

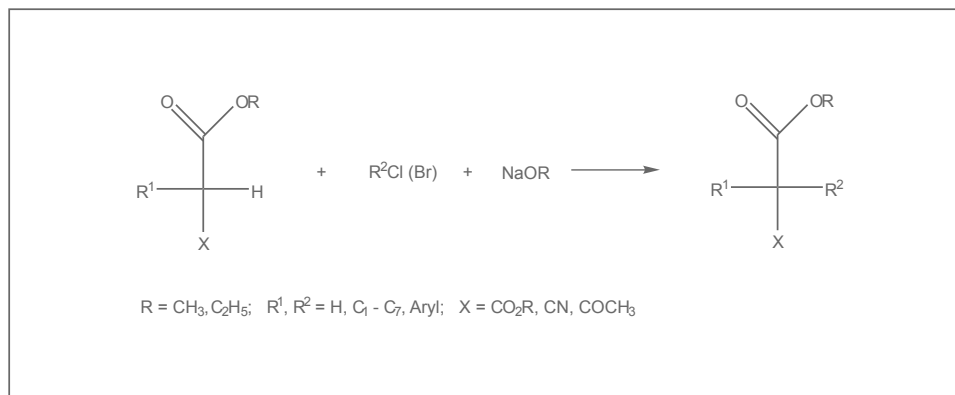
CUSTOM MANUFACTURING

During the recent years CFB has further developed its custom manufacturing services. We offer lab-scale process development, process optimization and small scale technical production from a few kg up to 100 kg as well as the production of pharmaceutical ingredients, organic intermediates and quaternary ammonium compounds up to commercial quantities.

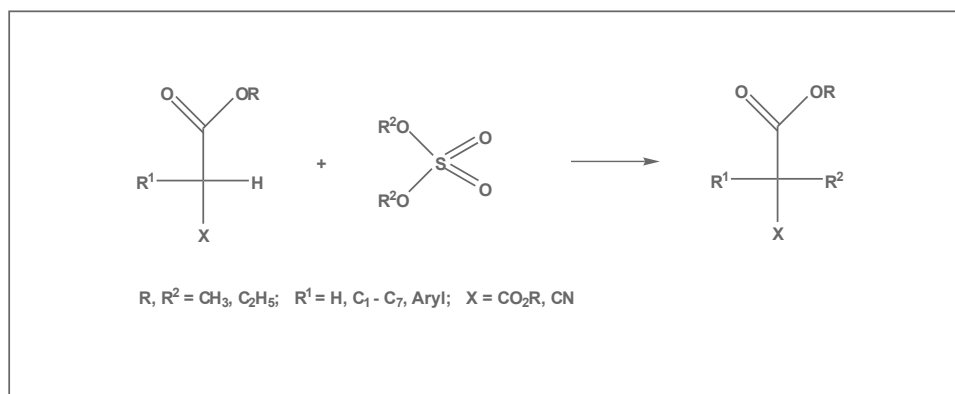
WE ARE ABLE TO CARRY OUT A VARIETY OF CHEMICAL REACTIONS, SUCH AS

Alkylation

i.e. alkylations of esters with alkyl halogenides and dialkyl sulfates



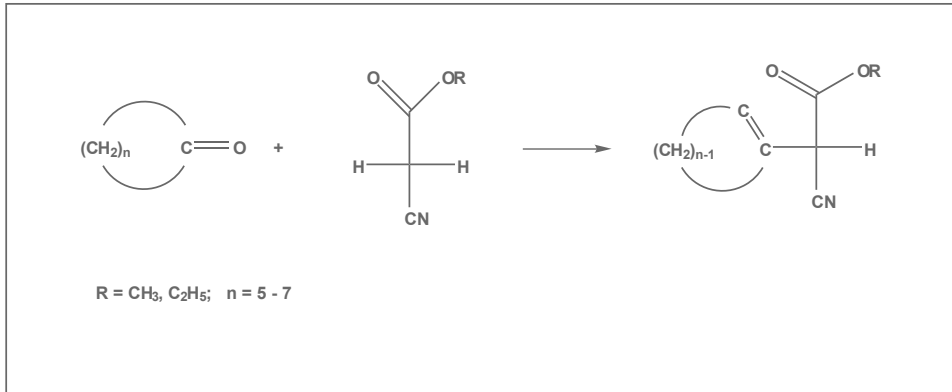
i.e. alkylations of cyanoacetic esters with carbonyl compounds



