

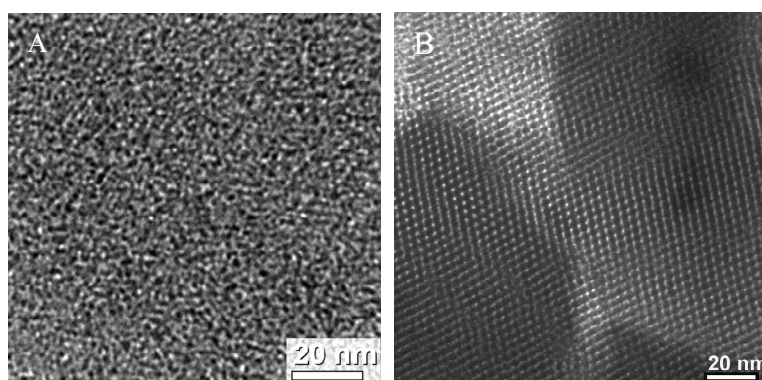
## Supplementary Information

Probing into assembling of highly vinyl-functionalized periodic mesoporous organosilica materials with crystal-like frameworks

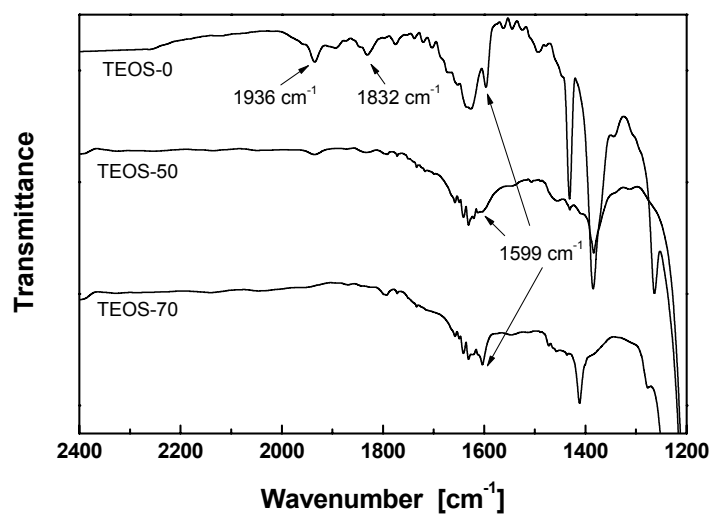
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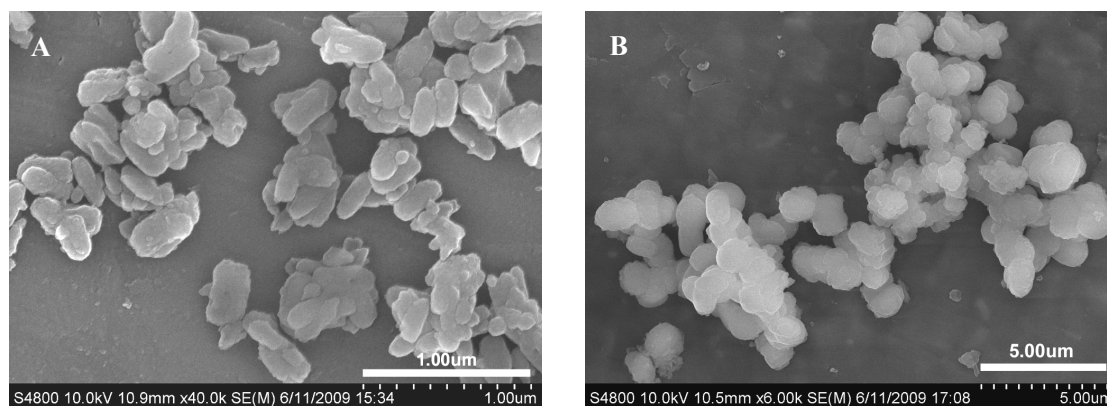
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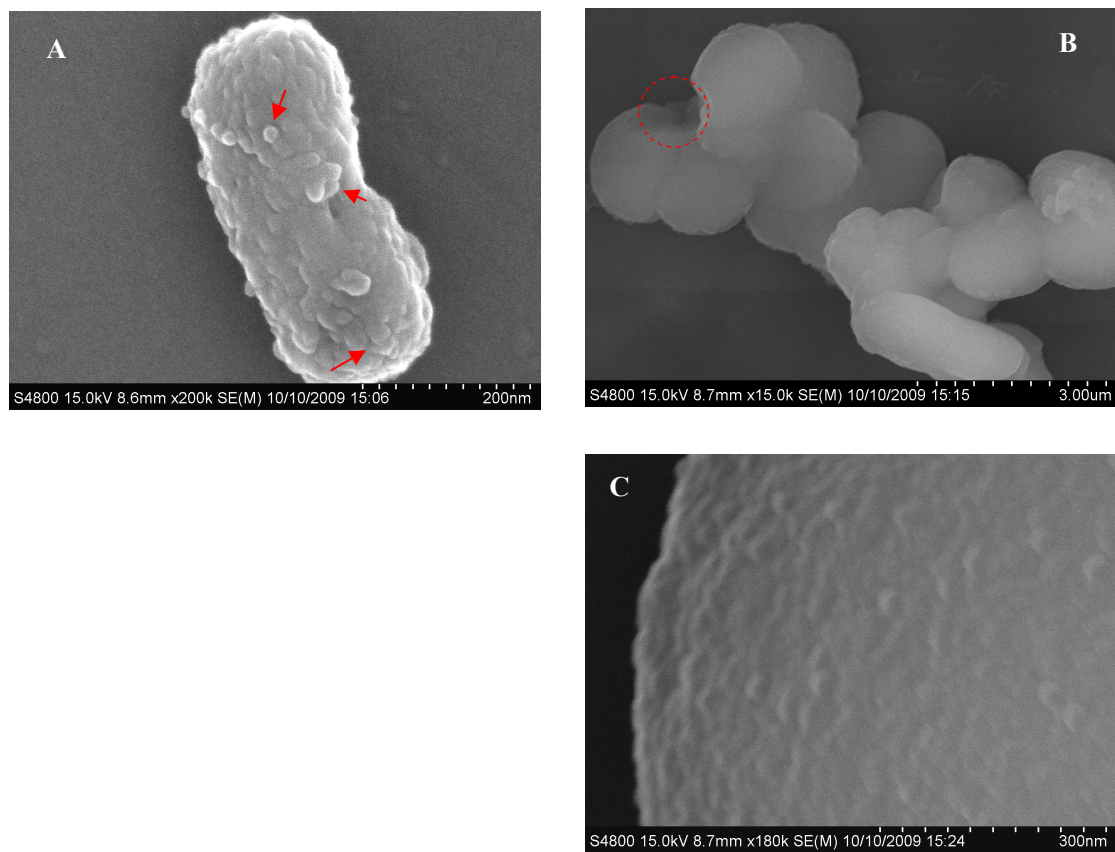
**Figure S1** TEM images of vinyl-functionalized PMOs based on BTEB/TEVS viewed in (100) direction. (A) TEVS-15, worm-like; (B) TEVS-30, *P6mm*.



**Figure S2** FTIR spectra of vinyl-functionalized PMOs based on BTEB/TEOS/TEVS with various molar percentages of TEOS.



**Figure S3** SEM images of vinyl-functionalized PMOs based on BTEB/TEVS. (A) TEVS-25; (B) TEVS-40.



**Figure S4** SEM images of vinyl-functionalized PMOs based on BTEB/TEVS. (A) TEVS-15; (B) TEVS-60; (C) magnified (B).