Supplementary Material for

Water Diffusion Modulates the CEST Effect on Tb(III)-Mesoporous Silica Probes

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Figures

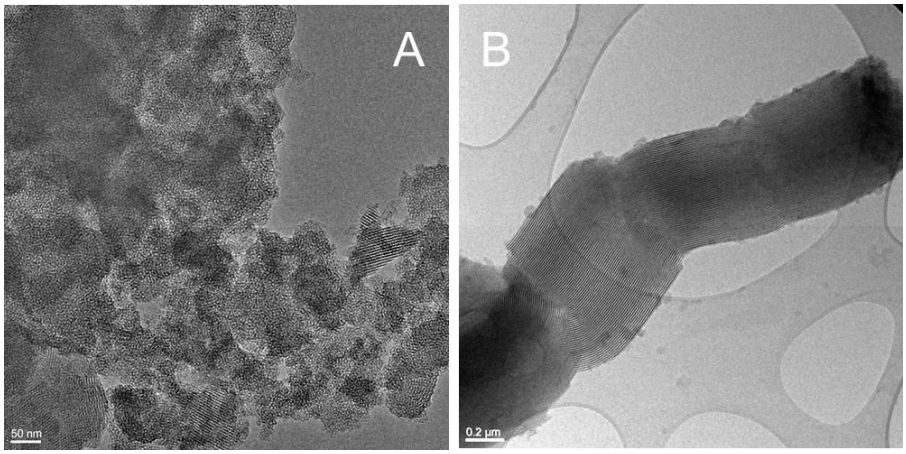

Figure S1. TEM micrographs at low magnifications of MCM-41 (A) and SBA-15 (B).

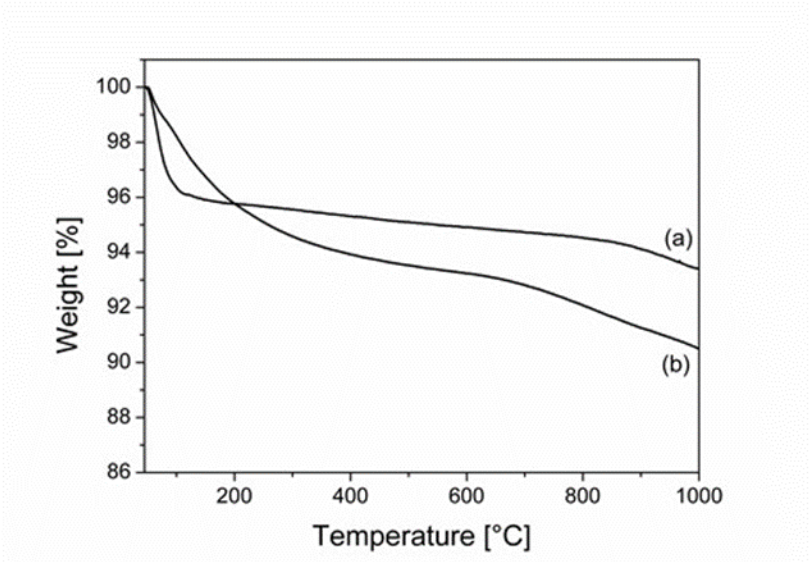

Figure S2. Thermogravimeric profiles collected under argon flow for MCM-41 (a) and SBA-15 (b).

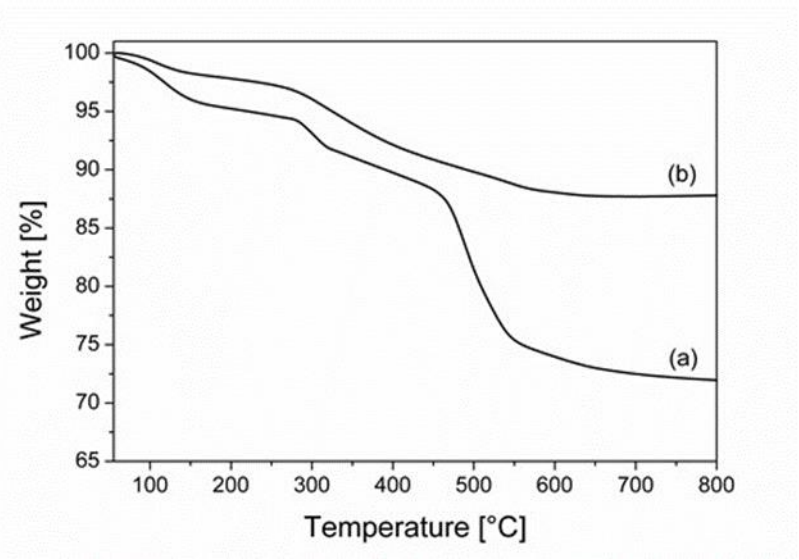

Figure S3. Thermogravimeric profiles collected under oxygen flow for NH_2-MCM-41 (a) and NH_2-SBA-15 (b).

