

## S36-2 A New Versatile Synthetic Tool for Asymmetric Synthesis of $\alpha$ -amino acid

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Non-natural amino acids have attracted a great deal of attention as key components of peptide mimetic agents. Although a number of efficient methods, including biotransformations, for preparing optically active  $\alpha$ -amino acids have been established, most process chemists are still pursuing even more straightforward and reliable methodologies to produce non-natural amino acid.

Recently, we developed a newly designed chiral glycine template (**1**) for an efficient asymmetric synthesis of  $\alpha$ -amino acids. The template (**1**) reacts with various kinds of electrophiles in highly stereoselective manner under industrially permissible mild conditions to afford alkylated products (**2**), which are converted to optically active  $\alpha$ -amino acids with simple standard protocol.

The template (**1**) is expected to be a versatile synthetic tool with a wide applicability for both medicinal chemistry and commercial process research.

