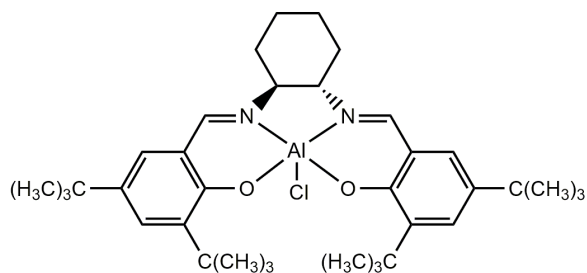
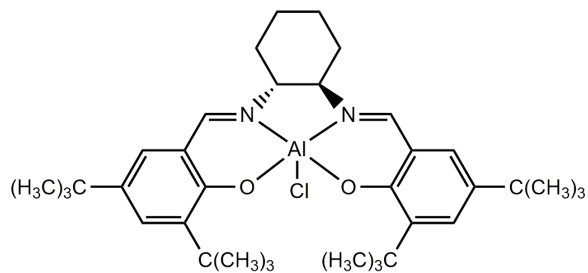


## REACTIONS

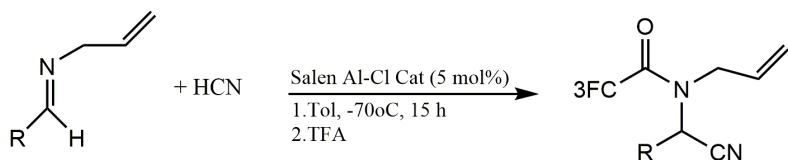


(R, R)-Jacobsen's Salen Al catalyst



(S, S)-Jacobsen's Salen Al catalyst

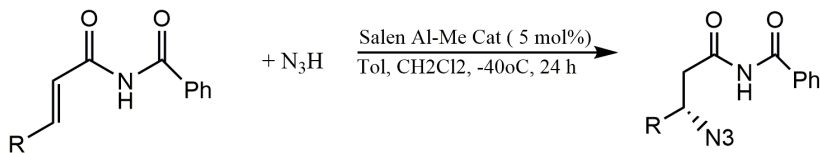
### 1) STRECKER REACTION, HYDROCYANATION OF IMINES:



*J. Am. Chem. Soc.*, 1998, 120, 5315-5316

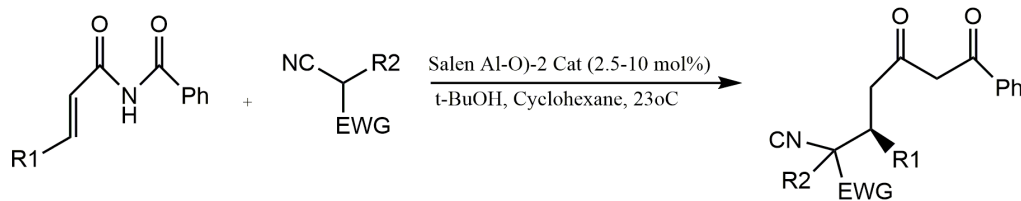
### 2) ASYMMETRIC CONJUGATE ADDITION REACTIONS:

#### A) ASYMMETRIC HYDRAZOIC ACID INTO UNSUBSTITUTED IMIDES:



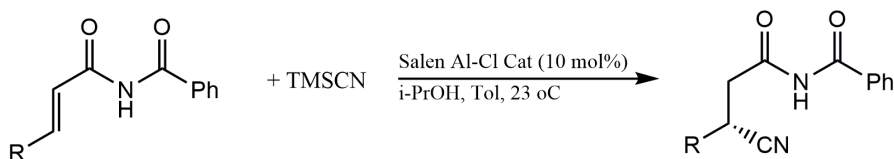
*J. Am. Chem. Soc.*, 1999, 121, 8959-8960  
*Adv. Synth. Catal.*, 2002, 344, 953-956