Alkylation cont. →

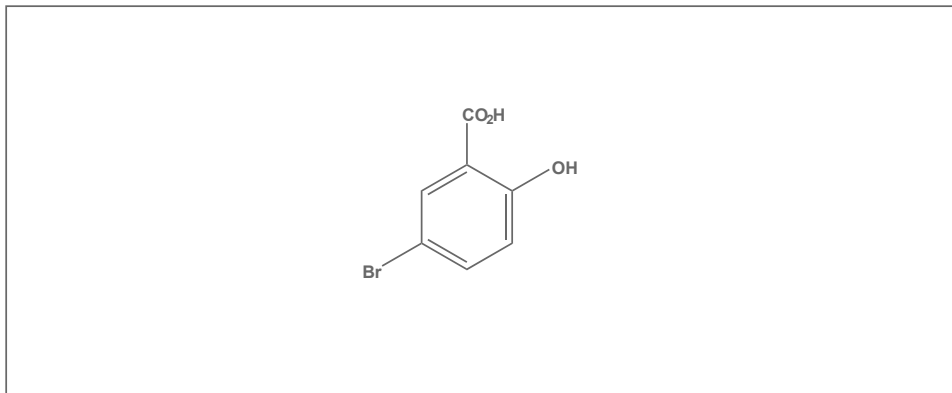


i.e. alkylations of cyanocetic esters with alkyl halogenides



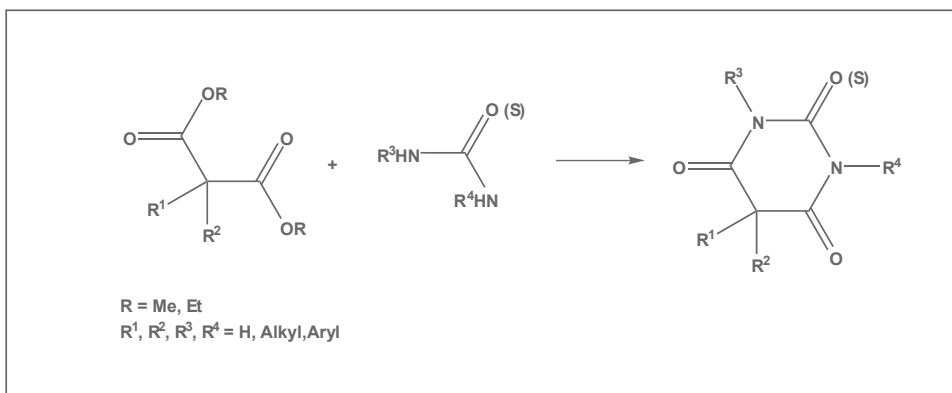
Bromination

i.e. synthesis of 5-Bromosalicylic acid



Condensations

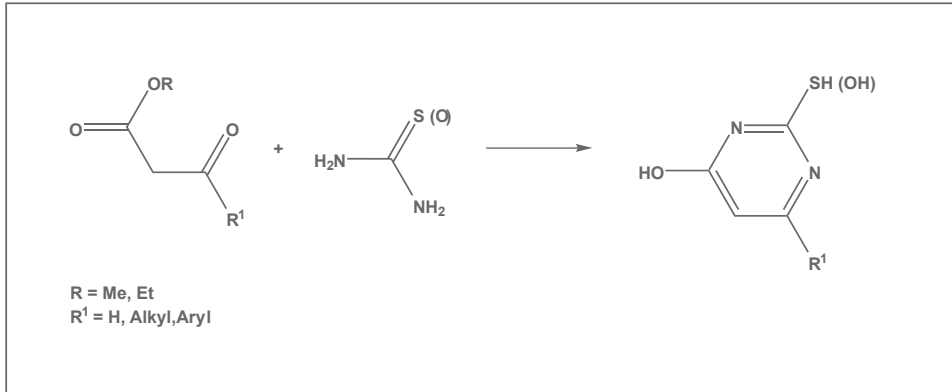
i.e. condensations of malonic esters with ureas



