

List of abbreviations / symbols

SDS: Sodium dodecyl sulfate

SDBS: Sodium dodecylbenzene sulfonate

MES: α -sulfonate myristic acid methyl ester

TBADS: tetra-*n*-butylammonium dodecylsulfate

TBADBS: tetra-*n*-butylammonium dodecylbenzene sulfonate

TBAMES: tetra-*n*-butylammonium- α -sulfonate myristic acid methyl ester

TBPDS: tetra-*n*-butylphosphonium dodecylsulfate

TBPDBS: tetra-*n*-butylphosphonium dodecylbenzene sulfonate

CTAB: Cetyl trimethylammonium bromide

TX-100: (p-tert-octylphenoxy polyethylene (9.5) ether (often known as Triton X-100))

AMT: Amitriptyline hydrochloride

AHC: 3-Amino-7-hydroxy-chromen-2-one

$\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$: Calcium nitrate tetra hydrate

$\text{Al}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$: Aluminium nitrate

TBAB: tetra-*n*-butylammonium bromide

TBPB: tetra-*n*-butylphosphonium bromide

DS^- : dodecylsulphate anion

DBS^- : dodecylbenzene sulfonate anion

R_4N^+ : tetra-*n*-alkylammonium counterion

TBA^+ : tetra-*n*-butylammonium counterion

TBP^+ : tetra-*n*-butylphosphonium counterion

TPAB: tetra-*n*-pentylammonium bromide

TPPB: tetra-*n*-pentylphosphonium bromide

BTAC: benzyl trimethylammonium chloride

D_2O : Deuterium oxide

cmc: critical micelle concentration

CP: Cloud point

LCST: lower consolute solution temperature

UCST: Upper consolute solution temperature

CPE: Cloud-point extraction

DLS: Dynamic light scattering
NMR: Nuclear magnetic resonance
SANS: Small angle neutron scattering
POM: Polarizing optical microscopy
UV-Vis: Ultraviolet-visible
AAS: Atomic absorption spectroscopy
 γ : surface tension
 κ : Specific conductance
 α : Fractional charge/degree of counterion dissociation
P: Packing curvature/ Mitchell- Ninham parameter
V: Volume of alkyl part of the surfactant
 l_c : length of alkyl part of the surfactant
 a_0 : head group area
 T_m : temperature of minimum cmc
 D_H : Hydrodynamic diameter
 δ : Chemical shifts
 $d\Sigma/d\Omega$: Differential scattering cross-section per unit volume
 N_{agg} : Aggregation number
[]: Concentration
 ΔG_c° : Standard Gibb's free energy change
 ΔH_c° : Standard enthalpy change
 ΔS_c° : Standard entropy
T: Temperature
RT: Room temperature