

## **[Supplemental Materials]**

### ***Supramolecular Nanofibers from Collagen-mimetic Peptides Bearing Various Aromatic Groups at N-Termini via Hierarchical Self-assembly***

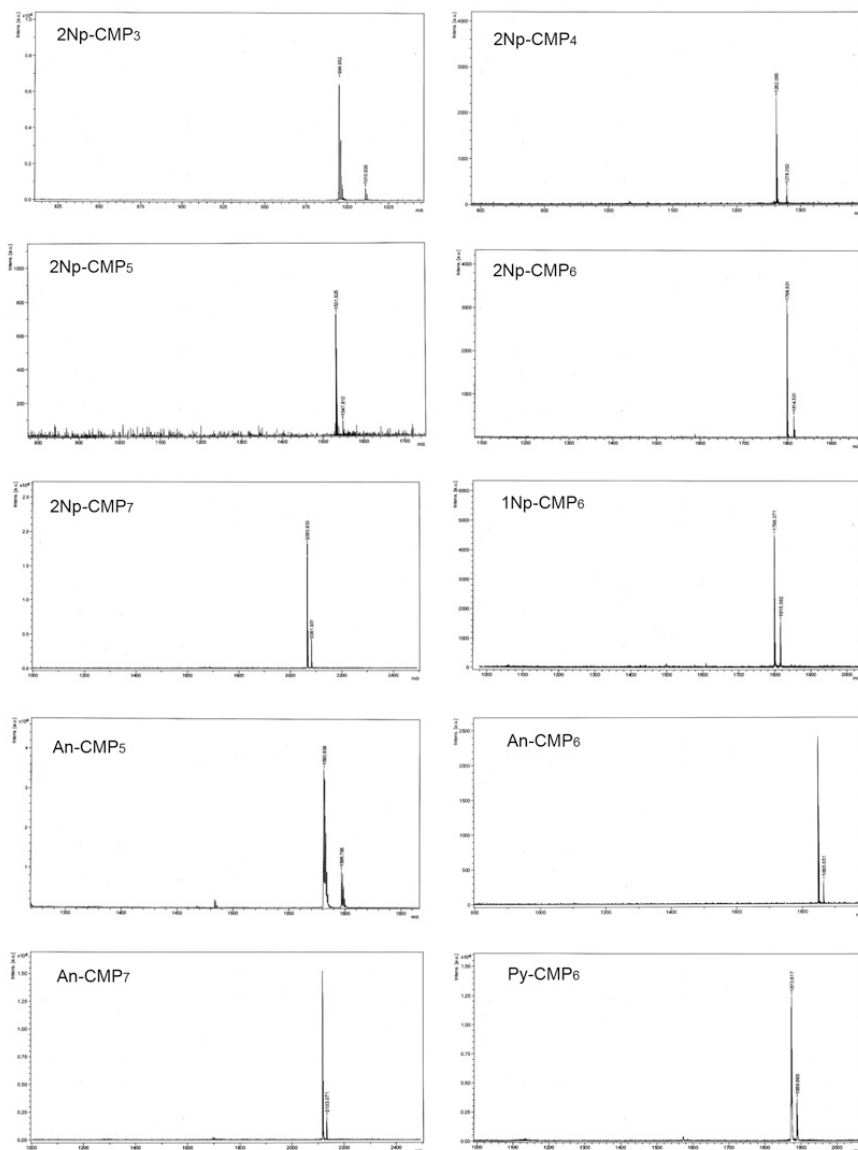
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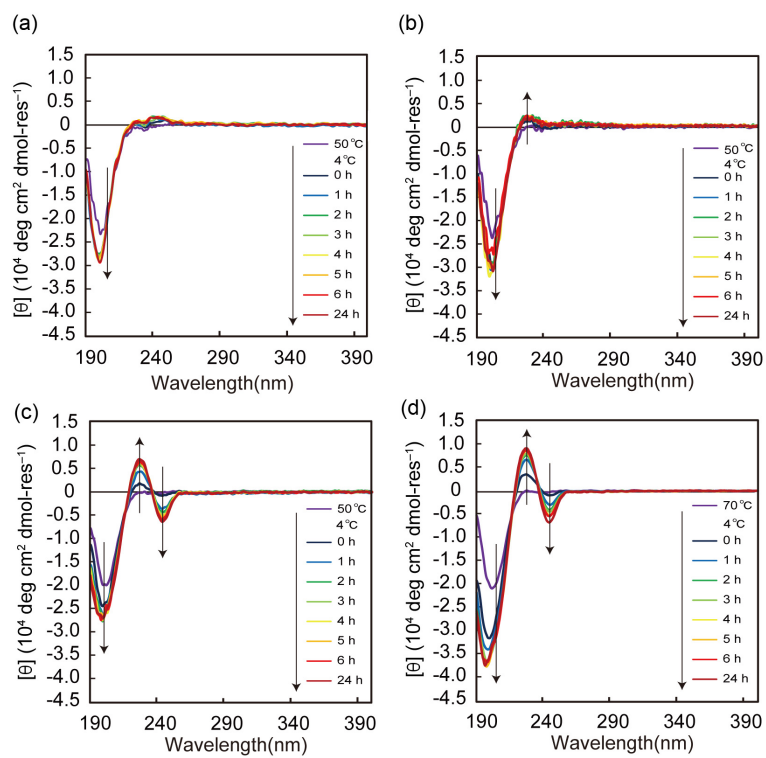
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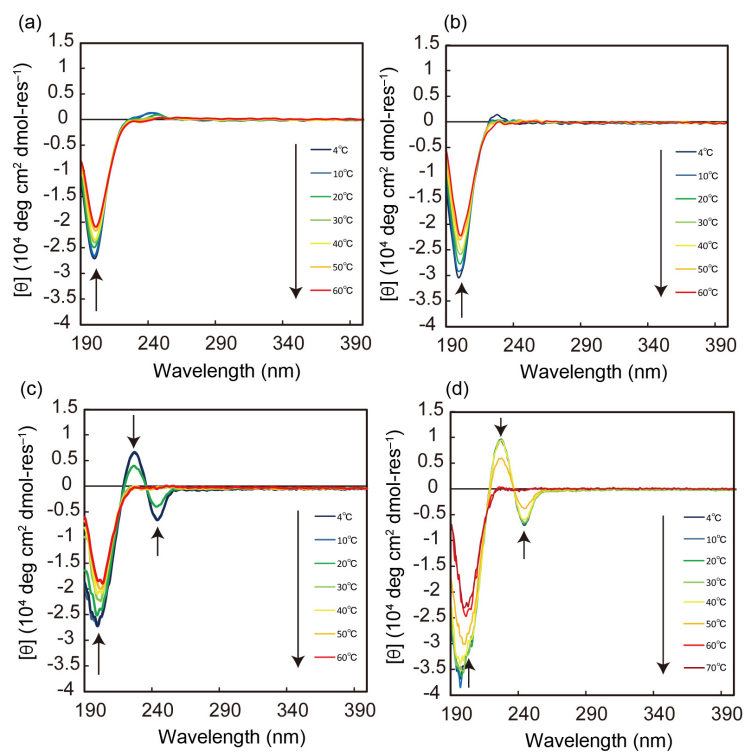
\*E-mail: nhigashi@mail.doshisha.ac.jp (N. H.)



