

Electronic supplementary information

**Interaction of water with oligo(ethylene glycol) terminated monolayers:
wetting versus hydration**

Mustafa Sayin,¹ Alexei Nefedov,² and Michael Zharnikov^{1,*}

¹*Applied Physical Chemistry, Heidelberg University, Im Neuenheimer Feld 253, 69120
Heidelberg, Germany*

²*Institute of Functional Interfaces, Karlsruhe Institute of Technology (KIT), Hermann-von-
Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany*

1. Integral TPD signal

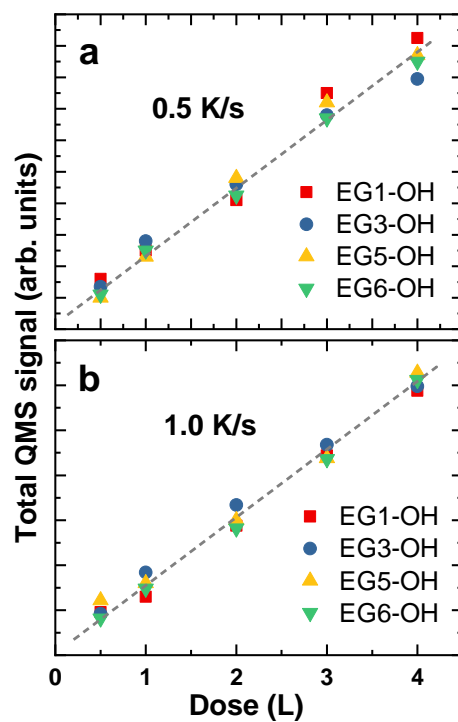


Figure S1. Integral TPD signal for the EGN-OH ($n = 6, 5, 3,$ and 1) SAMs as a function of the D_2O dose. The heating rate was set to 0.5 K/s (a) and 1.0 K/s (b). The legend is given in the figure. The gray dashed lines are guides for the eyes, to underline the linearity of the coverage-vs-dose dependence.

2. Additional TPD data

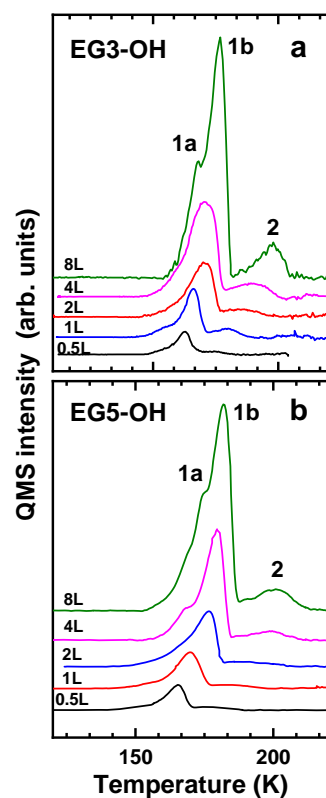


Figure S2. TPD traces for various doses of D₂O deposited at ~110 K onto the surface of the EG3-OH (a) and EG5-OH (b) SAMs. The heating rate was set to 0.5 K/s. The D₂O doses are marked at the respective curves. Individual desorption peaks are marked by numbers (see the main manuscript for details).

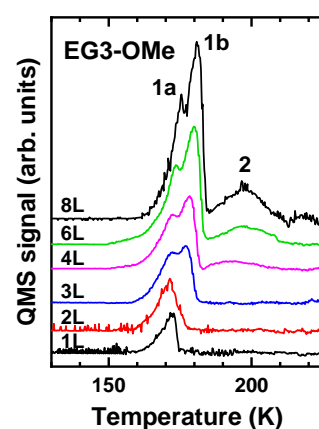


Figure S3. TPD traces for various doses of D₂O deposited at ~110 K onto the surface of the EG3-OMe SAMs. The heating rate was set to 0.3 K/s. The D₂O doses are marked at the respective curves. Individual desorption peaks are marked by numbers (see the main manuscript for details).