

Supporting Information

SiG–pollutant systems in an aqueous environment

Table S1. Geometrical parameters of the SiG-pollutant systems with explicit 15·H₂O molecules, in addition to COSMO implicit solvent environment. Distances are in angstroms (Å).

| <i>Pollutant</i> | | $d_{\text{Si-O1}}$ | $d_{\text{As-O1}}$ | $d_{\text{H-O1}}$ |
|-------------------------------------|---|--------------------|--------------------|-------------------|
| <i>SiG-MMA^{III}</i> | a | 1.74 | 2.27 | 1.04 |
| | b | 1.73 | 2.12 | 1.04 |
| | c | 1.73 | 2.18 | 1.04 |
| <i>SiG-DMA^{III}</i> | a | 1.71 | 2.37 | 1.02 |
| | b | 1.69 | 2.13 | 1.56 |
| <i>SiG-MMA^V</i> | a | 1.75 | 1.76 | 1.79 |
| | b | 1.75 | 1.77 | 1.88 |
| | c | 1.74 | 1.78 | 1.81 |
| | d | 1.77 | 1.78 | 1.88 |
| | e | 1.90 | 1.75 | - |
| <i>SiG-DMA^V</i> | a | 1.72 | 1.79 | - |
| | b | 1.71 | 1.84 | 1.84 |
| | c | 1.71 | 1.74 | - |
| <i>SiG-DMMTA^V</i> | a | 1.74 | 1.80 | 1.83 |
| | b | 2.27 | 2.22 | 1.67 |

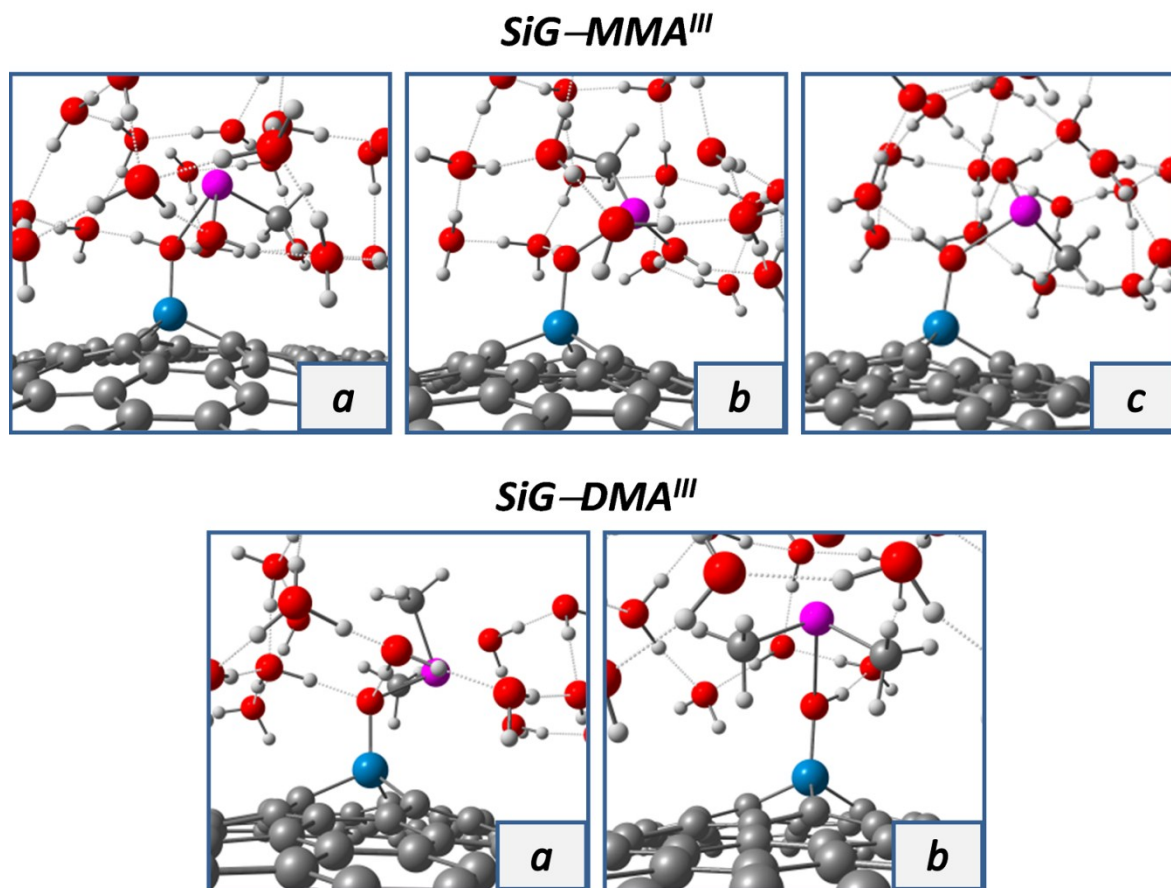


Fig. S1 Minimum energy conformations of MMA^{III} and DMA^{III} adsorbed onto SiG in a solvent environment; the pollutants are surrounded by 15 H₂O molecules with pointed hydrogen bonds.