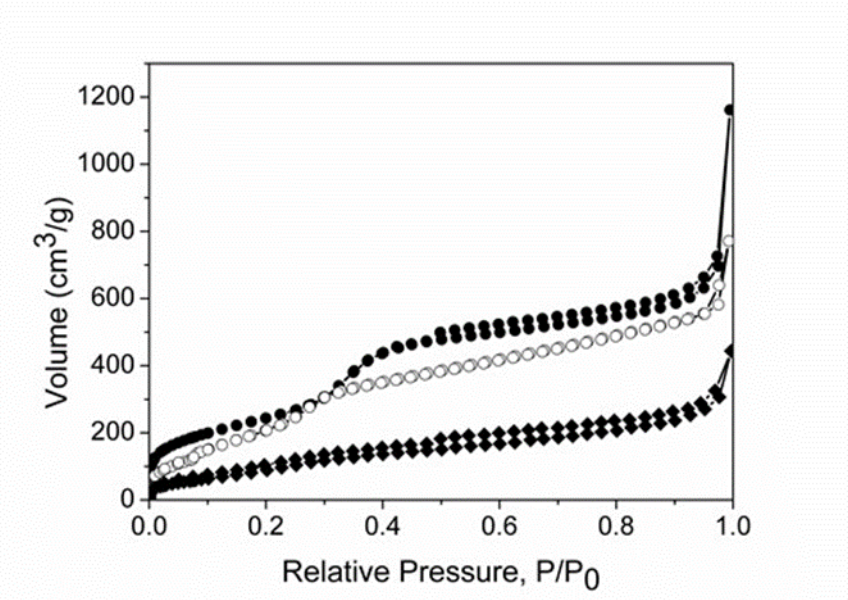

Figure S4. N_2 adsorption/desorption isotherms at 77 K of MCM-41 (-●-), NH_2-MCM-41 (-○-) and TbDO3A-MCM-41 (-♦-).

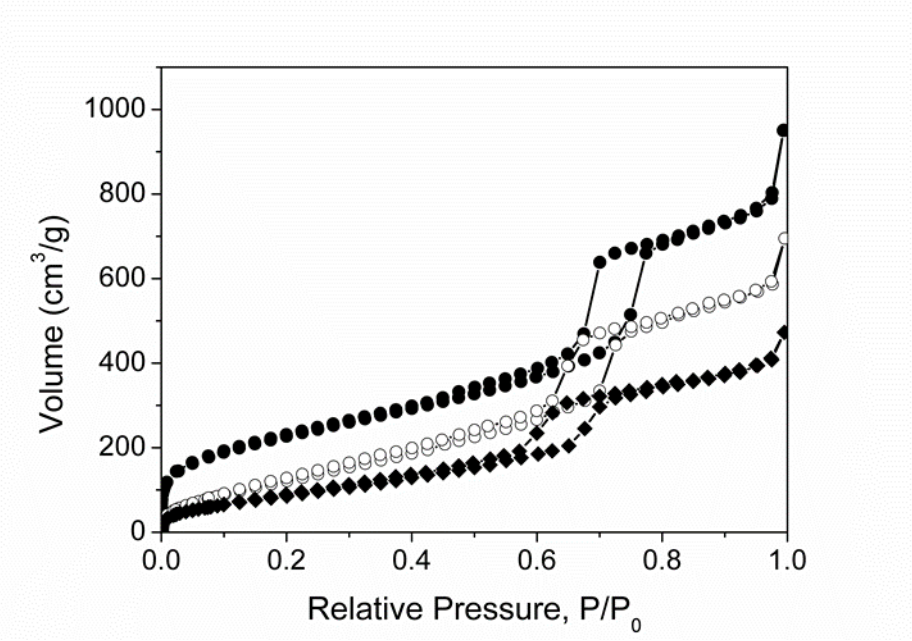

Figure S5. N_2 adsorption/desorption isotherms at 77 K of SBA-15 (-●-), NH_2-SBA-15 (-○-) and TbDO3A-SBA-15 (-♦-).

