## **REACTION MIXTURE CONTAINS**

DESIRED PRODUCT(S), UNWANTED BY-PRODUCTS, UNREACTED STARTING MATERIALS, SOLVENTS, CATALYSTS.

PRODUCT MAY BE LIGHT, HEAT, OR AIR SENSITIVE.

- (5) SEPARATION AND PURIFICATION OF PRODUCT(S) (SO-CALLED <u>REACTION WORK-UP</u>)
  - EXTRACTIONS
  - DISTILLATIONS
  - CRYSTALLIZATIONS
  - CHROMATOGRAPHY
  - ETC
- (6) IDENTIFICATION OF PRODUCT(S)
  - IR, NMR, OTHER SPECTROSCOPY, CHROMATOGRAPHY, PHYSICAL PROPERTIES (MP, BP, ETC)