## New Cycloaddition Reactions of Anionically Activated Dipoles

## Daesung Lee, Department of Chemistry, University of Illinois at Chicago, IL 60607

**New reactions of anionic dipoles**: Based on the high reactivity of lithium trimethylsilyldiazomethane, various unprecedented transformations were developed including pyrazoline synthesis. The cycloadducts could undergo facile N–N bond cleavage under proteolytic conditions, giving free  $\alpha$ -amino ketones with a β-cyanide substituent.

**Application to natural product synthesis:** The cycloaddition to form a pyrazoline followed by the N–N bond cleavage can be effectively employed for the synthesis of natural products containing  $\alpha$ -amino ketones and