

1942

## The Rearrangement of Aminoethanols

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### Recommended Citation

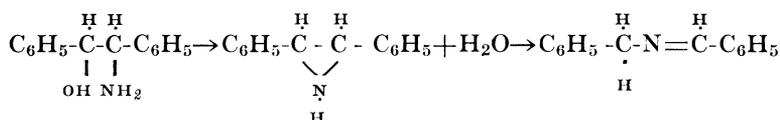
Coleman, George H. and Nicholopoulos, C. S. (1942) "The Rearrangement of Aminoethanols," *Proceedings of the Iowa Academy of Science*: Vol. 49: No. 1, Article 43.  
Available at: <https://scholarworks.uni.edu/pias/vol49/iss1/43>

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## THE REARRANGEMENT OF AMINOETHANOLS

GEORGE H. COLEMAN AND C. S. NICHOLOPOULOS

Erlenmeyer, in 1899, found that 1, 2-diphenyl-2-aminoethanol under pyrolytic conditions and subsequent acid hydrolysis yielded benzaldehyde and benzylamine hydrochloride and proposed the following mechanism:



This work was repeated using standard conditions of ninety minutes and minimum experimental temperature for maximum rearrangement. This was found to be 170° for 1, 2-diphenyl-2-aminoethanol, and 180° for the isomeric iso-1, 2-diphenyl-2-aminoethanol, and 165° for diphenylethyleneimine. Benzalbenzylamine was formed in each case. These results indicate that the ethyleneimine was unstable under the conditions required for rearrangement of the aminoethanols.

The work was continued using the isomeric chloro substituted aminoethanols,  $\text{ClC}_6\text{H}_4\text{CHOHCHNH}_2\text{C}_6\text{H}_5$  and  $\text{C}_6\text{H}_5\text{CHOHC}-\text{HNH}_2\text{C}_6\text{H}_4\text{Cl}$ . On pyrolysis at 170° for ninety minutes it was found that each compound formed a mixture of two Schiff's bases. These mixtures differed markedly in percentage composition.

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## TRIALKYLGOLD COMPOUNDS

LAUREN A. WOODS AND HENRY GILMAN

Evidence has been found for the existence of trialkylgold compounds. They may be prepared by the action of the alkyllithium derivatives on the corresponding dialkylgold halides.



At temperatures of about a -65° these compounds are stable and may be allowed to stand for hours without decomposition.

Trimethylgold may be stabilized by such chelating agents as ethylenediamine,  $\alpha$ -aminopyridine, and benzylamine. These complexes may be handled with moderate care at room temperature and may be analyzed. Being light and heat sensitive they will de-