Supporting Information

for

An Economic and Environmentally Benign Approach for the Preparation of Monolithic Silica Aerogels

Yuanyuan Zhang, Junxia Peng*, Guanqun Du, Hongxia Zhang, Yu Fang

Key Laboratory of Applied Surface and Colloid Chemistry of Ministry of Education, School of Chemistry and Chemical Engineering, Shaanxi Normal University, Xi'an 710119, P. R. China

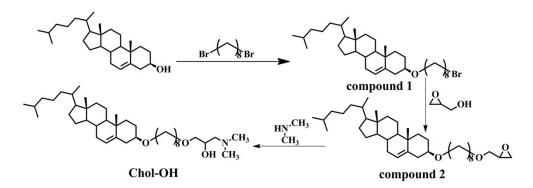


Figure 1S. Schematic illustration of the synthesis procedure for stabilizer, Chol-OH.

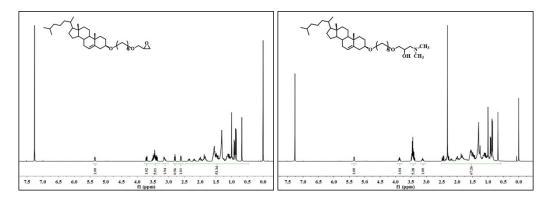


Figure S2. ¹H NMR Spectra of compound **2** and Chol-OH

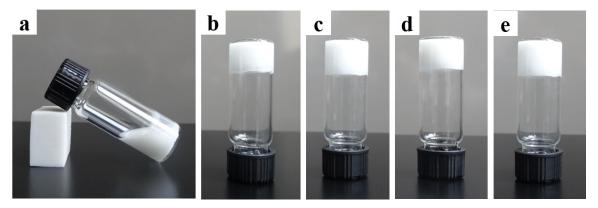


Figure S3. Phase behavior of Chol-OH stabilized water/GE-vinyl system with different water content, where (a) 50%, (b) 75%, (c) 80%, (d) 90%, and (e) 95% (v/v).

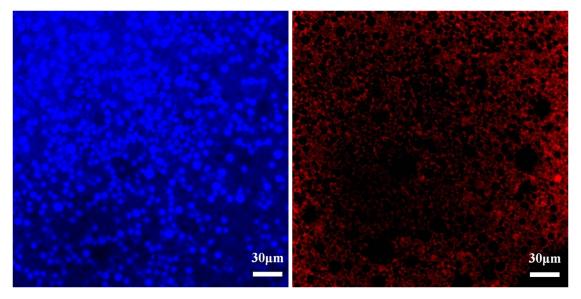


Figure S4. Confocal fluorescence images of GE-vinyl with 80% content of water. (a) The water phase was labeled by addition of 7-hydroxy-4-methyl coumarin (10^{-4} M) acted as fluorescent probe. (b) The oil phase, triethoxyvinylsilane, was labeled by addition of Nile Red (10^{-3} M) acted as fluorescent probe.

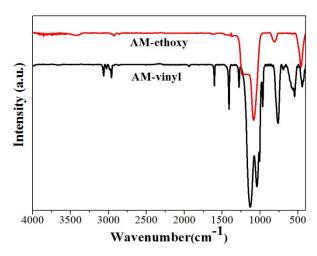


Figure S5. FT-IR spectra of monolithic silica aerogels: AM-vinyl and AM-ethoxy.