Alkylation cont. →

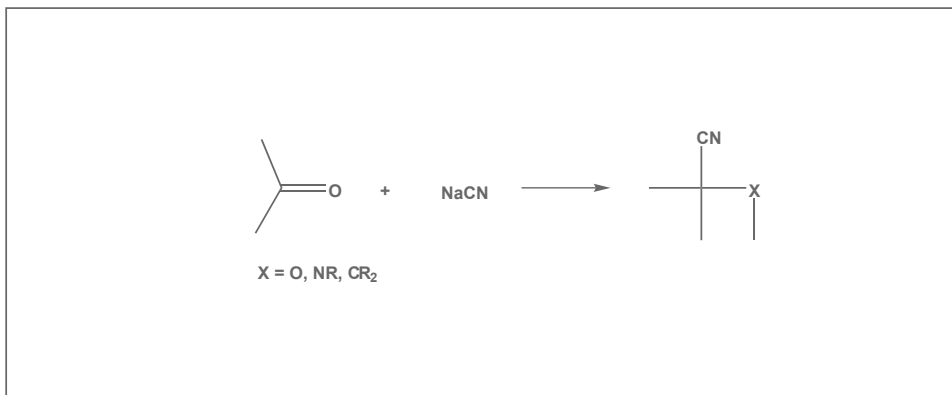


i.e. condensations of dicarbonyl compounds with ureas



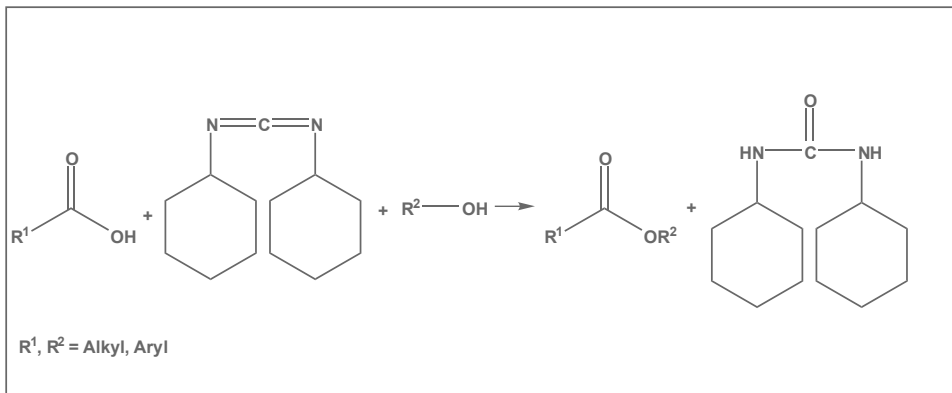
Cyanation with cyanide salts

i.e. generations of nitriles by addition of sodium cyanide to double bonds



Esterification

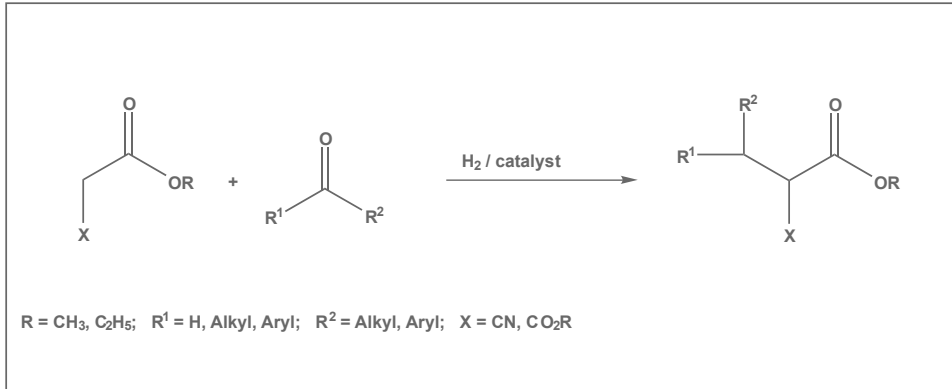
i.e. esterifications with DCC





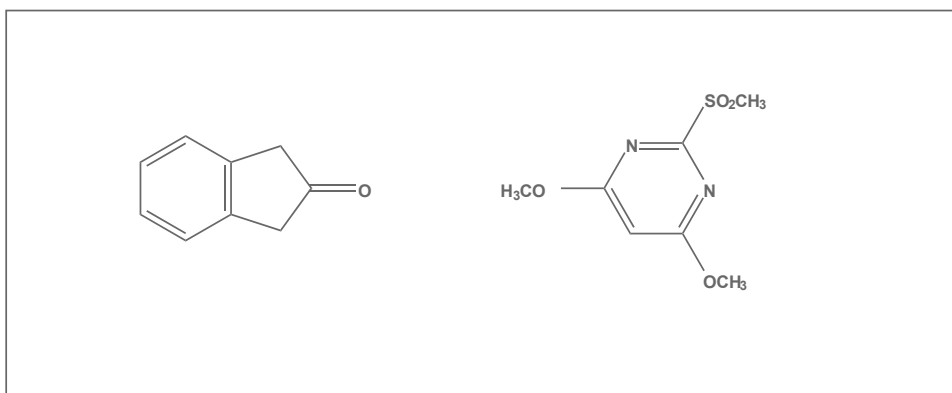
Hydrogenation

i.e. reductive alkylation of esters



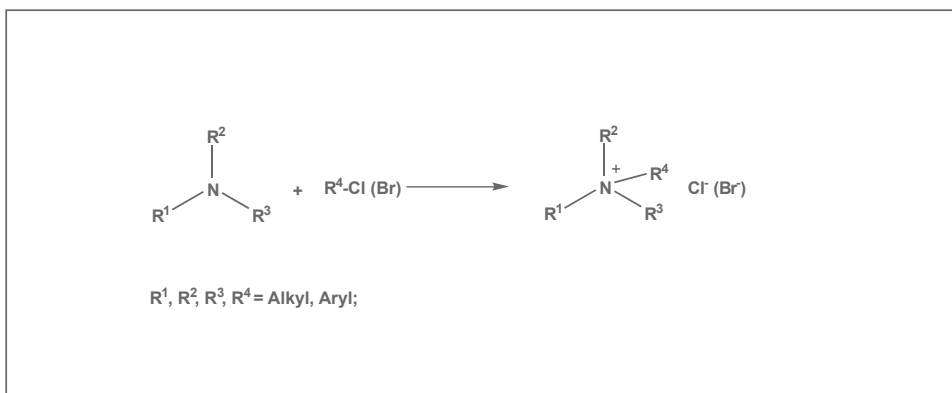
Oxidation

i.e. synthesis of 2-Indanone and 4,6-Dimethoxy-2-methylsulfonyl pyrimidine



