

Effect of reactive organoclay on physicochemical properties of vegetable oil-based waterborne polyurethane nanocomposites

T. Gurunathan^{1,2,*}, Smita Mohanty^{1,2}, Sanjay K. Nayak^{1,2}

¹Advanced Research School for Technology and Product Simulation (ARSTPS), Central Institute of Plastics Engineering & Technology, Guindy, Chennai - 600032, India

²Laboratory for Advanced Research in Polymeric Materials (LARPM), Central Institute of Plastics Engineering and Technology, Bhubaneswar -751024, India

*Address correspondence to:

T. Gurunathan,

Central Institute of Plastics Engineering & Technology, Guindy, Chennai - 600032, India

E-mail: jguru001@gamil.com

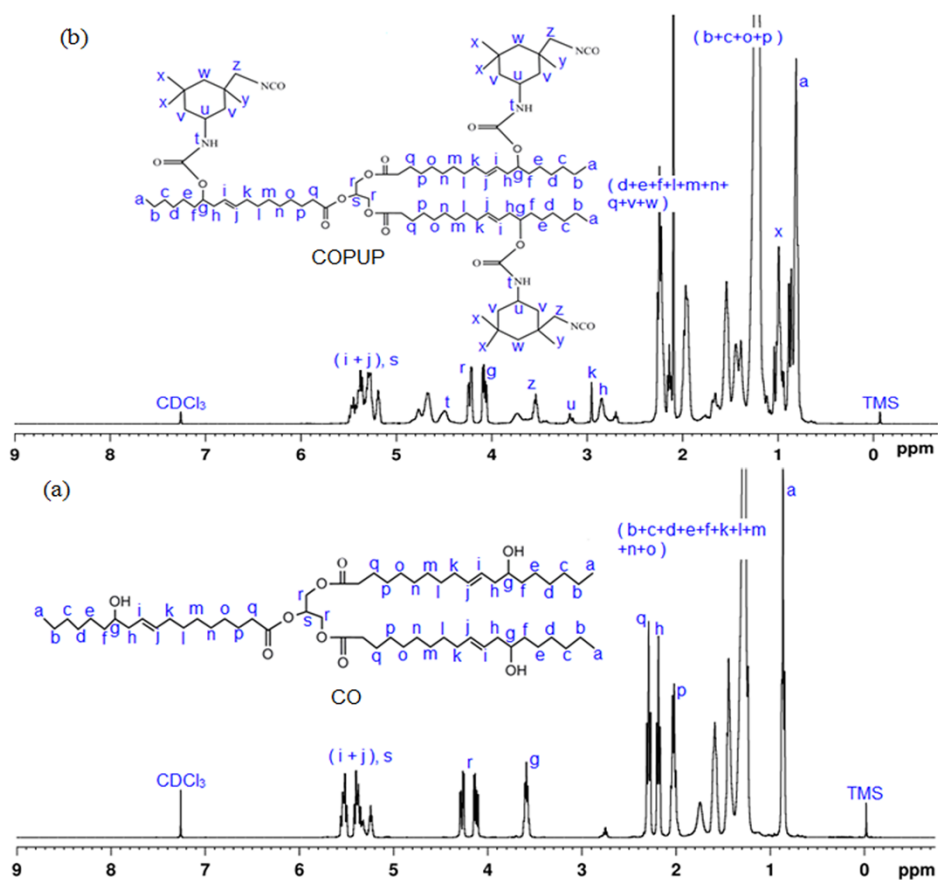
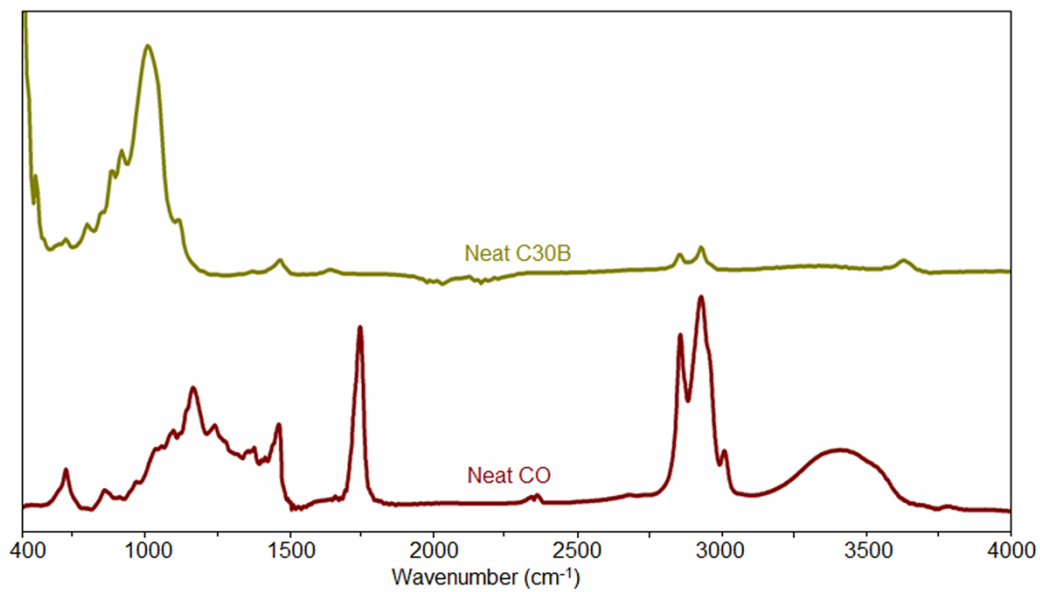
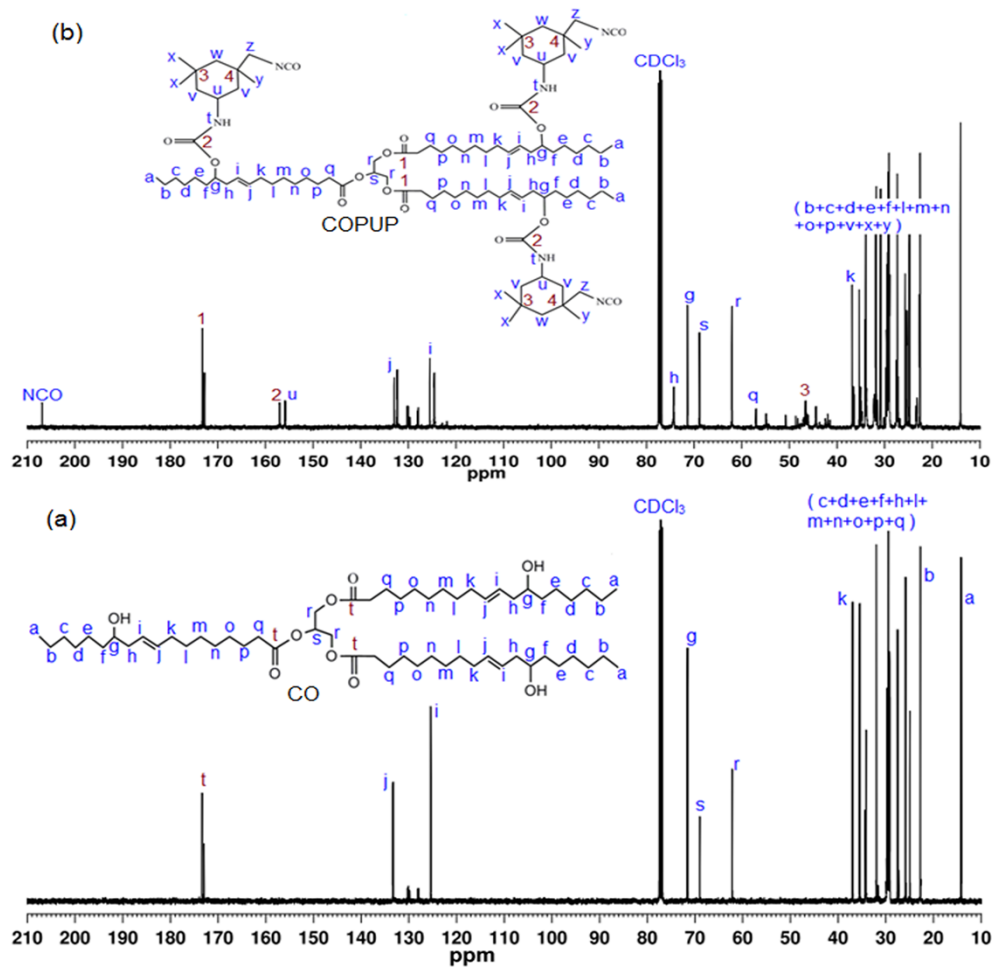


