

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Crystallographic information file for VPC-1 under vacuum

File name: Supplementary Data 2

Description: Crystallographic information file for VPC-1 under atmosphere with a humidity of 92 %RH

File name: Supplementary Data 3

Description: Crystallographic information file for VPC-1 under atmosphere with a humidity of 0 %RH

File name: Supplementary Data 4

Description: Adsorption information file for N₂ adsorption of VPC-1 at 77 K

File name: Supplementary Data 5

Description: Adsorption information file for H₂O adsorption of VPC-1 at 283 K

File name: Supplementary Data 6

Description: Adsorption information file for H₂O adsorption of VPC-1 at 293 K

File name: Supplementary Data 7

Description: Adsorption information file for H₂O adsorption of VPC-1 at 303 K

File name: Supplementary Data 8

Description: Adsorption information file for H₂O adsorption of USG-PT-SX-200 at 298 K

File name: Supplementary Data 9

Description: Adsorption information file for H₂O adsorption of USG-CT-S-200 at 298 K

File name: Supplementary Data 10

Description: Adsorption information file for H₂O adsorption of carbon nanotubes at 298 K

File name: Supplementary Data 11

Description: Adsorption information file for H₂O adsorption of zeolite at 298 K

File name: Supplementary Data 12

Description: Adsorption information file for H₂O adsorption of silica gel at 298 K

File name: Supplementary Data 13

Description: Cartesian coordinates of the optimized computational models