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# A Study of Olefin-Epoxyde Cyclizations Catalyzed by Metal Triflates

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Poster Presentation P2

A STUDY OF OLEFIN-EPOXIDE CYCLIZATIONS CATALYZED BY METAL TRIFLATES

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An effective method for the synthesis of carbocyclic compounds is cyclization initiated by electrophilic ring-opening of polyene epoxides. These cyclizations occur rapidly in the presence of a variety of Lewis acids, such as  $\text{TiCl}_4$ , and  $\text{BF}_3 \cdot \text{Et}_2\text{O}$ . The cyclization of geraniolene oxide **1** (easily obtained from commercially available geraniolene) catalyzed by a variety of metal triflates such as  $\text{Bi}(\text{OTf})_3$ ,  $\text{Sc}(\text{OTf})_3$  and  $\text{Yb}(\text{OTf})_3$  will be investigated. The reaction of the saturated analog will also be investigated in the presence of various metal triflates. Preliminary results from this study will be presented.