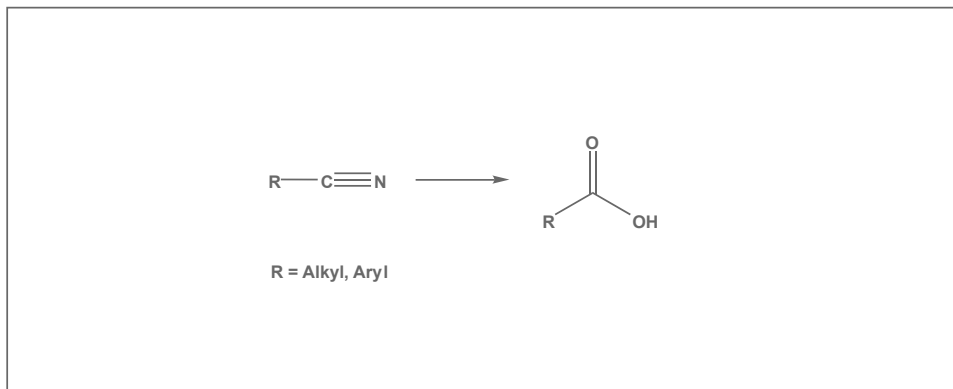
Quaternization

i.e. synthesis of Domiphen bromide and quaternary ammonium salts



Saponification

i.e. synthesis of carboxylic acids from nitriles



WE ARE WORKING WITH THE FOLLOWING HAZARDS:

Organic sulfur compounds
Inflammable and highly inflammable liquids
Alkali methoxides
Ammonia
Benzoyl chloride
Benzyl chloride
Bromine
Sodium cyanide
Dialkyl sulfates
Alkyl bromides
Chloral, Chloral hydrate
Dicyclohexylcarbodiimide
2,4-Toluene diisocyanate
Thionyl chloride
Hydrogen