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Correction to "Self-Assembly of Minimal Peptoid Sequences"

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It has come to our attention that some of our cryo-electron microscopy (cryo-EM) images actually show ice contamination,[1] instead of the soft matter aggregates originally indicated in our publication. The images only relate to counterexample peptoid sequences that did not properly assemble (originally Figures 3D−K and S5E−G, I−M, and P). As such, our main finding of an ultrashort water-soluble tripeptoid assembling into ordered nanofibers is not changed. Our overall conclusions based on complementary cryo-EM, DLS, CAC, and fluorescence spectroscopy measurements are also unaffected.

Nonetheless, the figures indicated and associated text require correction. In re-examining our cryo-EM data set, we found micrographs showing additional structures that are unlikely to be contaminants, which we previously took as less representative. Like the artifacts, the structures now identified are also irregular and consist of an ensemble of sizes centered around a mean. Incidentally, the mean sizes of these structures (50−250 nm in diameter, depending on sequence) fit better with our complementary DLS results—no agglomeration effect of individual 5−20 nm ice artifacts is needed anymore to reconcile the sizes measured by EM and DLS.

The new Figure 3 and caption should be as shown on this page (main textual changes in **bold**).

The corrections in the main text on page 496 (third page) are as follows (main changes in **bold**):

In the bottom left paragraph below Figure 3, the corrected second sentence should read: "N(FKF), which has Nlys with the longer side chain in the same central residue position as N(FkF), formed globular assemblies ca. **50−250 nm** wide (Figure 3D−F)."

In the right column, the corrected first paragraph should read: "N(kFF) and N(KFF), which have the cationic Nae/Nlys placed at the N-terminus, also formed **globular** assemblies (Figure 3G−L). Upon closer inspection, N(KFF) actually assembled into ca. 100 nm spherical assemblies. N(kFF), which has the shorter Nae side chain, also formed **100 nm** features (Figure 3J). However, this sequence appeared to exhibit stronger interactions, since **some of** the features instead coalesced into **elongated structures** ca. **100 nm** in diameter (Figures 2J,K and S5P) as well as into nanosheets that spanned >**100 nm** (Figures 2L and S5O)."

Also, in the right column, the corrected bottom paragraph should read: "Peptoid N(FKF) shows assemblies with R_H

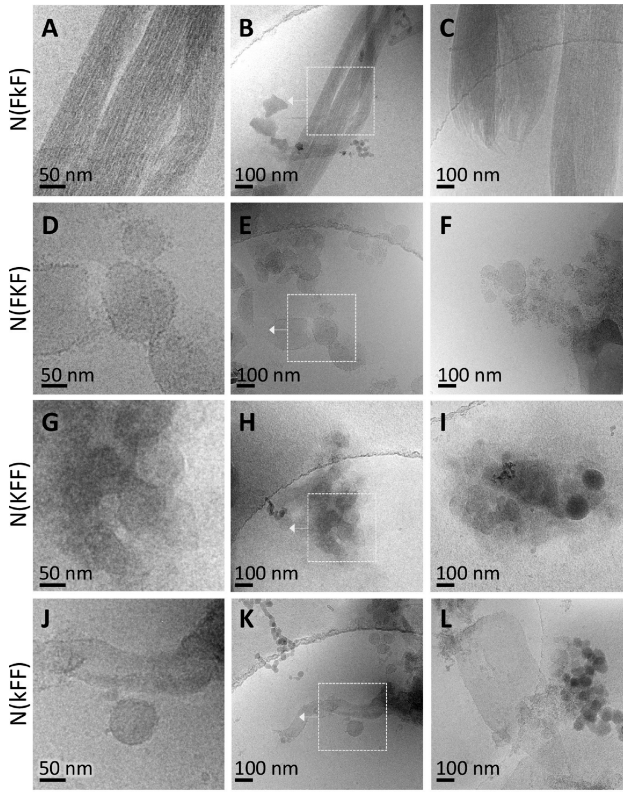

Figure 3. Cryo-TEM images from 2 wt % (20 mg/mL) solutions of N(FkF) (A−C), N(FKF) (D−F), N(KFF) (G−I), and N(kFF) (J−L). The left column shows zoomed in areas indicated in the center column. The right column shows additional typical images. Further areas are shown in Figure S5. **The higher contrast smaller clusters in the upper left of panel K and far right of panel L may be ice contamination.** Peptoid solutions were prepared in the same ways as for CAC measurements (see caption of Figure 2). See the Supporting Information for cryo-EM sample vitrification procedures.

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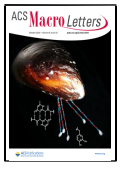

centered around 108 nm (Figure 4B), which could indicate the **larger** assemblies (Figure 2D−F). N(kFF) and N(KFF) show mainly the presence of structures with R_H centered around 0.5 and 44−49 nm (Figure 3C,D), corresponding respectively to monomers and the **globules** observed."

Lastly, in the Supporting Information, the corrected Figure S5 and caption should be as shown below (main textual changes in **bold**).

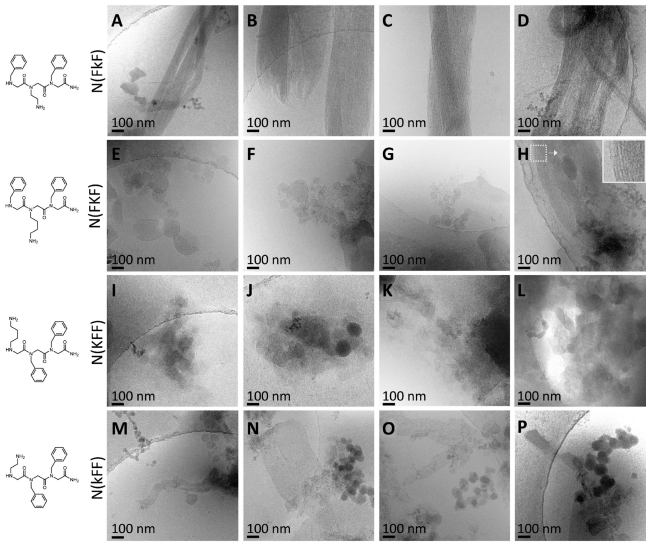

Figure S5. Overview of cryo-TEM observations. The sequences N(FkF), N(FKF), N(KFF), and N(kFF) are arranged by row. All samples were prepared from 2 wt % (20 mg/mL) solutions. The two columns on the left are duplicated from Figure 3 of the main text, while the two columns on the right show additional areas. The imaged features include both typical some less often observed structures, including fiber bundles of N(FKF) in (H), and sheet-like structures for N(kFF) in (N **and O**) that span ca. 150 nm × 500 nm. **Small amounts of higher contrast globular clusters with individual diameters <50 nm (A, lower right; D, lower left; M, upper left) are likely ice contamination.**"

REFERENCES

(1) Franken, L. E.; Boekema, E. J.; Stuart, M. C. A. Transmission Electron Microscopy as a Tool for the Characterization of Soft Materials: Application and Interpretation. *Adv. Sci.* **2017**, *4*, 1600476.

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