MODELING OF RHEOLOGICAL BEHAVIOR OF PA6/ABS NANOCOMPOSITES BY CARREAU–YASUDA AND POWER-LAW MODELS

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In this work we studied Carreau–Yasuda and power-law models for investigation of immiscible polyamide6/acrylonitrile butadiene styrene blends and compare its predictions with the experimental measurements. Consequences of the Carreau–Yasuda and power-law models are compared with results of experimental observations of the rheological properties special at low frequency region. Hence, the complex viscosity (η^*) curves were fitted with the parameters Carreau–Yasuda model to obtain the zero shear viscosity. The η^*-ω curves indicate a linear power-law like behavior with two unlike slopes at the low and the high frequency regions.