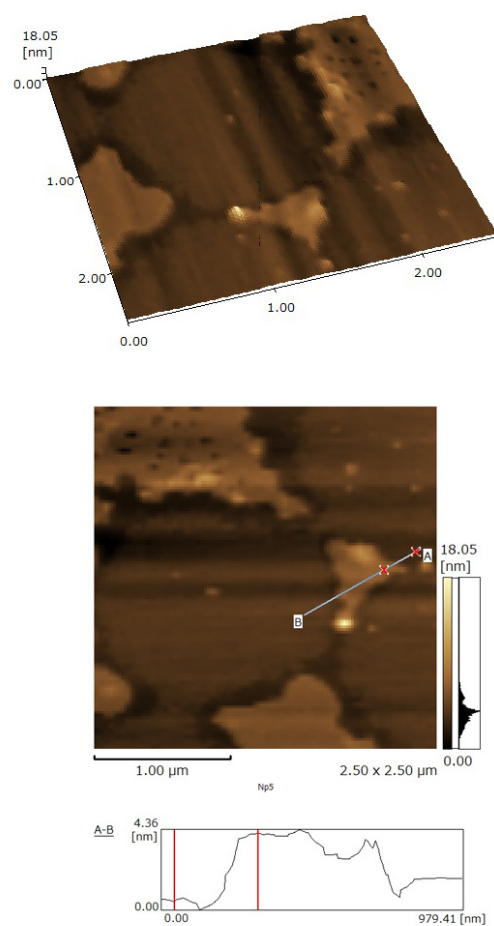
**Figure S1.** MALDI TOF MS spectra of 2Np-CMP<sub>n</sub> ( $n=3-7$ ), 1Np-CMP<sub>6</sub>, An-CMP<sub>n</sub> ( $n=5-7$ ) and Py-CMP<sub>6</sub>. Matrix: DHBA.



