in a mixture of methanol/water (6/4, v/v) at a concentration of 10 g L^{-1} and different temperatures.

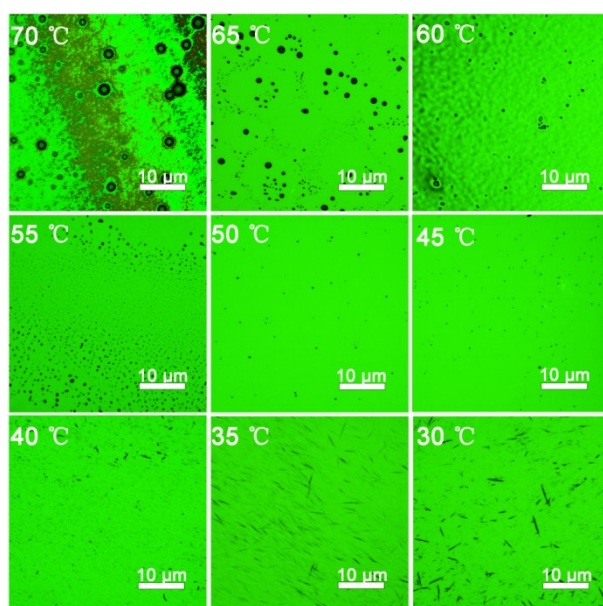


Fig. S9 Microscopy images of *NLL-1* in a mixture of methanol/water (6/4, v/v) at a concentration of 10 g L^{-1} and different temperatures.

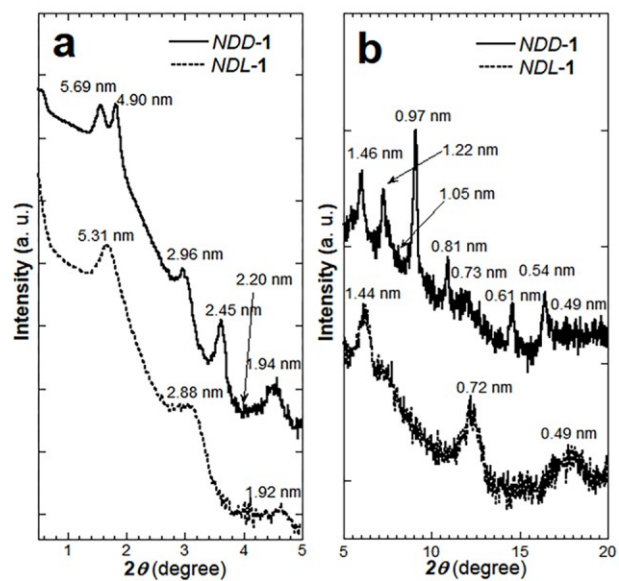


Fig. S10 (a) SAXRD and (b) WAXRD patterns of the xerogels of *NDD-1* and *NDL-1*.