

## Reduction of Mannich Bases to Form 1,3-Amino Alcohols Using a Knölker-type Catalyst

1,3-amino alcohols are a crucial biological and chemical motif and can be used both pharmacologically and in industrial ways. This important functional group can be accessed via the reduction of a Mannich base, a  $\beta$ -amino carbonyl compound, which is formed from readily available starting materials. Traditional methods of reduction include harsh conditions such as high temperatures, the use of strong reductants, or expensive catalysts. This project investigated the reduction of Mannich bases using iron-Knölker-type catalysts. This method works for a variety of  $\beta$ -amino carbonyl compounds and utilizes mild conditions: isopropanol as the reductant, and a low reaction temperature (50°C).

