Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Electronic Supplementary Information

New insights into the interaction of triethylphosphine oxide with silica surface: exchange between different surface species

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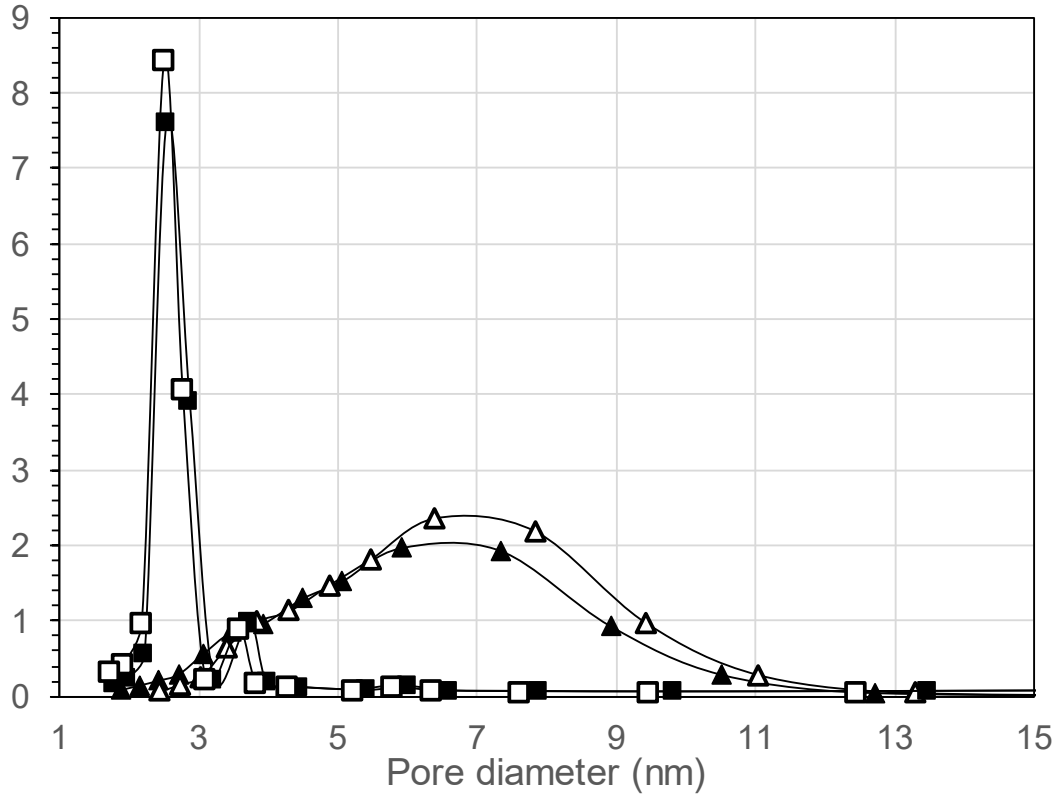

Figure S1. Pore size distribution of MCM-41 (squares) and Silia P60 (triangles), pretreated at 200°C (open symbols) and 500°C (filled symbols).