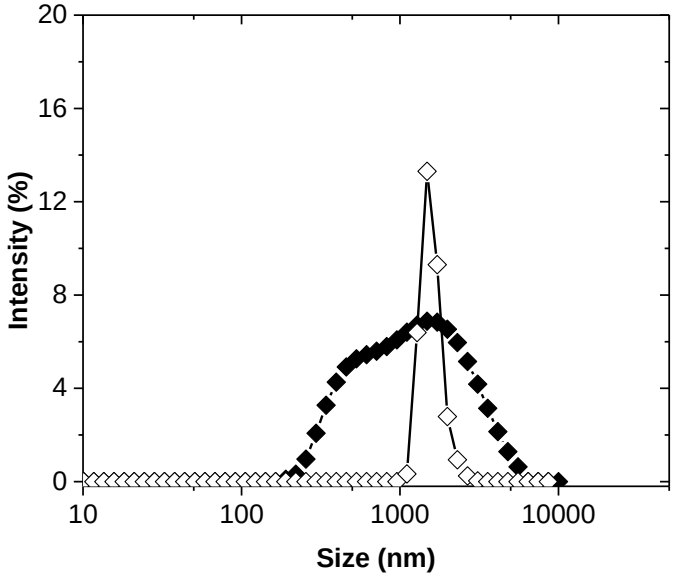

Figure S6. DLS analysis of pegylated TbDO3A-SBA-15 (♦) and TbDO3A-MCM-41 (◊) in PBS buffer solution at 298 K (20 mg/mL).

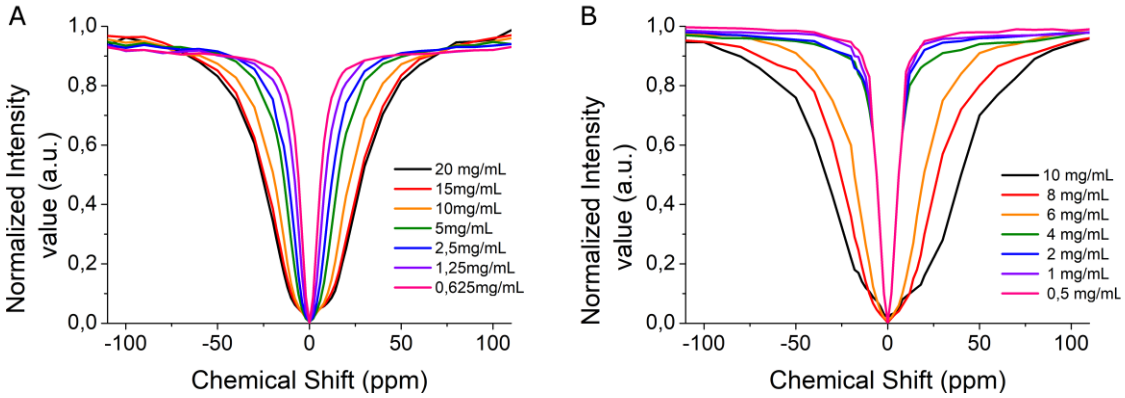

Figure S7. Z-spectra of TbDO3A-MCM-41 (A) and of TbDO3A-SBA-15 (B) at variable concentration of MSNs (pH=7.0-7.1, B_1=24 μT).

