



And in the spectrum of type PSt-GMA, adsorption bands at the wavenumbers at 914 and 846 cm⁻¹ were assigned to the epoxide groups. The adsorption peaks at 1729, 1185, and 1142 cm⁻¹ indicated the C=O stretching vibrations, C-O-O asymmetric stretching vibration, and C-O-O symmetric stretching vibration, respectively. These changes proved that glycidyl methacrylate had been incorporated into polystyrene.

In the spectrum of sampled, an obvious change was found at 1163 cm⁻¹, and this was due to asymmetric stretching vibration of SO₂. Thus sulfonate groups were detectable in sampled.