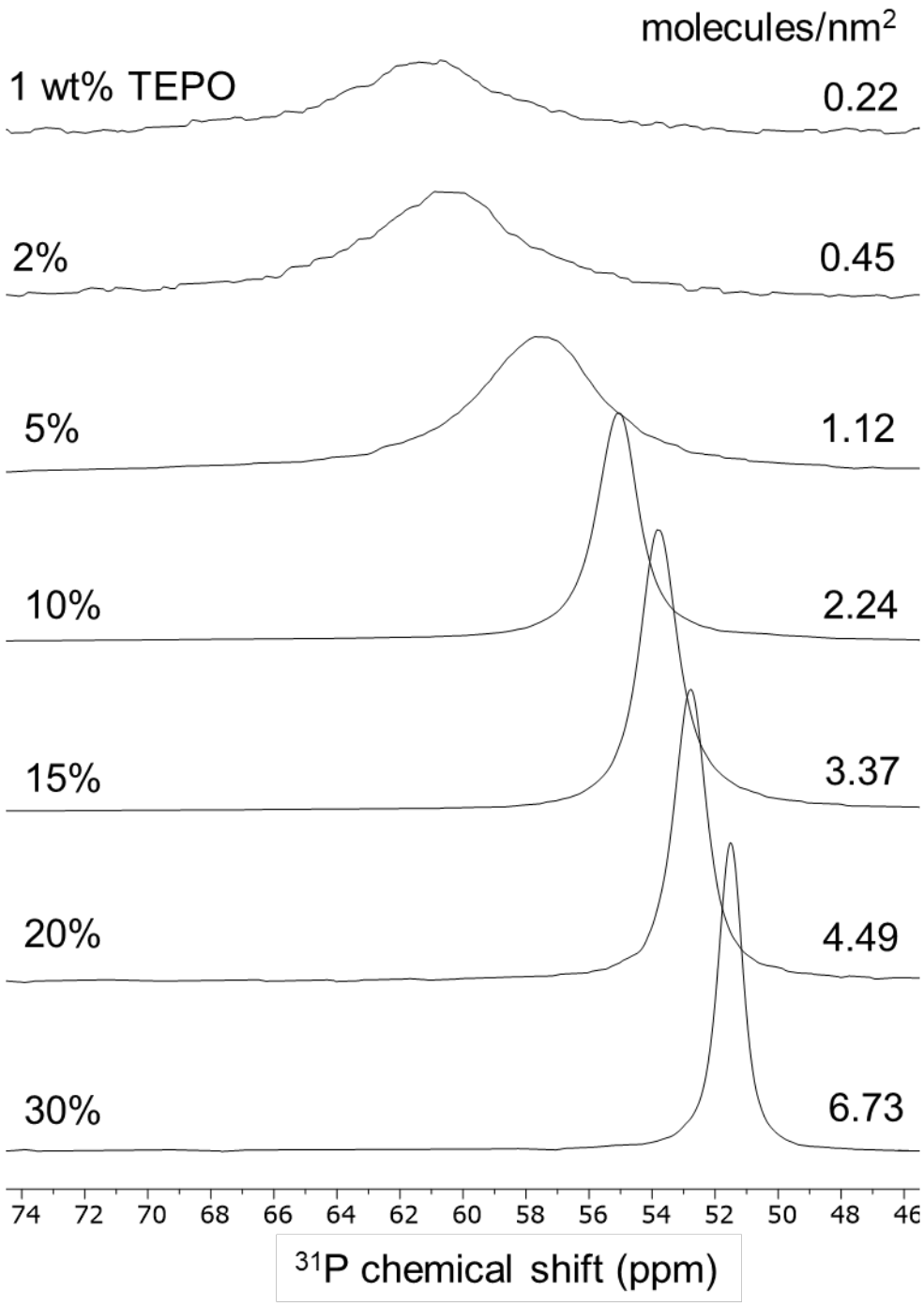

Figure S2. Variation of ^{31}P chemical shift (ppm) of TEPO adsorbed on Aerosil 200 calcined at 500ºC at different TEPO loadings and the corresponding surface coverage.

