

## **Enantioselective Reactions involving Chiral Lewis acids and Organic compounds as Catalysts**

Vinod K. Singh, Department of Chemistry, IIT Kanpur

Enantioselective reactions are important in Organic Synthesis. Enantioselectivity can be induced during a particular reaction using a chiral auxiliary/ligand. In this method, the ligand/auxiliary can be either attached to a substrate via a covalent bond (Internal auxiliary method) or it can be used from outside (External auxiliary method). The latter one is intellectually challenging and economically viable. In this lecture, I will discuss some of these reactions from our laboratory using chiral Lewis acids and small organic compounds (asymmetric organocatalysis).