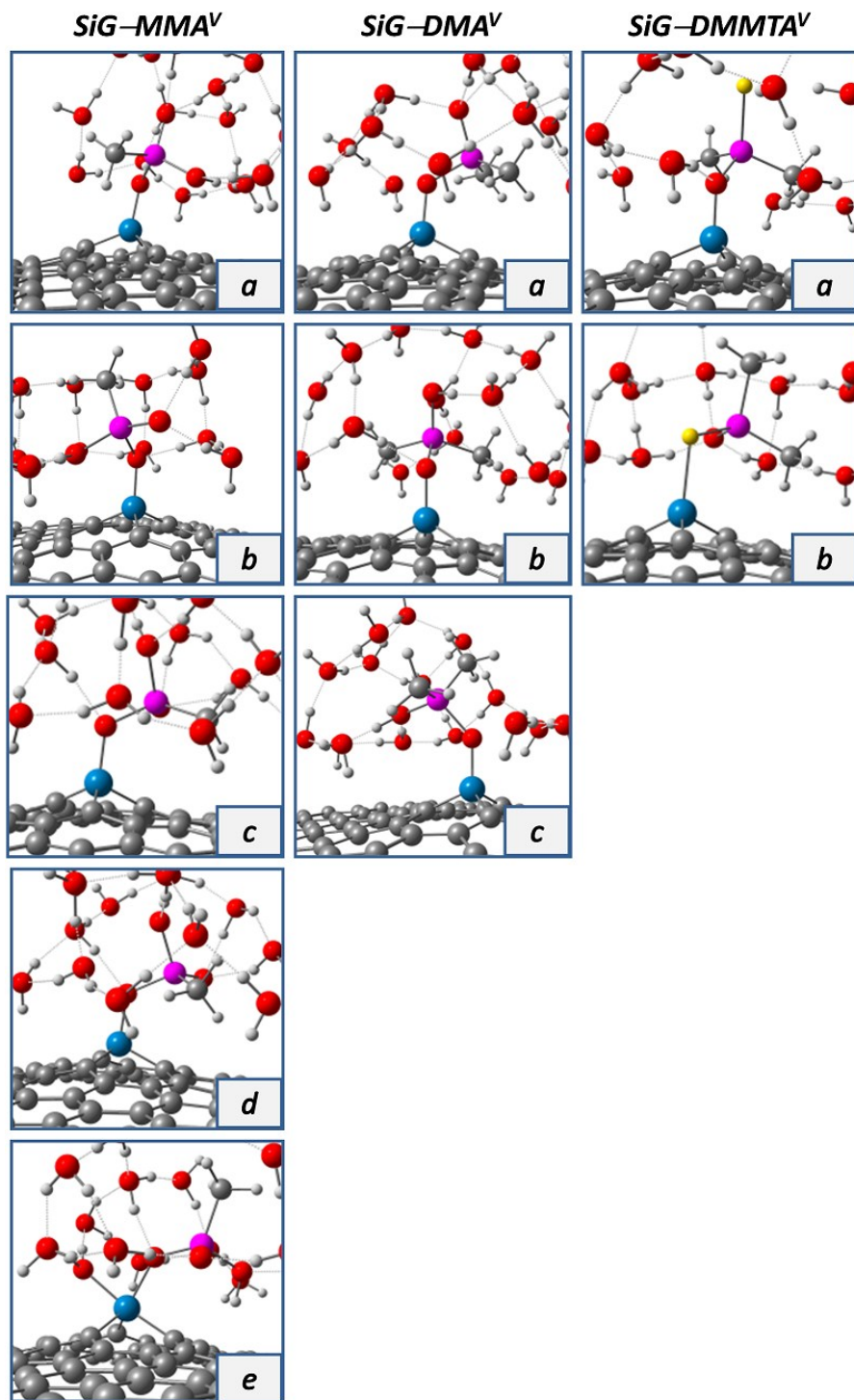


Fig. S2 Minimum energy conformations of MMA^V, DMA^V and DMMTA^V adsorbed onto SiG in a solvent environment; the pollutants are surrounded by 15 H₂O molecules with pointed hydrogen bonds.