Fig. S1 ¹H-NMR spectra of CO (a) and castor oil-based PUP (b)



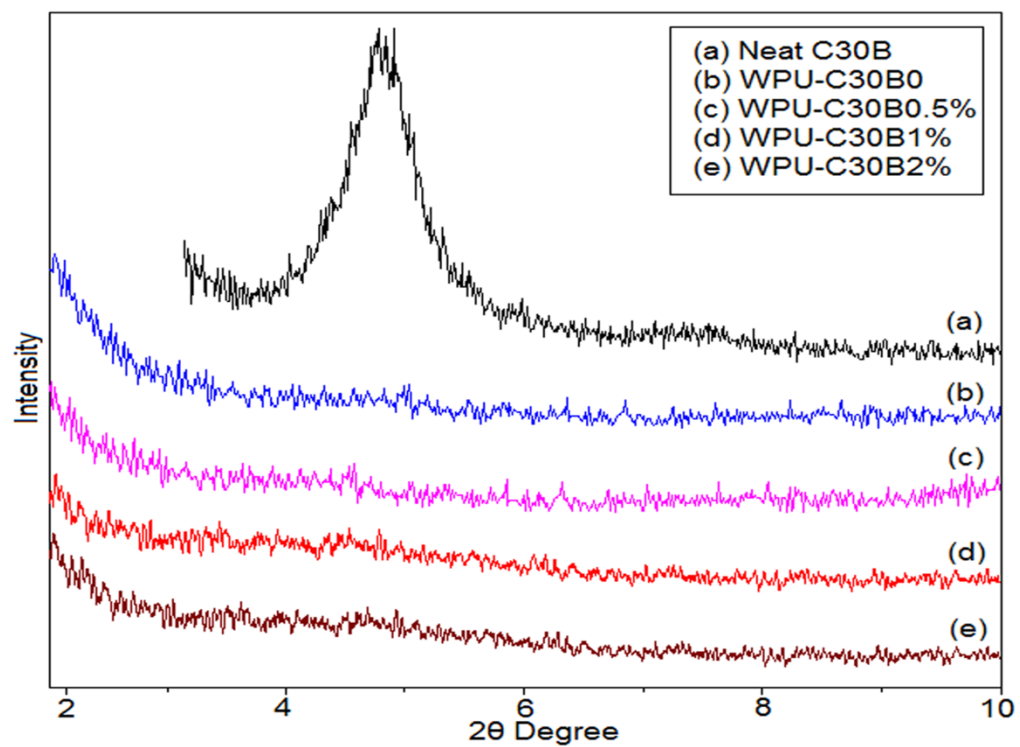


Fig. S4 WAXD intensity profiles of neat C30B and WPU-C30B nanocomposites.

