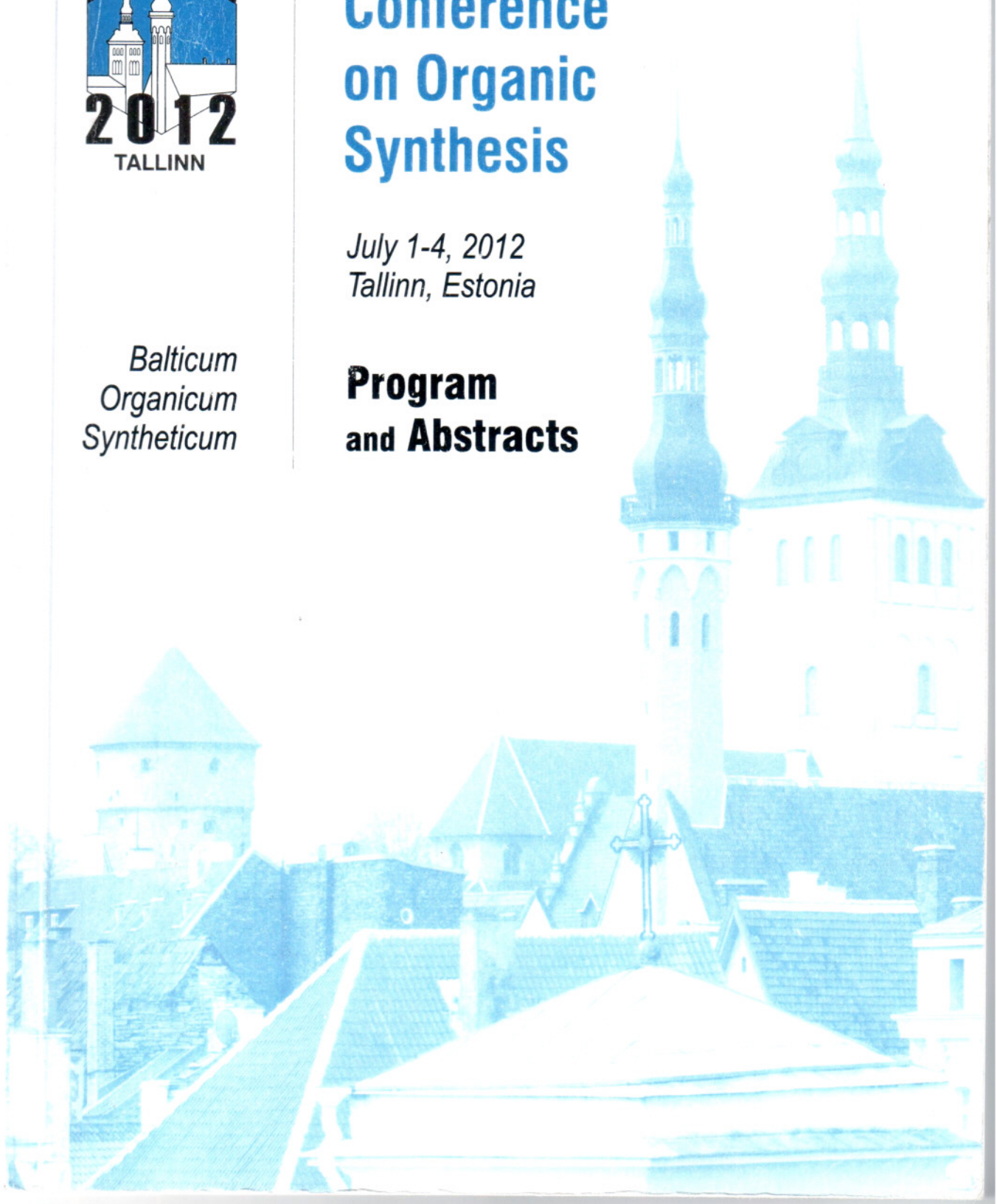
BOS 2012 TALLINN

International Conference on Organic Synthesis

July 1-4, 2012
Tallinn, Estonia

Balticum Organicum Syntheticum

Program and Abstracts



OXY-GROUP DIRECTED DIASTEREOSELECTIVITY IN THE CYCLIZATION OF ALLYLIC BIS-TRICHLOROACETIMIDATES FOR THE SYNTHESIS OF C-QUATERNARY VINYLGLYCINOLS

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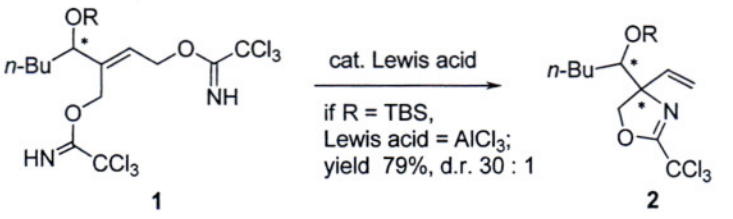
C-Quaternary vinylglycinols are structural elements of a number of pharmaceutically relevant compounds and natural products. Previously, we have reported the synthesis of 4-vinyl-2-trichloromethyloxazolines as precursors of *C*-quaternary vinylgycinols by Lewis acid catalyzed cyclization of allylic bis-trichloroacetimidates.[1] Here we present the investigation of diastereoselectivity for the cyclization of chiral bis-imidates **1** bearing oxy group.



1 **2**

Synthetic routes toward substrates **1** having different *O*-substituents were developed and the stereoselectivity of the reaction was explored with a range of Lewis acid catalysts. The best diastereoselectivity and yield for the formation of oxazoline **2** was achieved with *O*-TBS protected substrate **1** and $AlCl_3$ as a catalyst.

1. Klimovica, K.; Grigorjeva, L.; Maleckis, A.; Popelis, J.; Jirgensons, A. *Synlett* **2011,** 19, 2849 – 2851.