0.0

-0.5

-1.0

Interaction energy QQ -0.11 -0.09 -0.47 0.39 -0.16 -0.89 -0.13 -0.097 0.038 -0.46 0.27 0.11 -0.25 0.15 0.88 0.048 Δ Interaction energy QQ -0.19 -0.29 -0.36 0.29 -0.19 -0.24 -0.013 -0.099 -0.023 -0.18 -0.13 -0.039 -0.2 -0.036 0.35 -0.013 -0.35 0.79 **-0.47** 0.029 0.018 0.27 -0.013 0.049 0.7 **-0.67 -0.35 0.049** 0.2 0.26 0.2 -0.49 0.01 0.3 0.63 A Interaction energy op ANG. Molecular Weight Interaction energy A Interaction energy Interaction energy op Interaction energy Ly A Interaction energy Ly A Molecular Weight Avg. Dipole moment Avg Nematic order A Dipole moment Nematic order Interdigitation A Interdigitation A Tilk angle Aro Tilk angle Mercept Oir Tile

0.46 0.68 0.22 -0.3 0.31 -0.19 -0.031 0.2 -0.35 -0.028 0.27 0.62 -0.29 -0.31 -0.06 -0.11 -0.19 -0.47 0.2

COF -0.3 -0.04 -0.24 -0.39 1 0.028 0.097 0.021 -0.031 0.29 0.035 -0.12 -0.064 0.2 0.0093 -0.18 -0.16 -0.19 0.27 0.01

Intercept 0.31 0.15 0.5 -0.21 0.028 1 0.054 0.051-0.0075 0.32 -0.32 -0.036 0.39 -0.29 -0.89 0.17 -0.89 -0.24 -0.46 0.63

Δ Tilt angle -0.028 0.044 -0.046 0.057 0.035 -0.32 -0.25 0.35 0.12 -0.23 1 0.086 0.035 -0.033 0.26 -0.26 0.27 -0.13 0.12 -0.18

Δ Interaction energy -0.06 -0.13 -0.24 -0.025 -0.18 0.17 0.068 -0.034 -0.088 -0.025 -0.26 -0.021 0.014 -0.25 0.045 1 0.048 0.79 0.018 0.3

Avg Nematic order -0.19 -0.16 -0.054 -0.13 0.097 0.054 1 0.17 -0.51 0.59 -0.25 -0.2 -0.33 0.13 -0.067 0.068 -0.13 -0.013 0.061 0.13

0.14 0.042 -0.04 0.15 -0.16 0.052 0.14 -0.25 0.044 0.31 0.39 -0.2 -0.053 -0.13 -0.09 -0.29 0.029 0.26

0.24 -0.24 <mark>0.5 -0.054 0.015 0.054 0.036 -0.046-0.0048 0.43 -0.17 -0.62 -0.24 -0.47 -0.36 -0.55</mark>

**1** -0.39 -0.21 -0.13 -0.017 0.048 -0.37 0.057 0.14 -0.17 -0.024 0.017 -0.025 <mark>0.39 0.29 -0.56 -0.49</mark>

-0.23 -0.46 -0.22 <mark>0.071</mark> -0.33 <mark>-0.025</mark> -0.46 -0.18 **0.04 0.24** 

**0.2** -0.12 **0.058** -0.021 **0.11** -0.039 -0.042 0.029

-0.33 -0.29 <mark>0.014</mark> -0.25 -0.2 -0.21 <mark>0.33</mark>

0.21 -0.25 0.15 -0.036 0.2 -0.32

1 0.045 0.88 0.35 0.7 -0.48

Avg. Molecular weight

Δ Molecular weight 0.46

Avg. Dipole moment 0.68 0.14

Diff S2

Interdigitation

Interaction energy LI

Δ Interaction energy LJ

Δ Dipole moment **0.22 0.042 0.24** 

Δ Nematic order -0.031 0.052 0.015 -0.017 0.021 0.051 0.17

**0.2 0.14 0.054 0.048 -0.031-0.0075 -0.51 -0.096** 

Diff Tilt 0.27 0.31 -0.0048 0.14 -0.12 -0.036 -0.2 -0.033 0.35 -0.46 0.086 1

Δ Interdigitation -0.29 -0.2 -0.17 -0.024 0.2 -0.29 0.13 -0.12 -0.16 0.071 -0.033 -0.12 -0.33

Interaction energy -0.31 -0.053 -0.62 0.017 0.0093 -0.89 -0.067 -0.087 -0.025 -0.33 0.26 0.058 -0.29 0.21

0.62 0.39 0.43 -0.17 -0.064 0.39 -0.33 -0.0084 0.19 -0.22 0.035 0.2

Avg Tilt angle -0.35 -0.25 0.036 -0.37 0.29 0.32 0.59 0.13 -0.26