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Electronic Supplementary Information

An Inorganic Anionic Polymer Filter Disc: Direct Crystallization of a Layered Silicate Nanosheet on a Glass Fiber Filter

by

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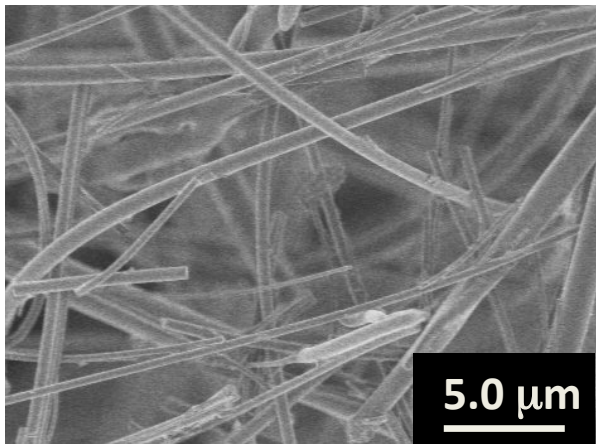

Fig. S1. SEM image of the pristine silica fibers (ADVANTEC GB-100R).

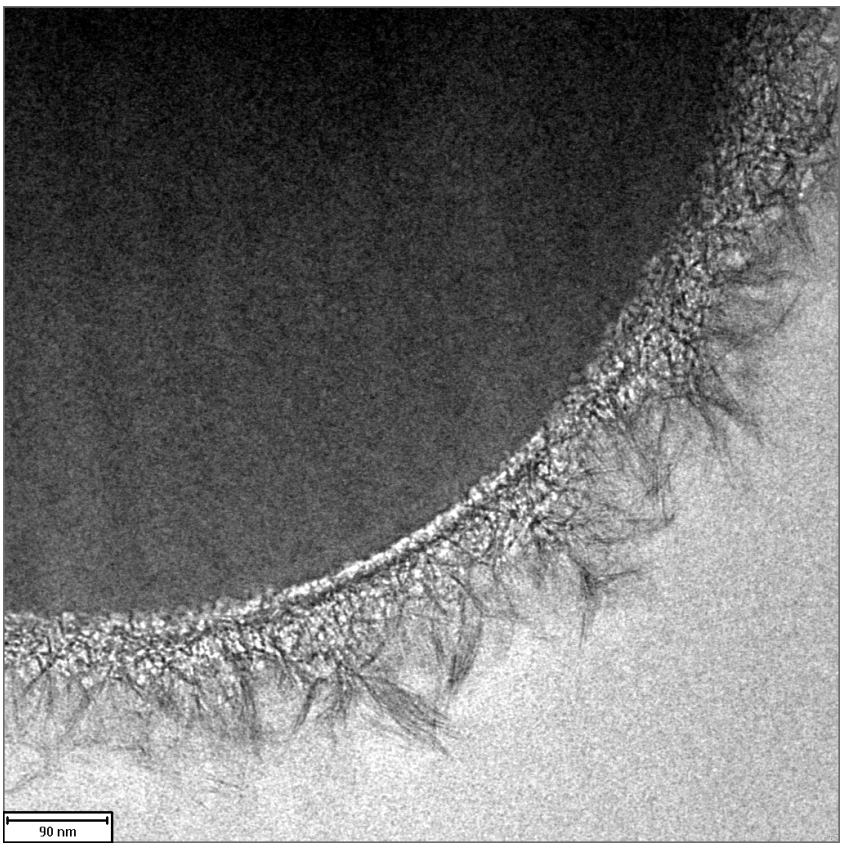

Fig. S2. A cross-sectional TEM image of F15q.

