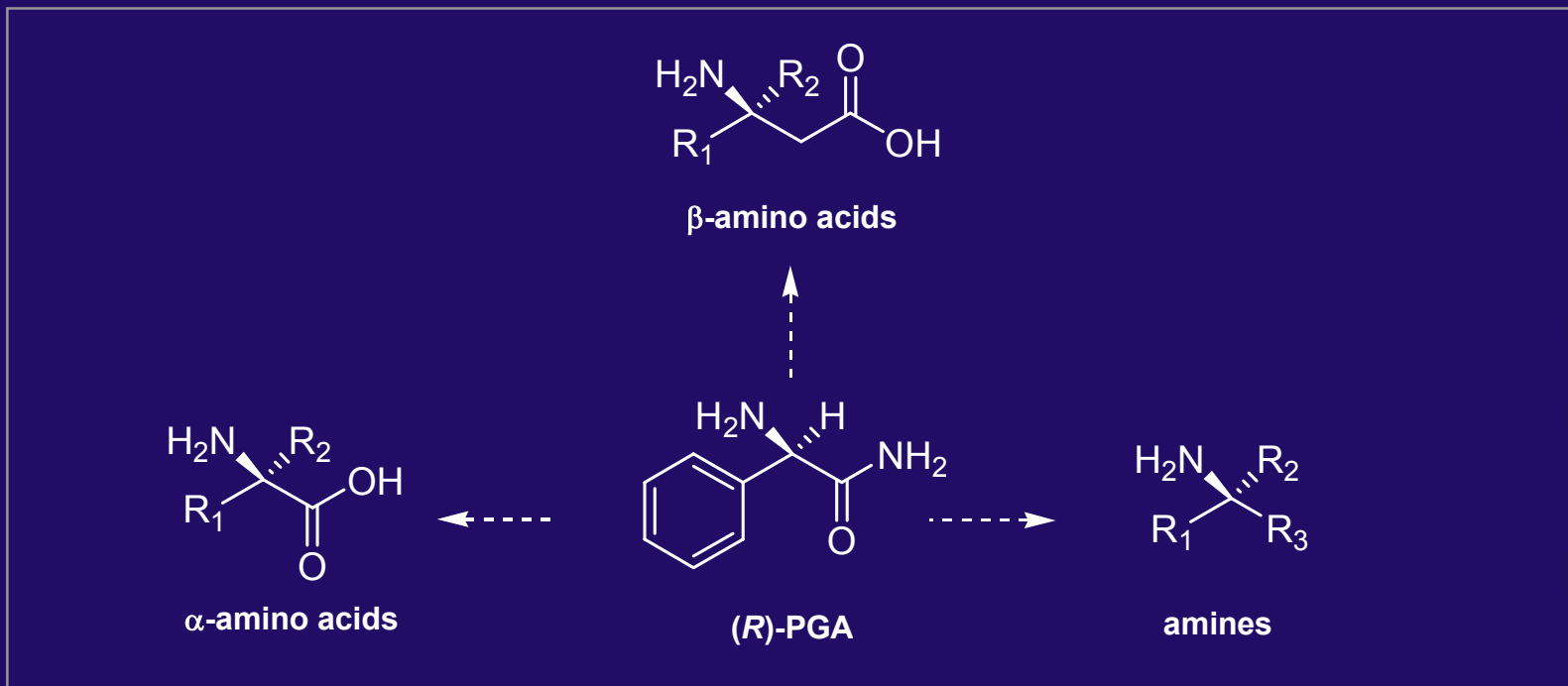


Chirality Transfer

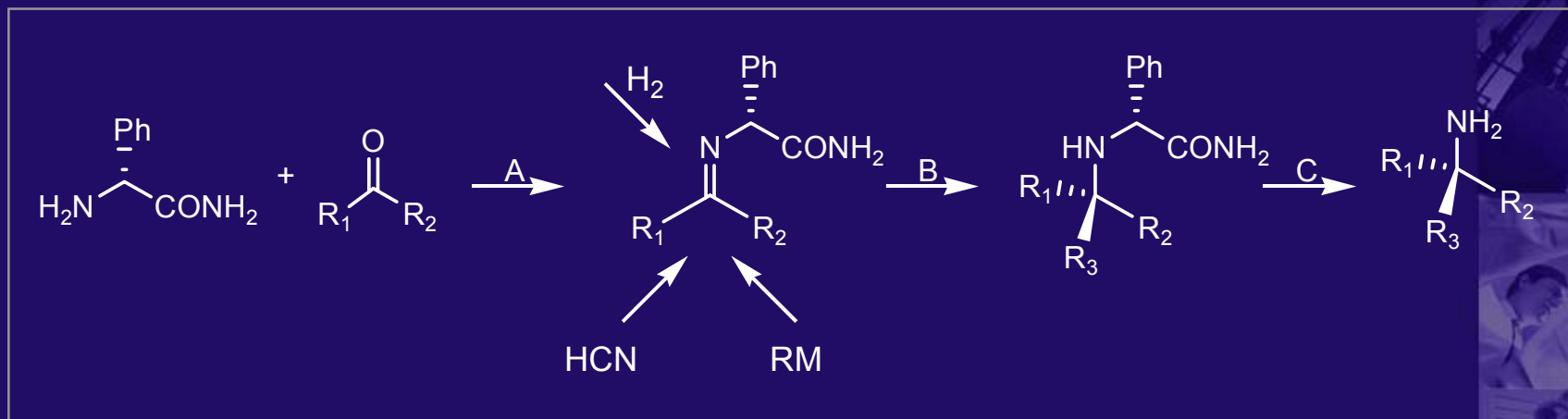
The application of the DSM proprietary product (*R*)-phenylglycine-amide (*R*)-PGA as chiral amine donor source in the synthesis of enantiomerically pure amino acids and other amino-functionalized compounds.



Chirality Transfer

Typical Chemistry

- A. Imine formation
- B. Diastereoselective addition reactions: (1) Strecker chemistry (HCN); (2) reduction (H₂); (3) organometal chemistry (RM)
- C. Removal of chiral auxiliary: for example hydrogenolysis with H₂, Pd/C



Example 2: (S)-3,3-dimethyl-2-butylamine

Key step: Diastereoselective Reduction