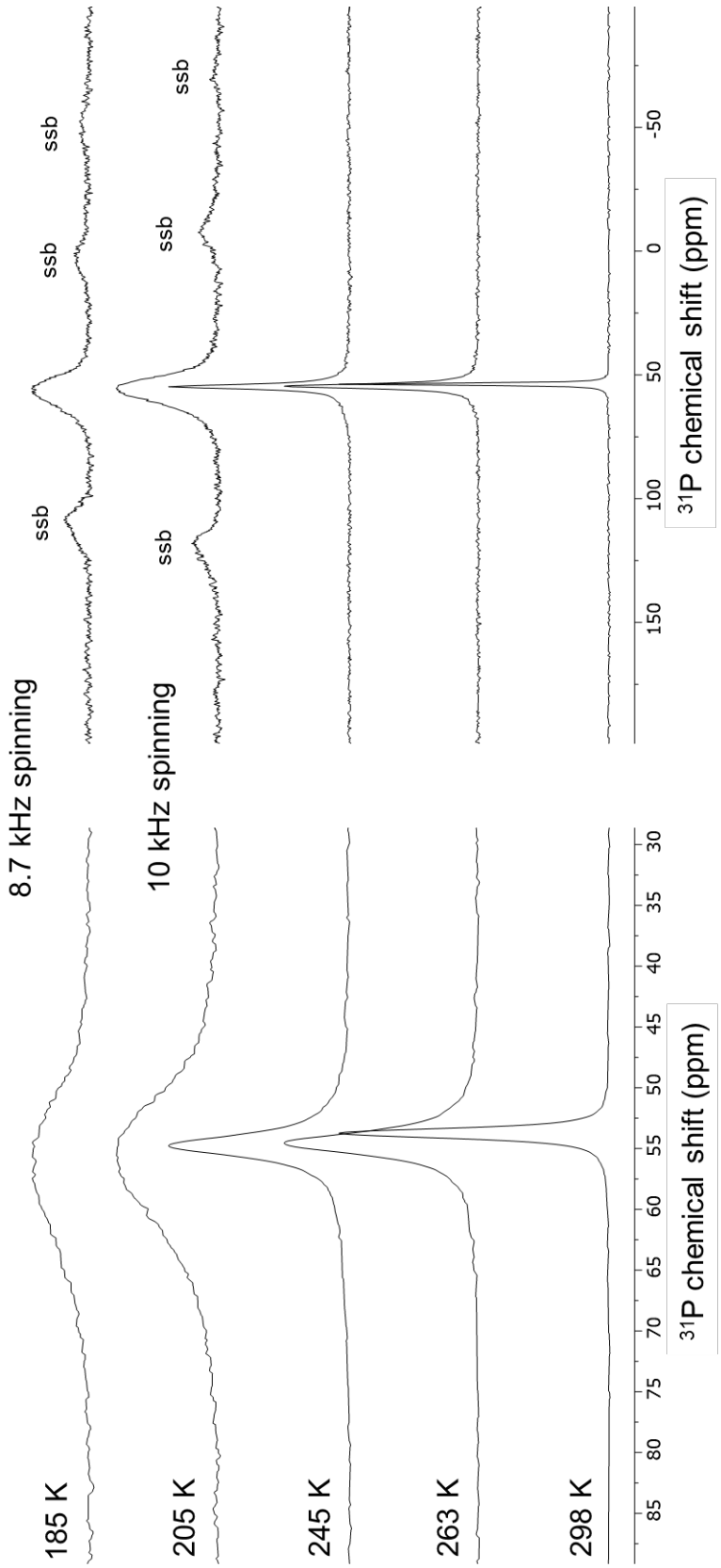

Figure S3. Effect of temperature on the ^{31}P signal of TEPO adsorbed on Aerosil 200 calcined at 500ºC at 20 wt% TEPO loading: central signal (left) and full range spectrum (right). SSB = spinning side bands.