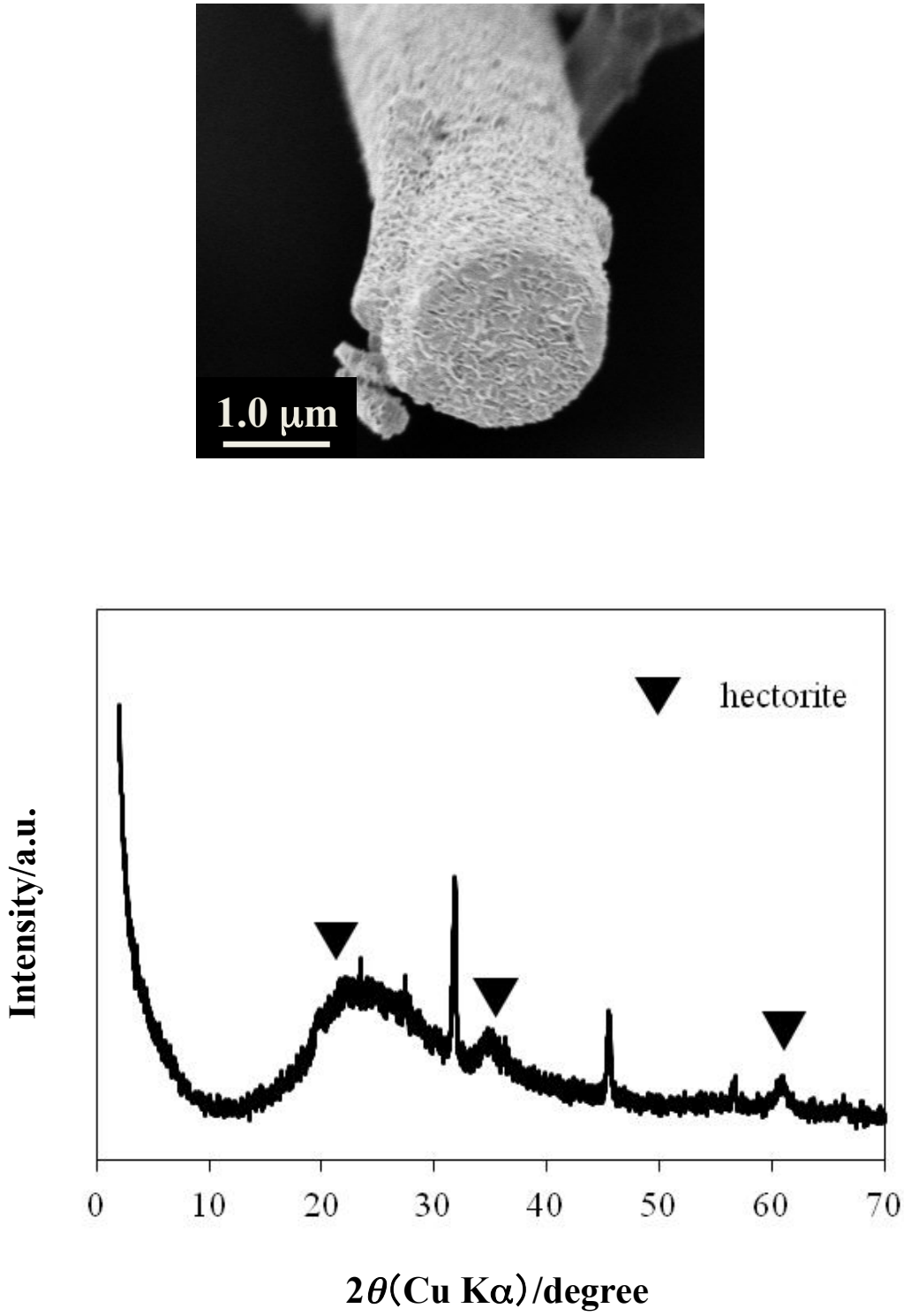

Fig. S3. (bottom) XRD pattern and (top) SEM image of the F15h fibers .

