

Answer on Question #38770-Chemistry-Organic Chemistry

Question

Why -NH_2 is a activating substituent?

Answer

By definition, an activating substituent is a functional group that donates some of its electron density into a conjugated π system via resonance or inductive electron withdrawal, thus making the π system more nucleophilic.

The -NH_2 group donates electron density because it has a lone pair of electrons:

