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Alkoxy compounds - XXIII. Synthesis, properties, PMR spectra, and stereochemistry of 2-alkyl-2-alkoxymetyl-1, 3-propanediols and 2, 2, 5-trialkyl-5-alkoxymetyl-1,3-dioxanes

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Abstract

The reduction of alkoxymethylalkylmalonic esters with lithium aluminum hydride has given previously unknown 2-alkyl-2-alkoxymethyl-1, 3-propanediols, and by the condensation of these with ketones six previously unreported 2, 2, 5-trialkyl-5-alkoxymethyl-1, 3-dioxanes have been synthesized. The PMR spectra of these compounds have been studied and the unsymmetrical boat conformation has been shown for the 2, 2, 5-trialkyl-5-alkoxymethyl-1, 3-dioxanes. The causes of the stereochemical features of the compounds mentioned are discussed. © 1971 Consultants Bureau.

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