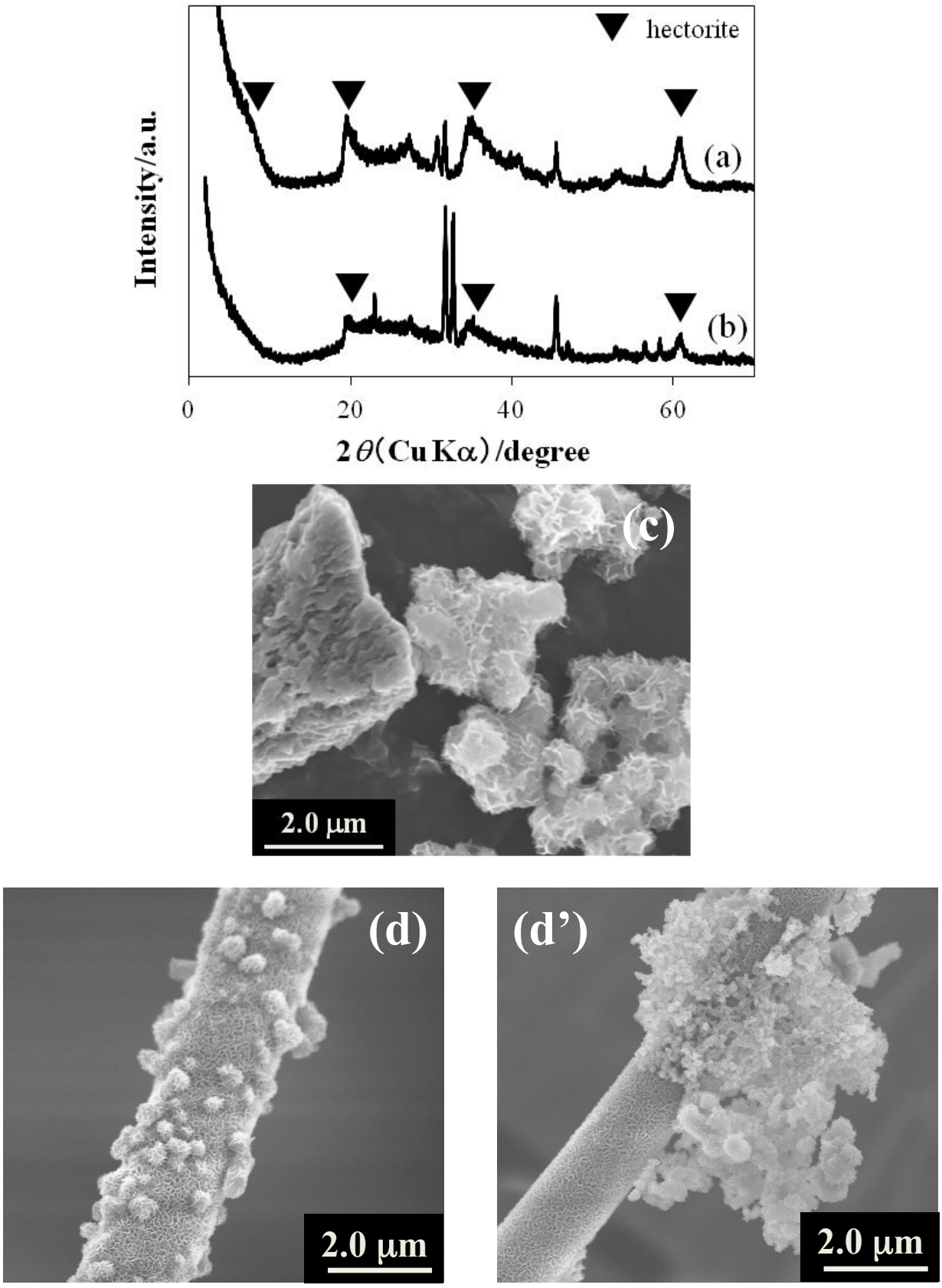

Fig. S4. XRD patterns of (a) particles, which precipitated during the F50h synthesis, and (b) fibers in the filter part. SEM images of (c) the precipitates, and (d) the fiber part.

