

Synthesis of Mesoporous Silica Nanotube Using Glycyldodecylamide at Neutral Condition

한상철, 문혜민, 서영희, 박상언*
인하대학교
(separk@inha.ac.kr*)

Novel synthesis method could be proposed to form silica nanotube (SNT) by using glycine type surfactant at neutral condition and room temperature. Current syntheses of SNT have relied on the severe conditions such as extreme pH condition and high temperature and pressure and also with such complicated surfactants as templates which are requiring tedious work-up. Our findings were based on the use of biomimetic surfactant as micellar solutions in the synthesis of such ordered and morphologically controlled nanotube silica which had higher specific surface areas and quite smaller pore size than that of currently achievable conventional SNT.