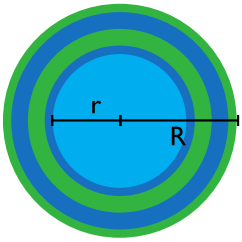
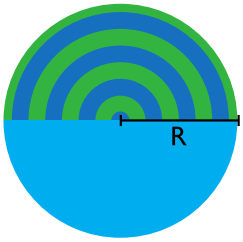
Electric supplementary Information

Volume of homopolymer : Volume of block-copolymer = 1 : 1

Core-shell



Janus



Volume of core : Volume of shell

$= 4\pi r^3/3 : 4\pi(R^3 - r^3)/3$

$= 1 : 1$

$r^3 = (1/2)\,R^3$

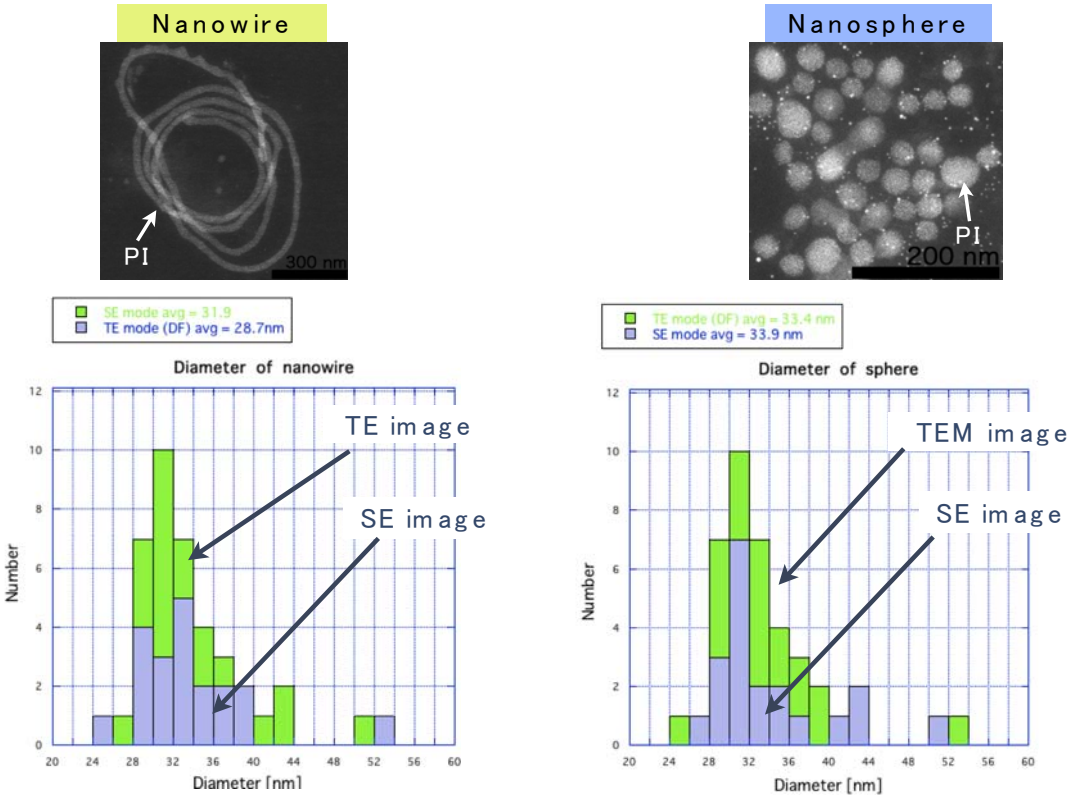
$r = (1/2)^{1/3}\,R$

interfacial area $= 4 \cdot \pi \cdot r^2 = 2.52\ \pi \cdot R^2$

interfacial area $= \pi \cdot R^2$

ratio of interfacial area
core-shell : Janus = 2.5 : 1

S1. Calculation of interfacial area of core-shell or Janus particles.



S2. Size distribution of width of PI and total nanowire or nanosphere.