(2) It has been found that there is an increase in the size of both the crystalline and amorphous regions during the crystallization of polypropylene and capron annealed in the stretched state. The degree of crystallinity of polypropylene increases somewhat, and that of capron remains practically unchanged.

Translated by V. ALFORD

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SYNTHESIS OF POLYPHOSPHINITES BY TRANSESTERIFICATION*

A. N. PUDOVIK and G. I. YEVSTAFYEV

Kazan State University

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IN EARLIER communications we described the synthesis and properties of diphosphites [1–6]. It was shown that polymers could be produced by the Arbuzov regrouping method from diphosphites containing a common aromatic radical.

Continuing the research in the sphere of polyphosphites and polyphosphinites, we have studied the reaction of the transesterification of the di-methyl and diethyl esters of phenylphosphinous acid (MP and EP), and the ethyl ether of ethylphosphinous acid (EE) with certain glycols, leading to the formation of polyalkyleneglycolphosphinites

$$n(\mathrm{RO})_2\mathrm{PR'}+n\mathrm{HO{-}R''{-}OH}\rightarrow \mathrm{RO}\left[\begin{array}{c}\mathrm{-P-OR''O-}\\ \mathrm{R'}\end{array}\right]_n\mathrm{H}+(2n-1)\,\mathrm{ROH}.$$

We had already successfully used the method of transesterification to prepare polyalkyleneglycolphosphonates [7].

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