Supplementary Information:

Microstructure-related performances of poly(vinyl alcohol)-silica hybrid membranes: A molecular dynamics simulation study

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Part. A Flow charts for studying PVA membrane and its hybrid membranes by MD simulations

![Flow chart for studying PVA membrane by MD simulations.](image)

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**Part. B Solubility parameters of the PVA-silica hybrid membranes**

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*Fig. S3* Solubility parameters of the PVA-silica hybrid membranes.

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![Graph showing effect of APTS content on density of the hybrid membranes.](image)

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