# A FACILE GENERAL SYNTHESIS OF ARYLMALEIC ANHYDRIDES.

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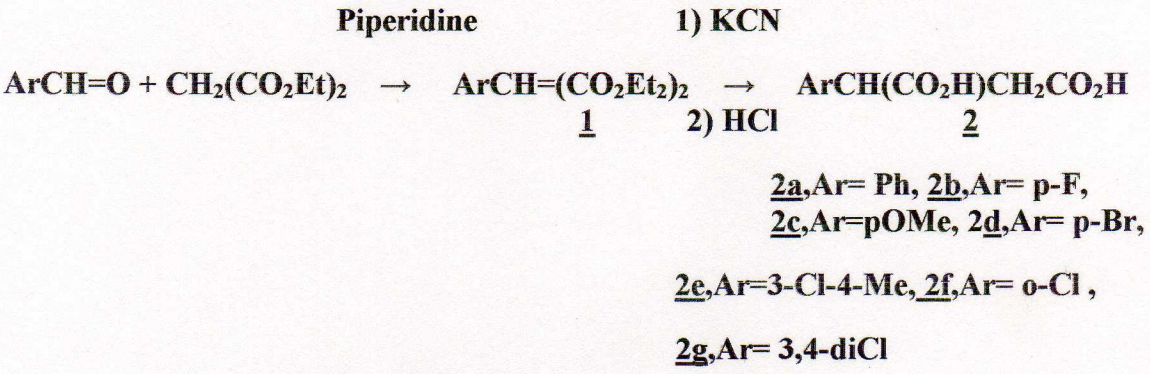
**By a sequence involving Knoevenagel condensation, Michael addition of cyanide, hydrolysis, and selenium dioxide oxidation, a series of seven aryl maleic anhydrides were prepared in excellent overall yields. The regiospecificity of reaction of these anhydrides with various nucleophilic species, e.g. $Me_3SiN_3$, $NH_3$, and $PhNH_2$ was investigated. Except for a few cases, the nucleophile attacks the more hindered carbonyl, in a reaction controlled by electronic rather than steric factors. These anhydrides are of particular utility in the synthesis of 4- and 5-Aryl Substituted 1,3(3H) Oxazine-2,6-Diones (Oxauracils)[1,2].**

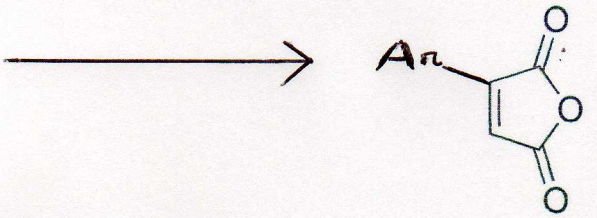



**2a,Ar= Ph, 2b,Ar= p-F,**
**2c,Ar=pOMe, 2d,Ar= p-Br,**

**2e,Ar=3-Cl-4-Me, 2f,Ar= o-Cl ,**

**2g,Ar= 3,4-diCl**

**2a-e, $SeO_2$/acetic anhydride**




**3a, Ar= Ph, 3b, Ar= p-F, 3c Ar = pOMe, 3d, Ar= p-Br,**

**3e, Ar= 3-Cl-4-Methyl, 3f, Ar= o-Cl, 3g, Ar= 3,4-diCl**

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