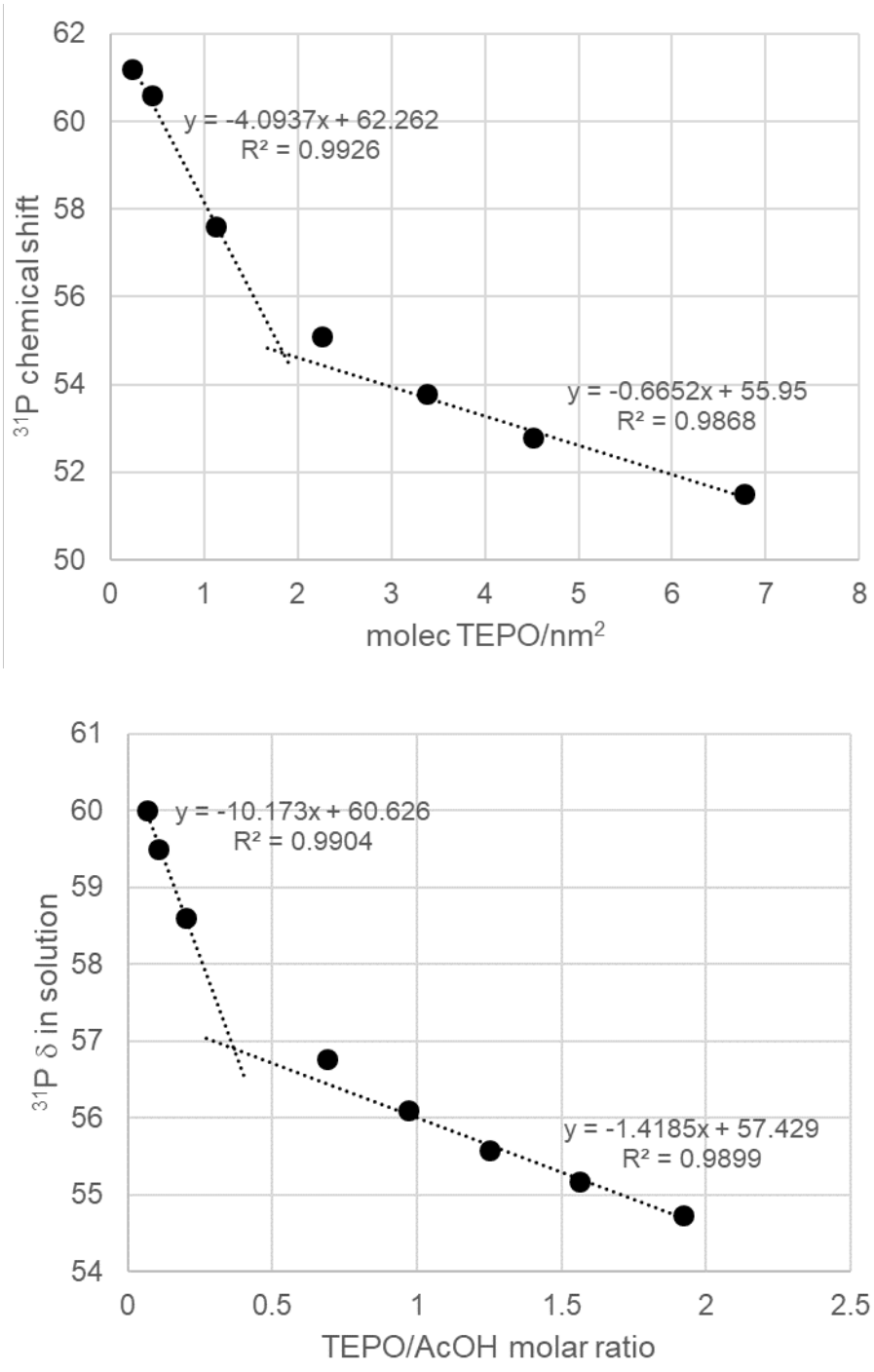

Figure S4. Comparison of the variation of ^{31}P chemical shift (ppm) with TEPO surface coverage on Aerosil 200 calcined at 500ºC and in solution with the TEPO/acetic acid molar ratio in $CDCl_3$ (data taken from reference 13).

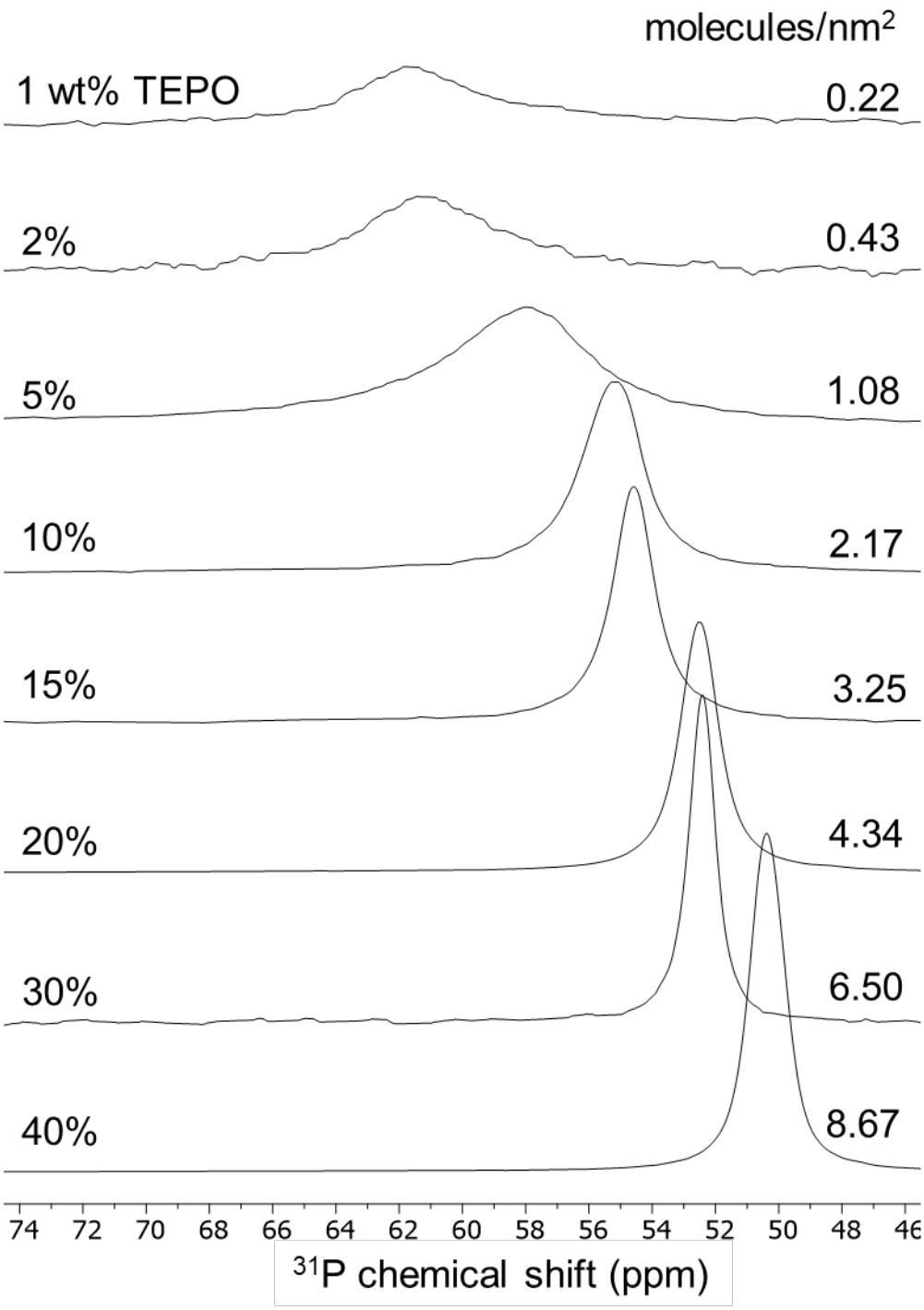

Figure S5. Variation of ^{31}P chemical shift (ppm) of TEPO adsorbed on Aerosil 200 calcined at 200ºC at different TEPO loadings and the corresponding surface coverage.

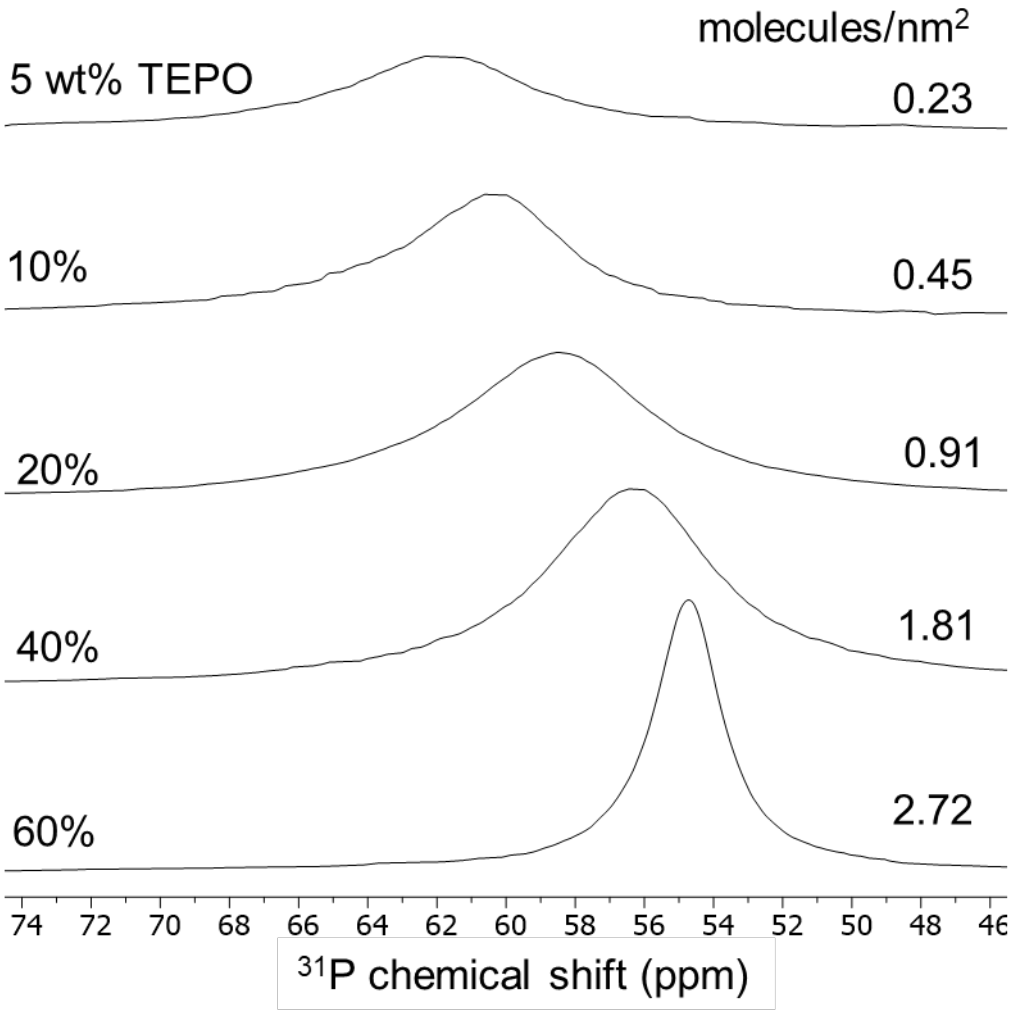

Figure S6. Variation of ^{31}P chemical shift (ppm) of TEPO adsorbed on MCM-41 calcined at 500ºC at different TEPO loadings and the corresponding surface coverage.

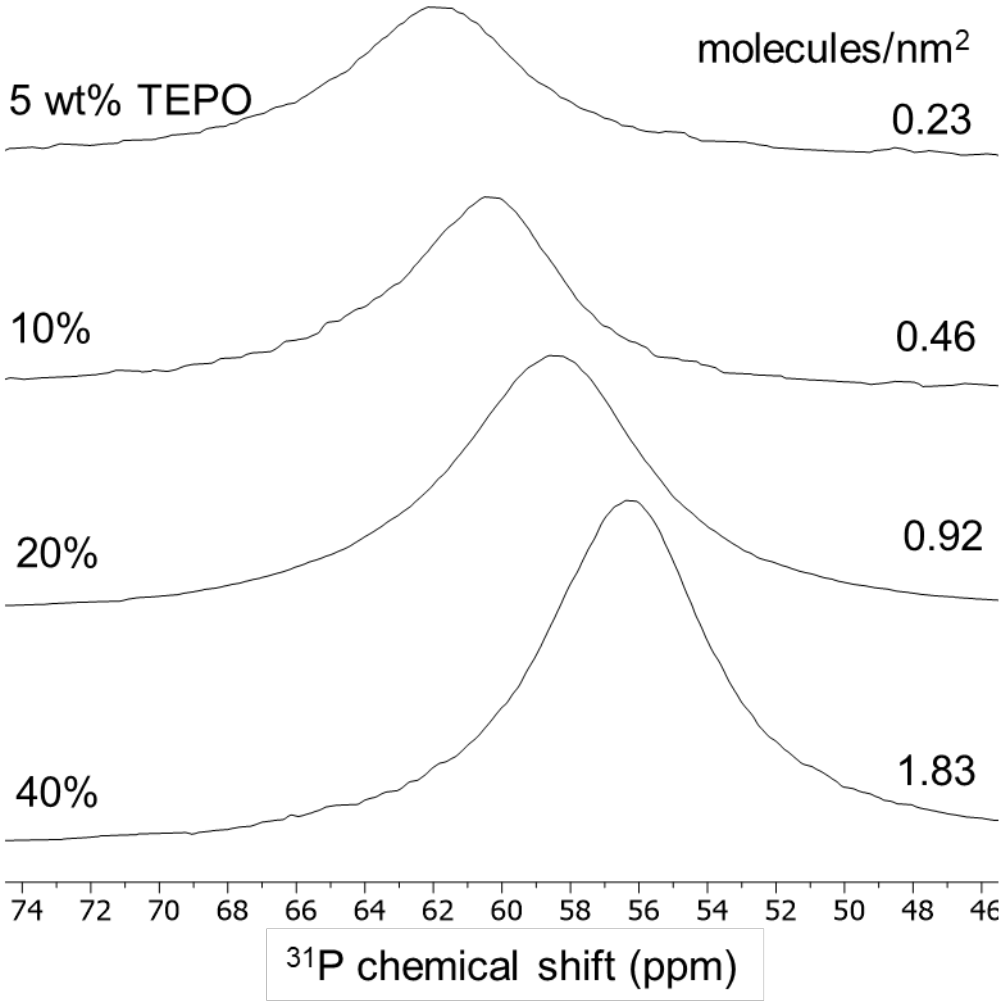

Figure S7. Variation of ^{31}P chemical shift (ppm) of TEPO adsorbed on MCM-41 calcined at 200ºC at different TEPO loadings and the corresponding surface coverage.

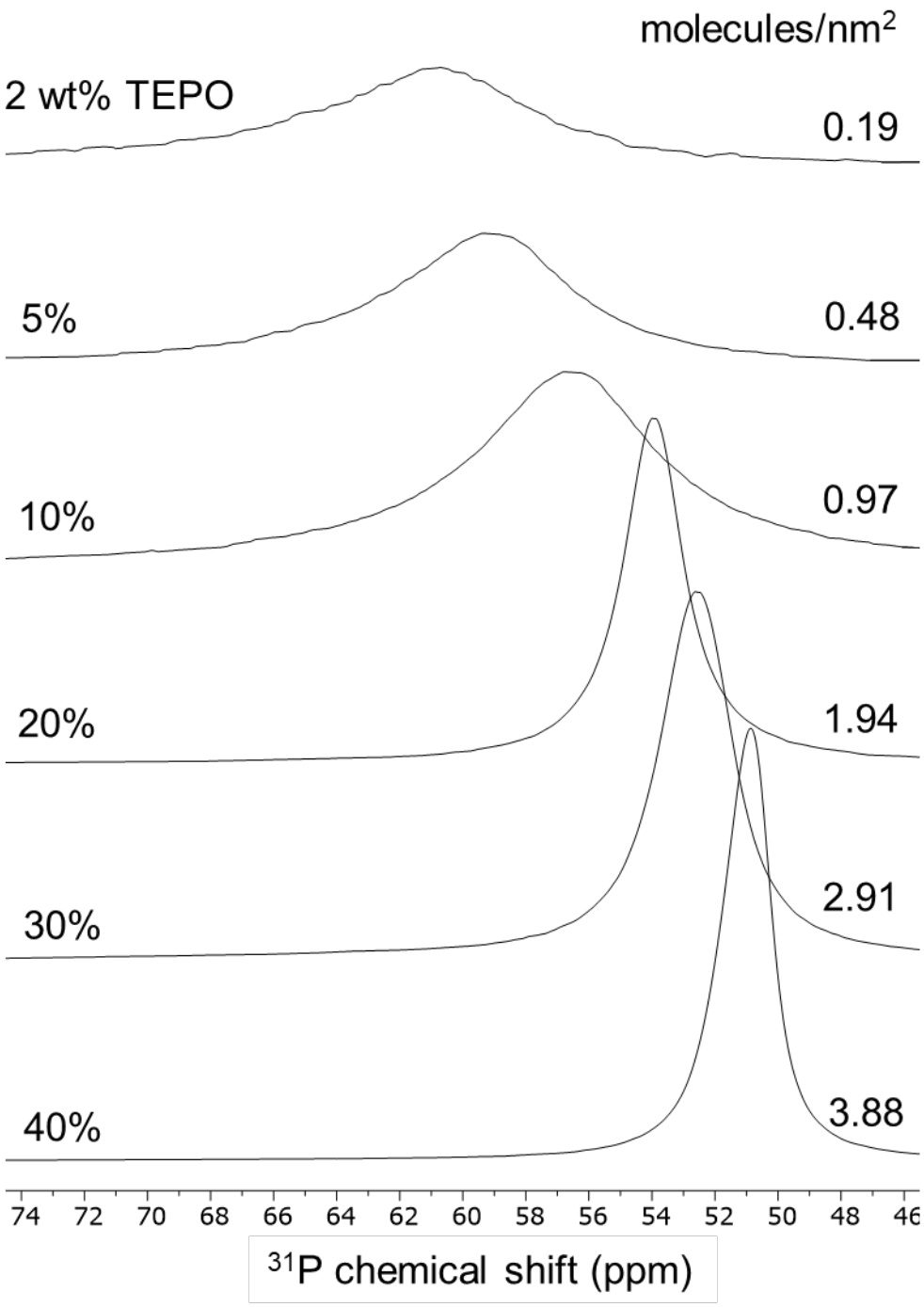

Figure S8. Variation of ^{31}P chemical shift (ppm) of TEPO adsorbed on Silia P60 calcined at 500ºC at different TEPO loadings and the corresponding surface coverage.

