

Supplementary Information

Extrusion Foaming of Lightweight Polystyrene Composite Foams with Controllable Cellular Structure for Sound Absorption Application

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1. The characterization of PS/50%Lignin

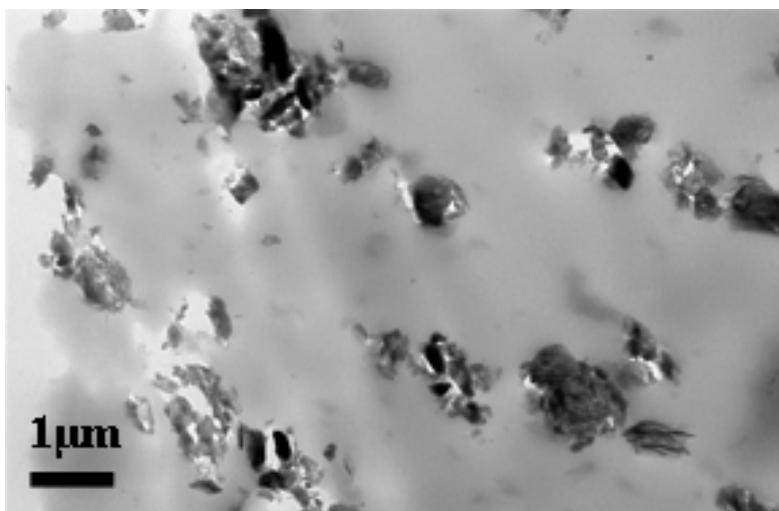


Fig. S1 The TEM image of PS/Lignin composite with 50 wt% lignin content.

2. The density of PS composite foams

Table S1 The density of PS composite foams.

Sample	ρ (g/cm ³)	Sample	ρ (g/cm ³)
PS	0.09	PS/0.2%MWCNT	0.08
PS/10%Lignin	0.08	PS/0.5%MWCNT	0.09
PS/20%Lignin	0.07	PS/1%MWCNT	0.11
PS/30%Lignin	0.08	PS/0.2%Gr	0.08
PS/40%Lignin	0.10	PS/0.5%Gr	0.09
PS/50%Lignin	0.33	PS/1%Gr	0.10