

Electronic Supplementary Information for

“Dynamic wettability on polyethylene glycol-modified poly(dimethylsiloxane) in aqueous/organic two phase system”

Mao Fukuyama^{a,b}, Manabu Tokeshi^c, Mikhail A. Proskurnin^d, and Akihide Hibara^a

- Institute of Multidisciplinary Research for Advanced Material, Tohoku University, 2-1-1 Katahira, Aoba-ku Sendai 980-8577, Japan.*
- PRESTO, Japan Science and Technology Agency, 4-1-8 Honcho, Kawaguchi, Saitama, 332-0012, Japan.*
- Division of Applied Chemistry, Hokkaido University, Kita 13 Nishi 8, Kita-ku, Sapporo 060-8628, Japan*
- Lomonosov Moscow State University, Leninskie Gory 1, str. 3, GSP-1 Moscow, 119991, Russia.*

Email address: maofukuyama@tohoku.ac.jp, hibara@tohoku.ac.jp

Experimental setups for the contact angle measurements.

The experimental setups for the contact angle measurements were shown in Figure S1. For the measurement using a water droplet in the air, a droplet was formed on a PDMS-PEG sheet (Figure S1a). The droplet and the sheet was then covered by a glass container to avoid evaporation. For the measurement using a water droplet in hexadecane solution, a PDMS-PEG sheet supported by a cover glass was used to avoid the deformation of PDMS-PEG caused by the swelling (Figure S1b). For the measurement using a hexadecane droplet in aqueous solution, the droplet was formed under the PDMS-PEG sheet with a cover glass floating on the aqueous solution since density of hexadecane is lower than that of water. The position of the PDMS-PEG sheet was fixed by a wire glued to the cover glass by PDMS-PEG.

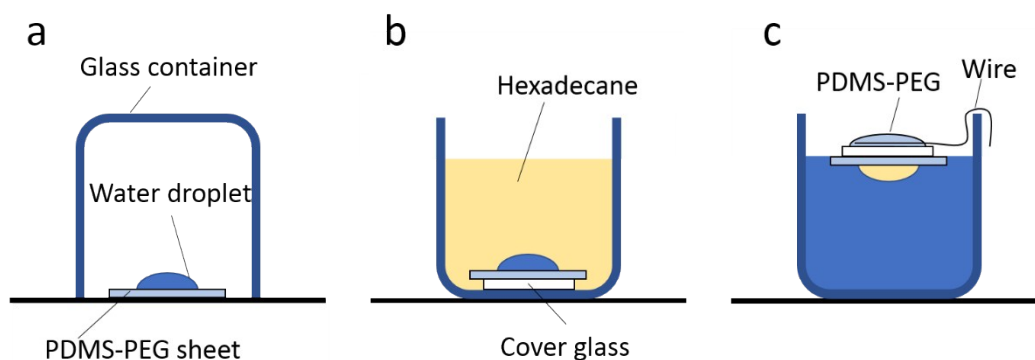


Figure S1. Experimental setups for the contact angle measurements with (a) a water droplet in the air, (b) a water droplet in hexadecane, and (c) a hexadecane droplet in water.