

# **Research into Structural and Mechanical Properties of the Nanomodified Polyamide-6-Based Materials after Solid-Phase Extrusion Using Microwave Heating**

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**Key words and phrases:** microwave treatment; modified polymer-carbon materials; solid-phase extrusion.

**Abstract:** The effect of microwave radiation on the process of solid-phase extrusion of polymer-carbon nanocomposites has been studied. The comparative assessment of the operational characteristics of composite materials has been made. It is shown that the combination of methods of solid-phase technologies with additional microwave processing of polymer-carbon nanocomposites enables to obtain products with improved performance characteristics.

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