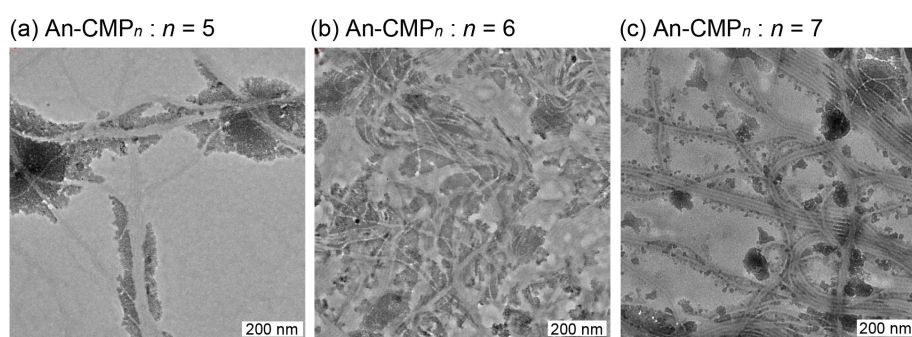
**Figure S2.** CD spectral change of 2Np-CMP<sub>n</sub> ( $n=3$  (a),  $n=4$  (b),  $n=5$  (c),  $n=7$  (d)) in water (5% TFE) upon incubation at 4 °C after treatment at 50 °C or 70 °C (denatured form). [2Np-CMP<sub>n</sub>]=60 μM.



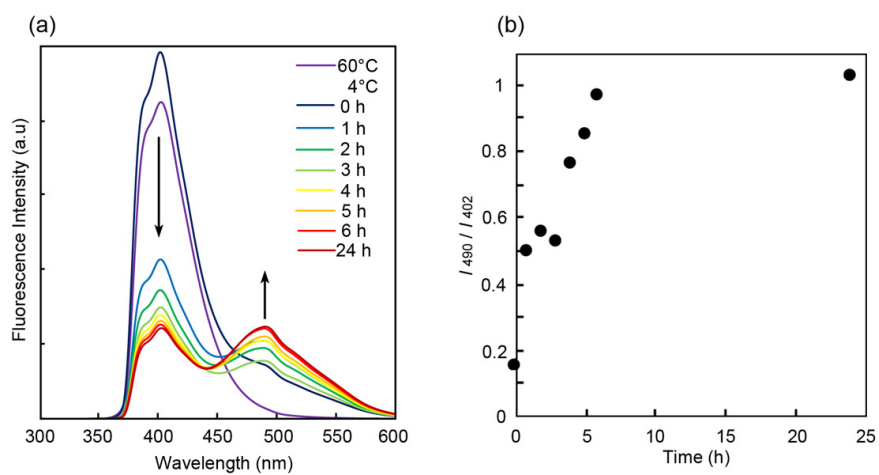
**Figure S3.** Temperature dependence of CD spectra of 2Np-CMP<sub>n</sub> ( $n=3$  (a),  $n=4$  (b),  $n=5$  (c),  $n=7$  (d)) in water (5% TFE).  $[2\text{Np-CMP}_n]=60\text{ }\mu\text{M}$ .



**Figure S4.** AFM image of 2Np-CMP<sub>n</sub> ( $n=5$ ) assemblies formed in water (5% TFE) at 4 °C. [2Np-CMP<sub>n</sub>]=60 μM.



**Figure S5.** TEM images of An-CMP<sub>n</sub> ( $n=5$  (a),  $n=6$  (b),  $n=7$  (c)) assemblies formed in water (5% TFE) at 4 °C. [An-CMP<sub>n</sub>]=60  $\mu$ M. The images were obtained by staining with 1% phosphotungstic acid.



**Figure S6.** (a) Fluorescence spectral change of Py-CMP<sub>6</sub> in water (5% TFE) upon incubation at 4 °C after treatment at 60 °C. [Py-CMP<sub>6</sub>]=60 μM. (b) Time-dependence of  $I_{490}$  (excimer)/ $I_{402}$  (monomer) value.  $\lambda_{\text{ex}}$ =348 nm.