#### B) ADDITION OF MALONONITRILES INTO UNSATURATED IMIDES:



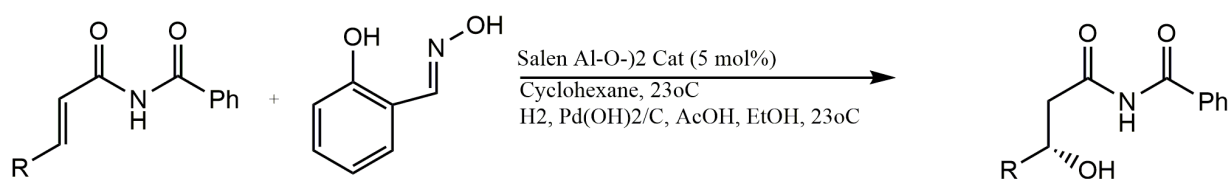
*J. Am. Chem. Soc.*, 2003, 125, 11204-11205

#### C) ADDITION OF CYANIDE INTO UNSATURATED IMIDES:



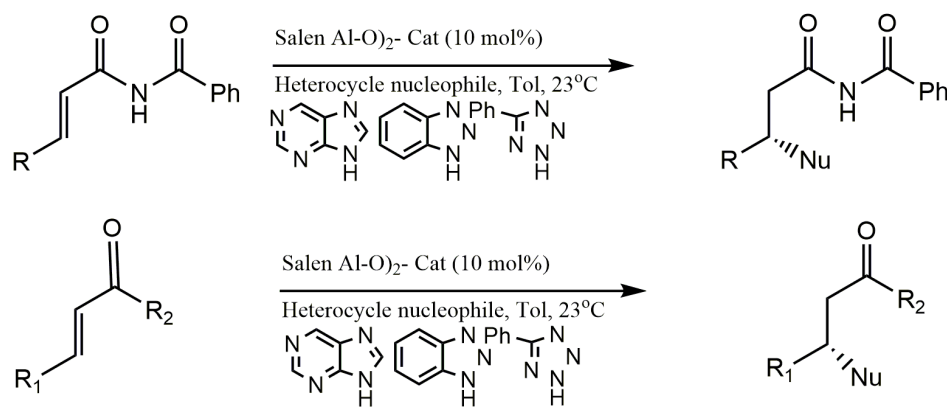
*J. Am. Chem. Soc.*, 2003, 125, 4442-4443

D) ADDITION OF OXIME INTO UNSATURATED IMIDES:



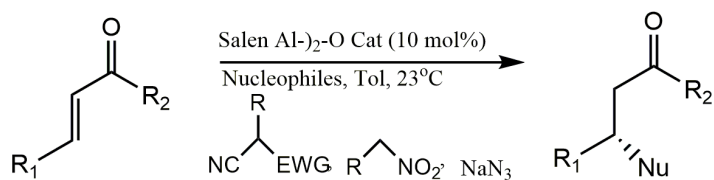
*J. Am. Chem. Soc.*, 2004, 126, 14724-14725

E) ADDITION OF NITROGEN CONTAINING HETEROCYCLES INTO UNSATURATED IMIDES:



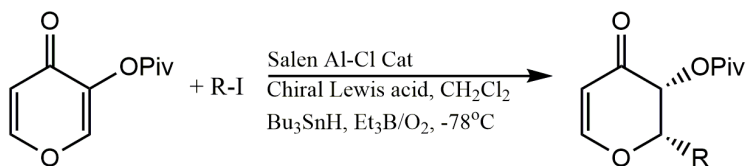
*Angew. Chem. Intl. Ed.*, 2005, 44, 2393-2397

F) ADDITION OF VARIOUS NUCLEOPHILES TO ENONES:



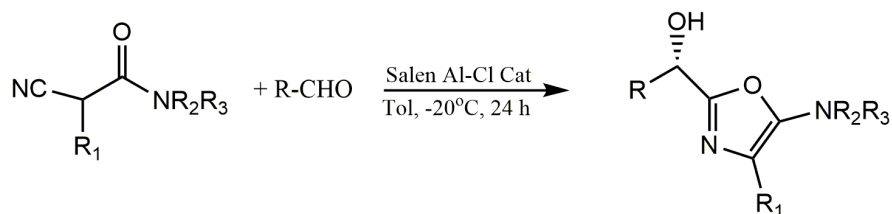
*J. Am. Chem. Soc.*, 2005, 127, 1313-1317

3) ENANTIOSELECTIVE RADICAL ADDITION TO ALKOXY PYRONES:



*J. Am. Chem. Soc.*, 2006, 128, 13346

4) ENANTIOSELECTIVE ADDITION OF ISOCYANIDES TO ALDEHYDES:



*Org. Lett.*, 2007, 9, 3615