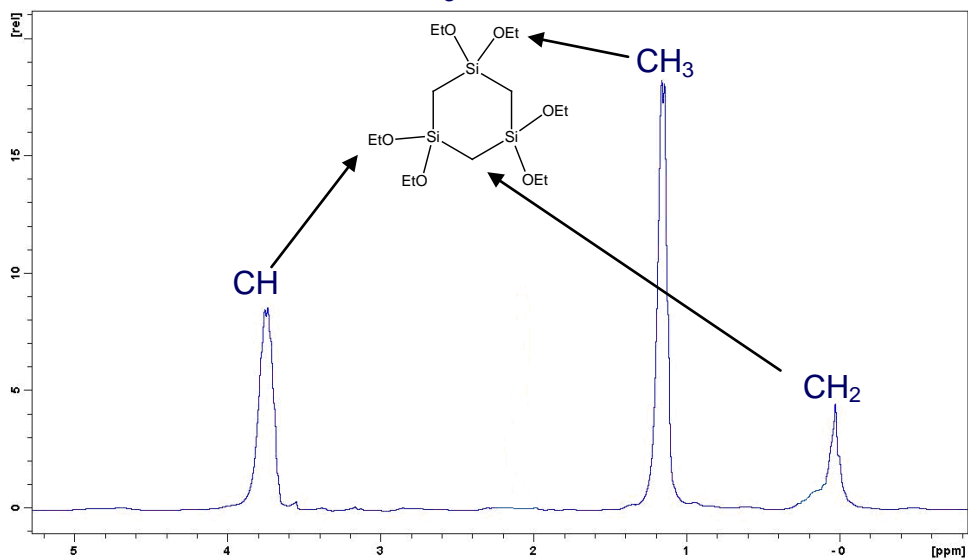
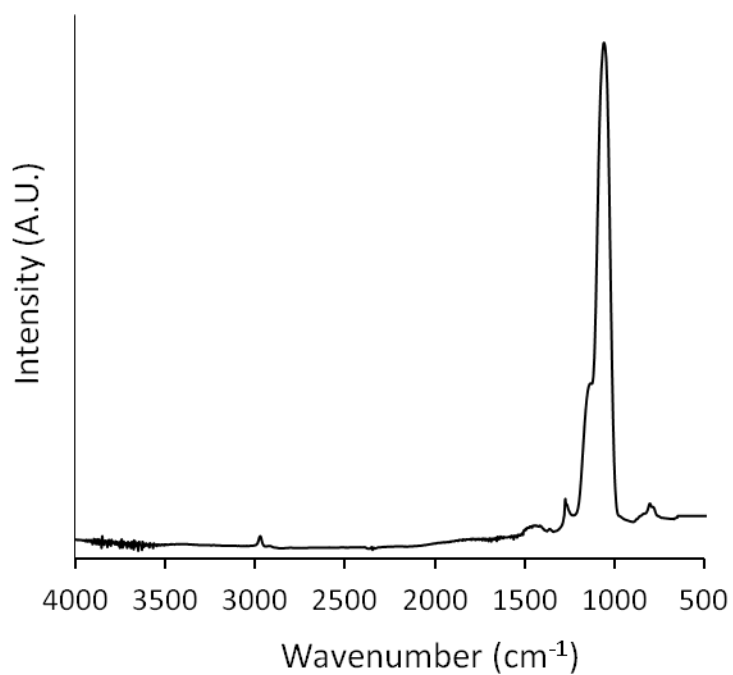


## Supplementary Information

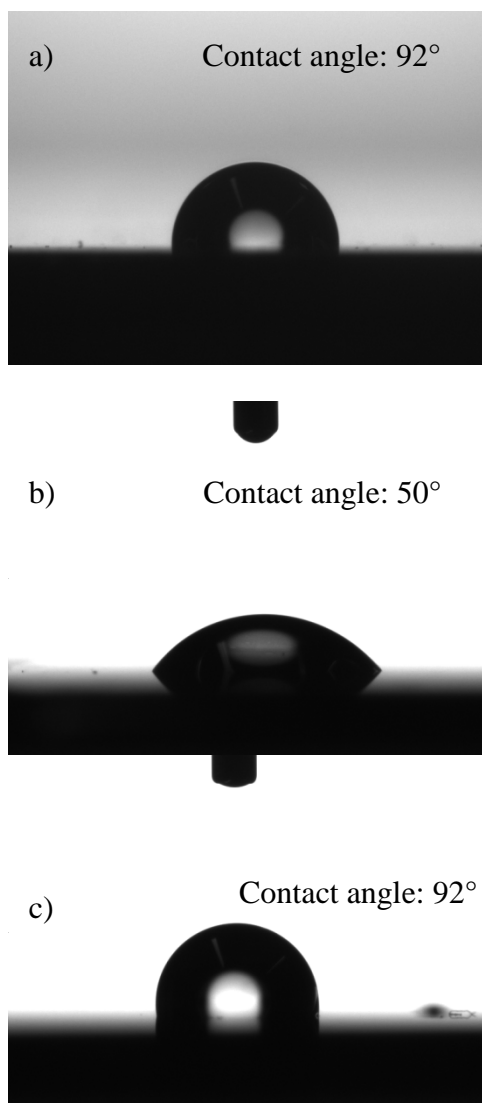
### $^1\text{H}$ NMR - 300 MHz - $\text{CDCl}_3$



**Figure S1.**  $^1\text{H}$  NMR spectrum of 1,3,5[tris(diethoxy)sila]cyclohexane.



**Figure S2.** DRIFT spectrum of the NaOH treated RPMO-Brij film after annealing.



**Figure S3.** Water droplet images of a) the pristine PMO film, b) the dried PMO film after immersion in a pH 14 solution for 5 min. and c) the annealed PMO film after immersion.