Methanolysis of bis(germatrane-1-yl)oxane

© Le Nhat Thuy Giang,1 Victor P. Baryshok,1+ and Mikhail G. Voronkov2*
1 Department of Chemical Technology. Irkutsk State Technical University. Lermontov St., 83. Irkutsk, 664074. Russia. Phone: +7 (3952) 40-55-13. E-mail: baryvik@yandex.ru
2 Laboratory of Organometal Compounds. A.E. Favorsky Irkutsk Institute of Chemistry, Siberian Branch of the Russian Academy of Sciences. Academician Favorsky St., 1. Irkutsk, 664033. Russia. Phone/Fax: +7 (3952) 42-64-00.

*Supervising author; †Corresponding author

Keywords: reaction of fission, 1-methoxygermatrane, bis(germatrane-1-yl)oxane, acid catalysis.

Abstract

Methanolysis of bis(germatrane-1-yl)oxane in xylene medium by consecutive transformations leads to the formation of 1-methoxygermatrane with the yield of 83.9%. In the presence of p-toluenesulfonic acid these transformations are accelerated and the output of 1-methoxygermatrane increases up to 90.2%.