

Answer on Question #54377 – Chemistry - Organic Chemistry

Question:

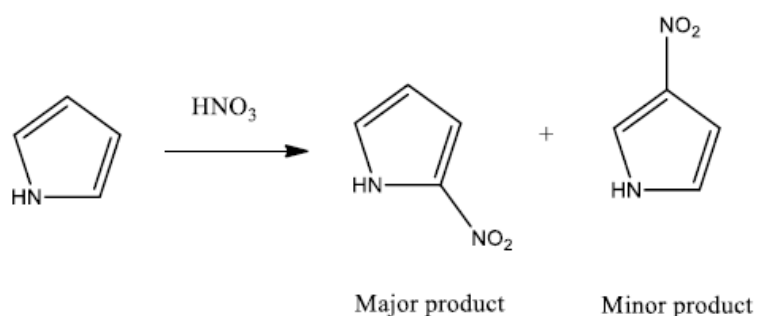
Predict the major and minor product of the following reactions:

- 1) Nitration ofazole
- 2) Friedel crafts acylation of pyrrole
- 3) Friedel crafts acylation of pyridine

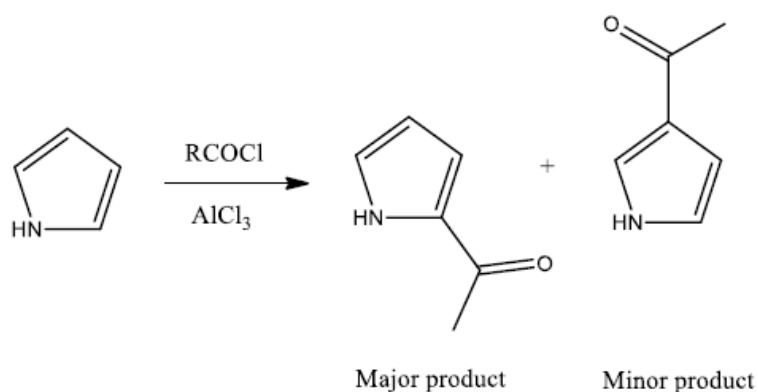
Answer

Alkylation and nitration of the azoles especially pyrrole occurs at the 2-position. Although some minor amount of the 3-substituted derivative also is formed. For pyridine, the nucleophilic substitution goes very hard and can only be at the 3-position (meta-derivative).

- 1) Nitration ofazole



- 2) Friedel crafts acylation of pyrrole



- 3) Friedel crafts acylation of pyridine