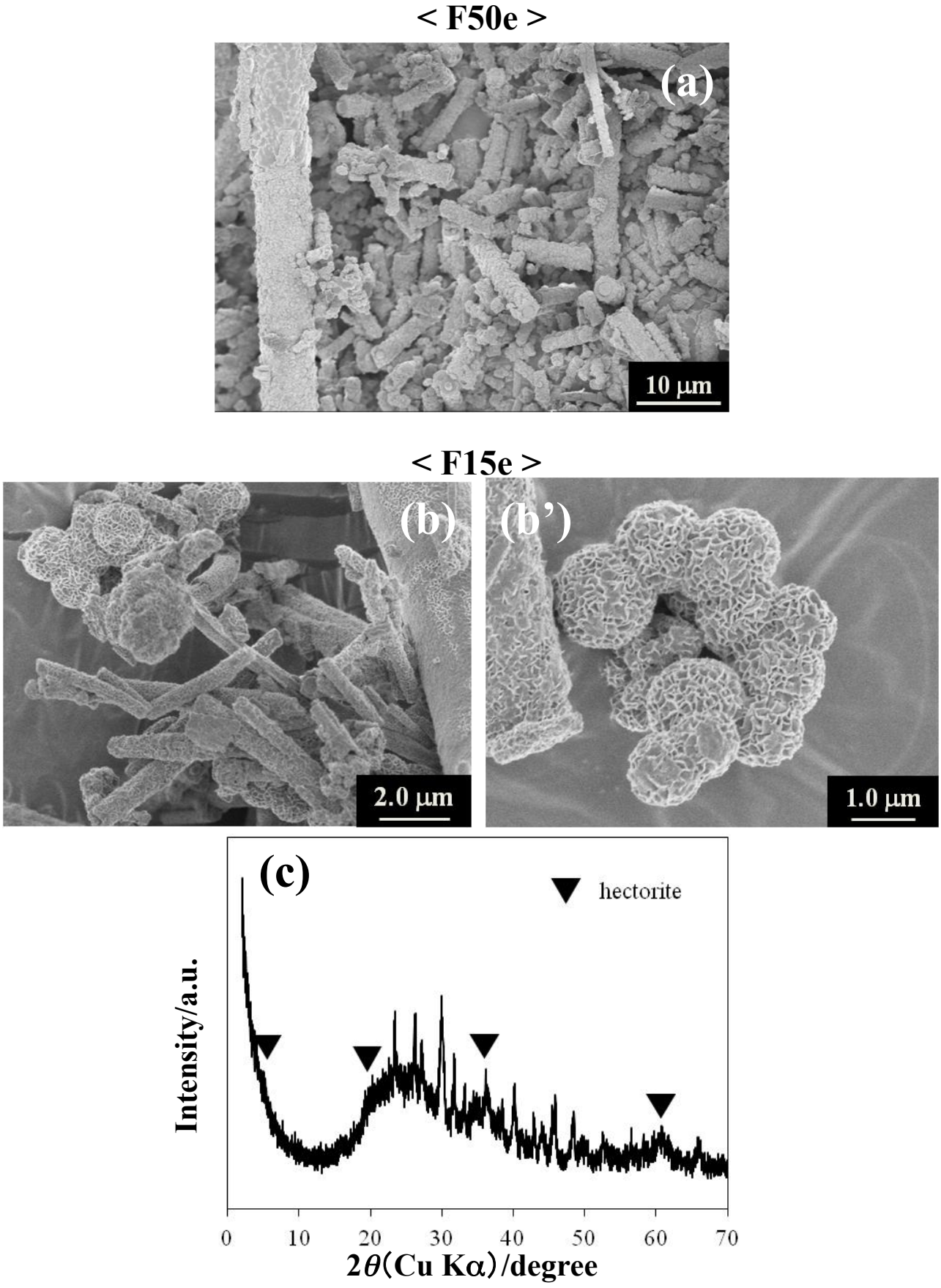

Fig. S5. SEM images of fragments, which precipitated during the (a) F50e and (b) F15e syntheses, and (c) the XRD pattern of the precipitate in F15e synthesis.