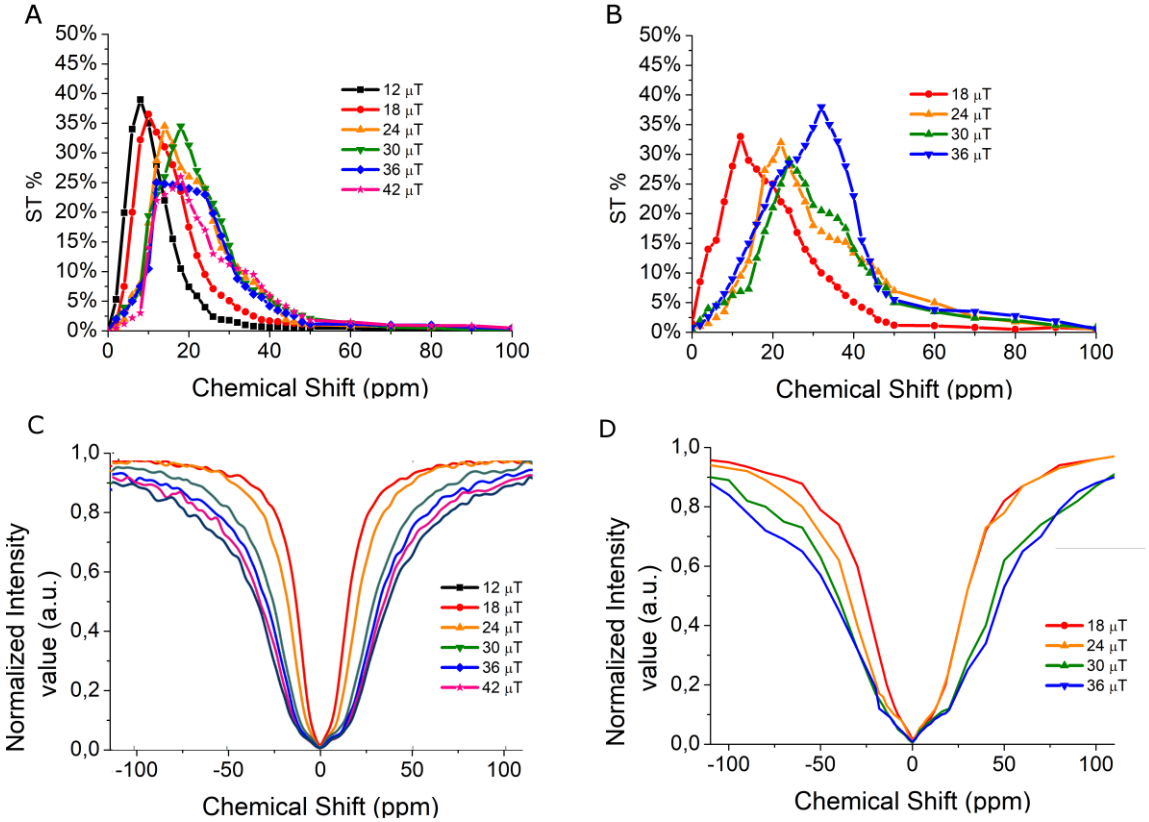

Figure S8. (A,C) ST%- and Z- spectra of TbDO3A-MCM-41 (pH=7.01, [MSNs]= 20 mg/mL). (B,D) ST%- and Z- spectra of TbDO3A-SBA-15 (pH=7.1, [MSNs]= 10 mg/mL).

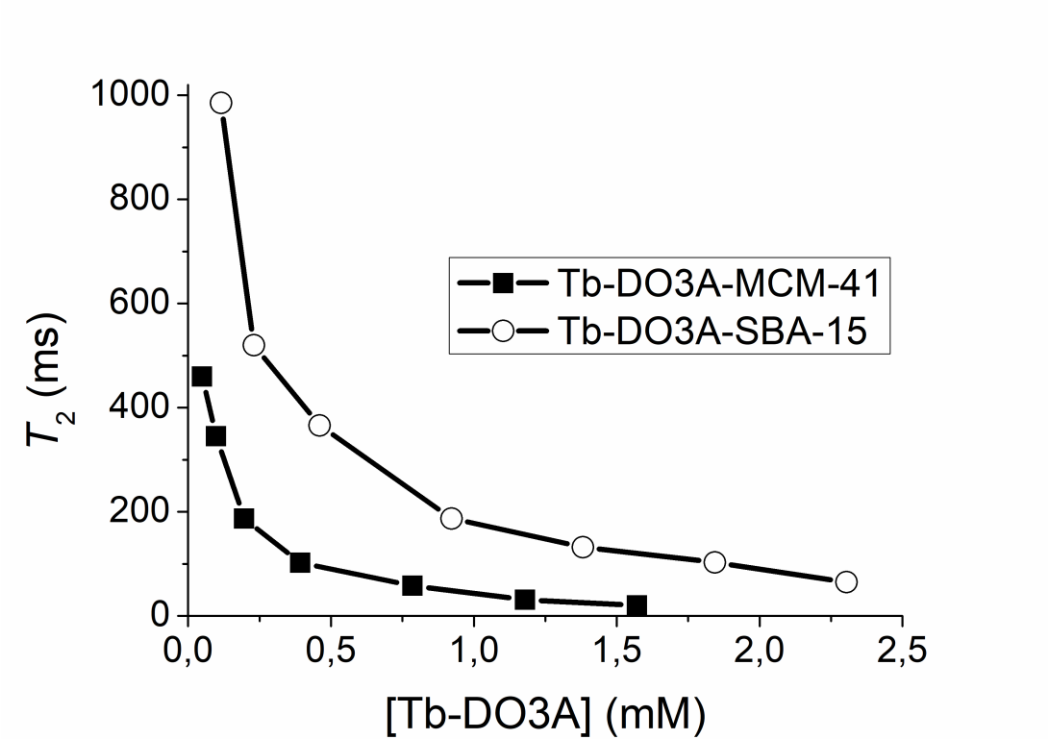

Figure S9. T_2 measurements of TbDO3A-MCM-41 and TbDO3A-SBA-15 MSNs at variable concentration.