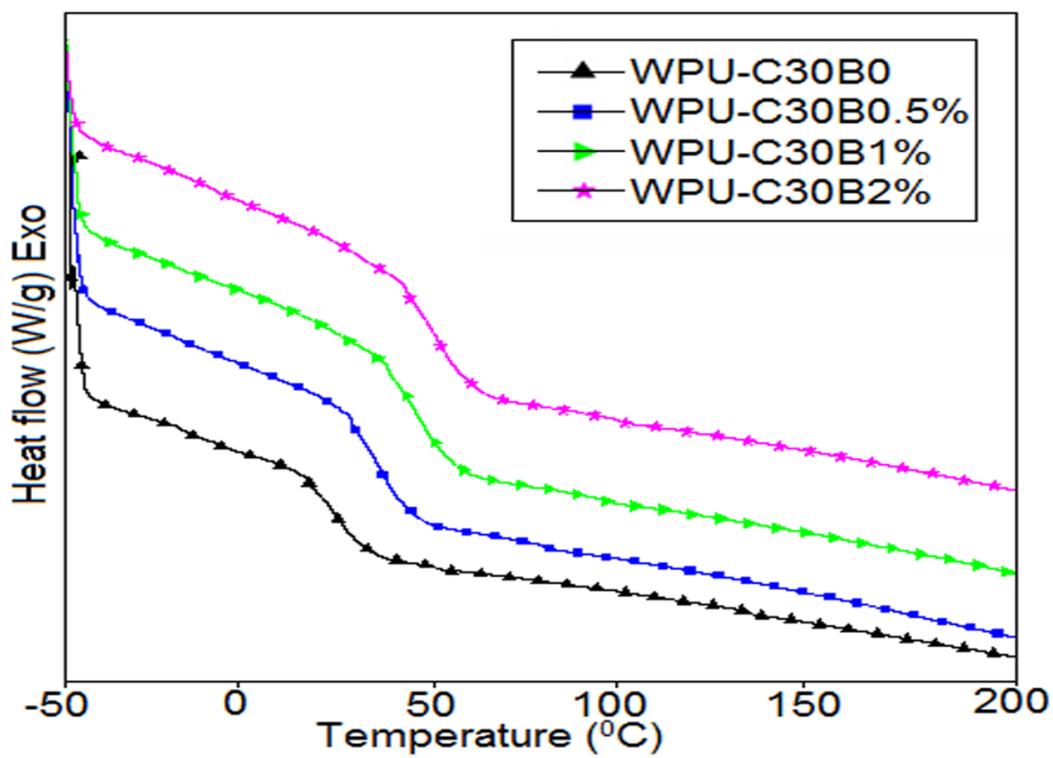


Fig. S5 DSC thermograms of WPU-C30B0 and WPU-C30B nanocomposites

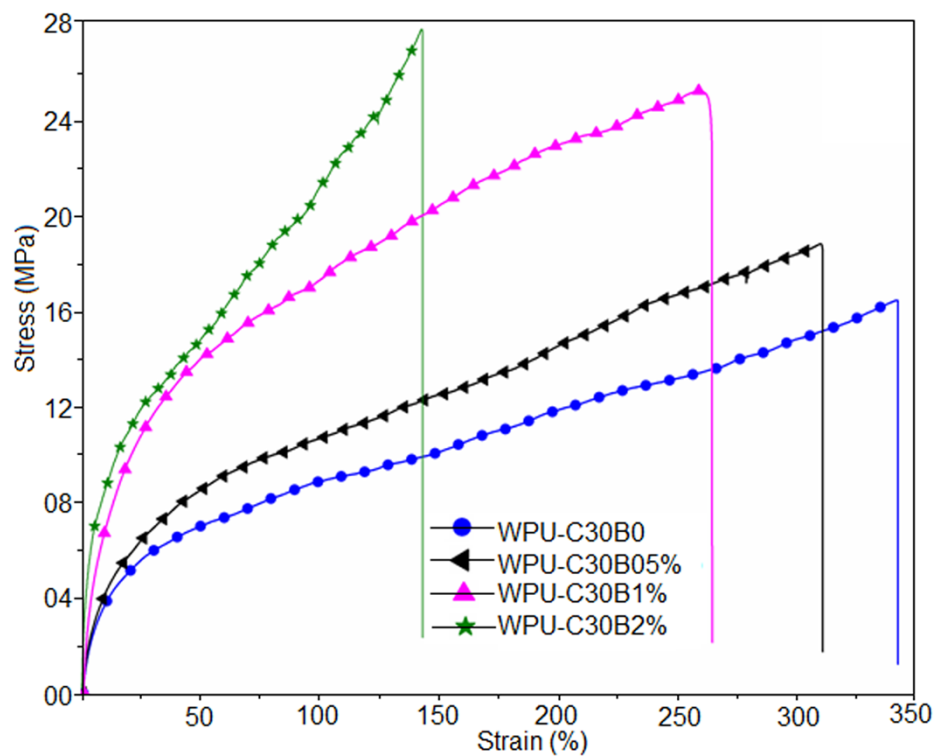


Fig. S6 Tensile stress-strain curves for the WPU-C30B nanocomposites