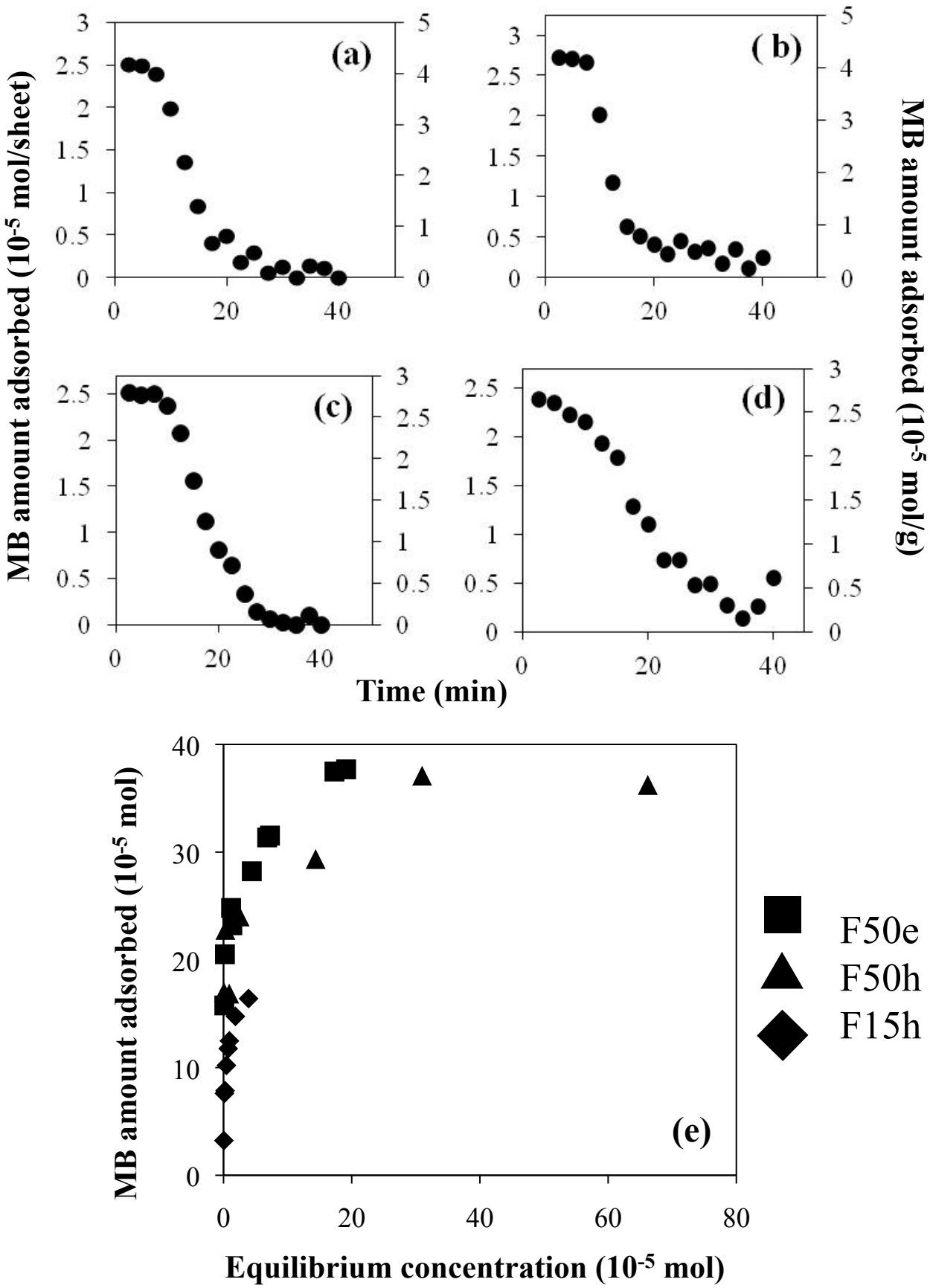

Fig. S6. MB breakthrough curves of (a) F15e, (b) F15h, (c) F50e, (d) F50h, and (e) the adsorption isotherms of MB from aqueous solution on the Hect-coated fiber samples.

