

## عنوان مقاله:

Dispersion polymerization of styrene in polar solvents: effect of different solvents on the polymer particles diameter

## محل انتشار:

دوازدهمین سمینار بین المللی علوم و تکنولوژی پلیمر (سال: 1395)

تعداد صفحات اصل مقاله: 3

## نویسندگان:

Mohammad Reza Afkhami Aghda - *Iran Polymer and Petrochemical Institute Tehran, Iran*

Farshid Ziaee - *Iran Polymer and Petrochemical Institute Tehran, Iran*

Nakisa Yaghubi - *Iran Polymer and Petrochemical Institute Tehran, Iran*

Mehrdad Jalilian - *Iran Polymer and Petrochemical Institute Tehran, Iran*

## خلاصه مقاله:

Dispersion polymerization has proven to be a useful polymerization technique for preparing micron-size particles in comparison other polymerization technique. Dispersion polymerization consists of monomer, initiator, and steric stabilizer and all the components should be dissolved in the polymerization medium such as alcoholic media. Polystyrene microspheres were prepared by dispersion polymerization in alcohol media (ethanol) initiated by azobisisobutyro nitrile (AIBN) using poly vinyl pyrrolidone (PVP K-30) as a dispersant agent. All the samples were prepared at 65°C for 24 h. Other samples of PS were synthesized in pure solvents like ethanol, 1- propanol, 1- butanol, 1- heptanol and 1- decanol and their diameter and the maximum and minimum size measured by Image tool software were investigated. Finally mono size of particles investigated and discussed. The particles are monosize in .ethanol and 1- decanol and poly size in other alcoholic medium such as 1-propanol, 1-butanol and 1- decanol

## کلمات کلیدی:

Dispersion polymerization, Monosize particles, SEM, Average Diameter and Image Tool Software

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/578172>

