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Alkoxy compounds - XXII. Synthesis and PMR spectra of some 2-substituted 5-alkyl-5-α-alkoxyethyl-1,3-dioxanes

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Abstract

Six 2, 2, 5-trialkyl-5- α -alkoxyethyl-1, 3-dioxanes have been synthesized for the first time by the condensation of 2-alkyl-2- α -alkoxyethyl-1, 3-propane diols with ketones, and it has been shown by a study of their PMR spectra that they exist in the unsymmetrical boat conformation. The PMR spectra of a number of previously-synthesized 2-alkyl(aryl)-5-alkyl-5- α -alkoxyethyl-1, 3-dioxanes have been considered and it has been shown that from an analysis of the spectra it is possible to estimate the contents of geometrical isomers in a mixture. The stereochemistry of these compounds has been discussed. © 1971 Consultants Bureau.

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