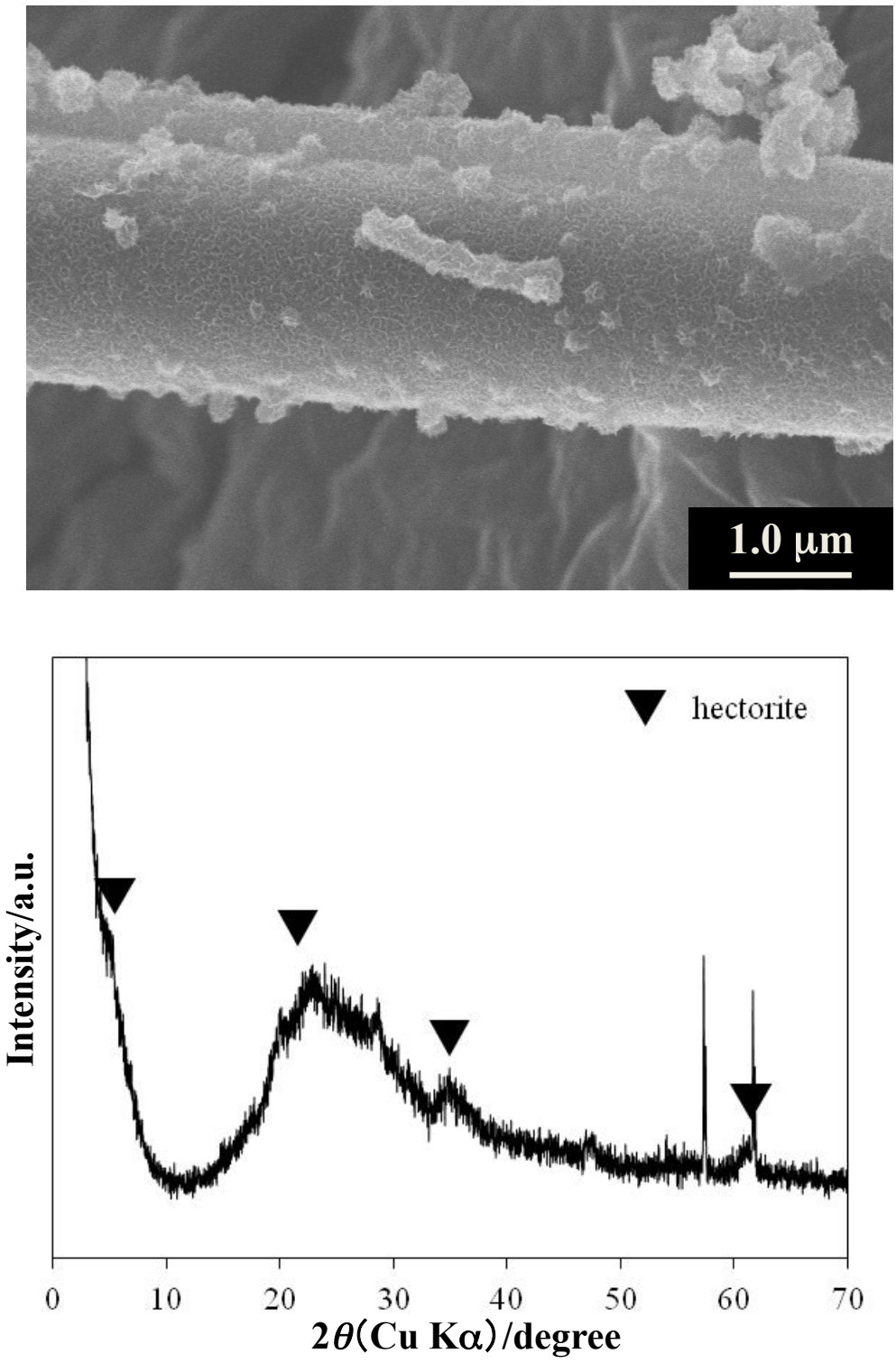

Fig. S7. (bottom) XRD pattern and (top) SEM image of the FDq fibers.