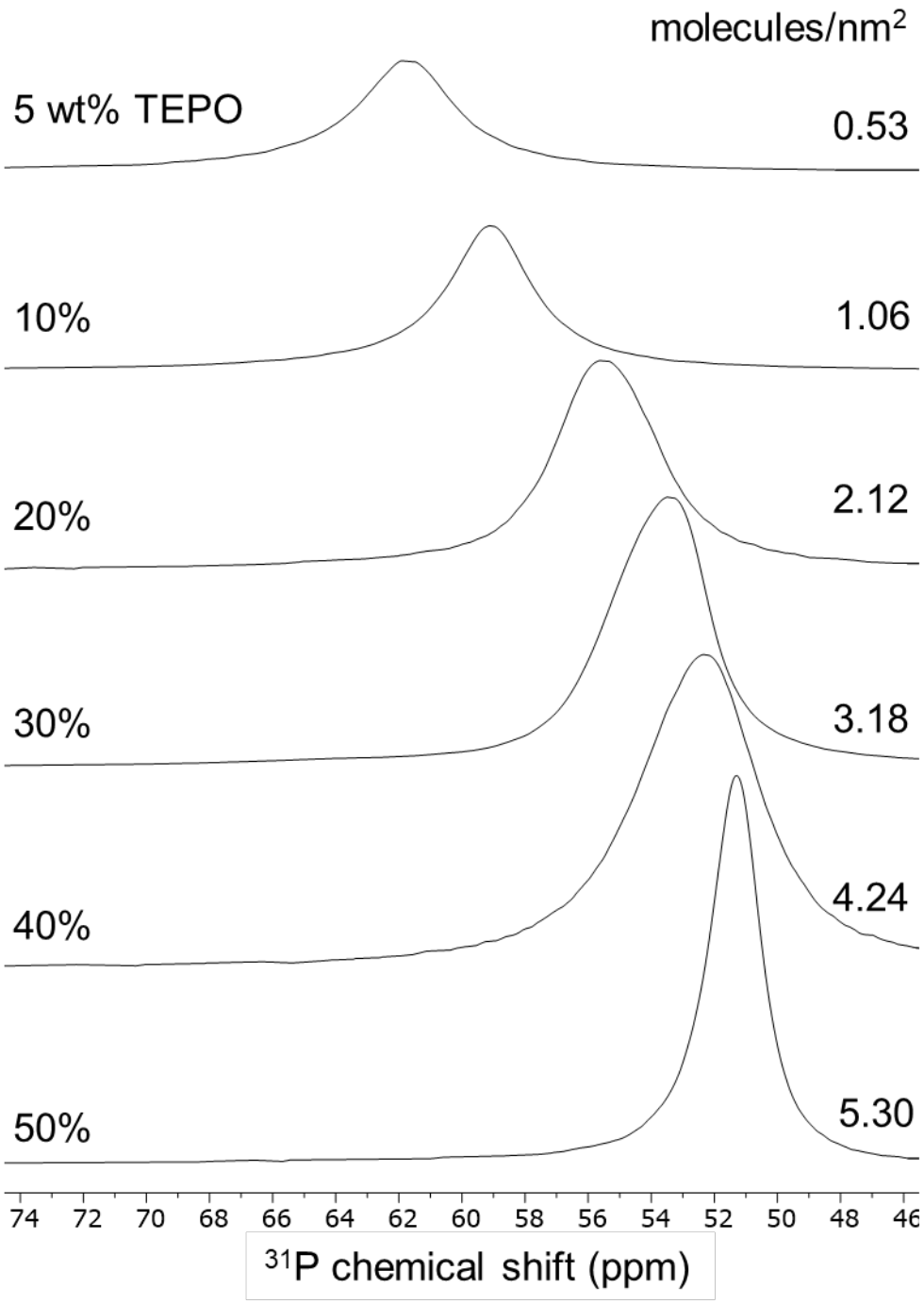

Figure S9. Variation of ^{31}P chemical shift (ppm) of TEPO adsorbed on Silia P60 calcined at 200ºC at different TEPO loadings and the corresponding surface coverage.