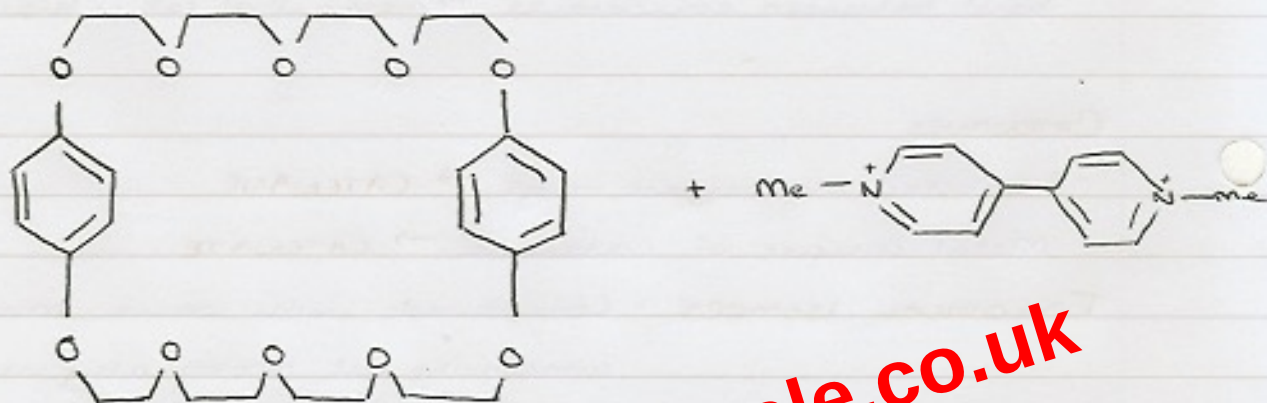


2. Thread and Clip Synthesis: Principles

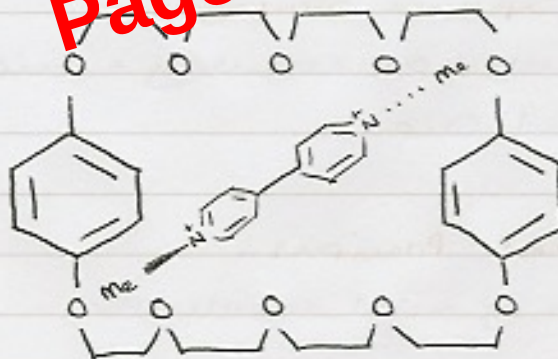
Promotion of threading process.

- 'Statistical' approach gives very low yields.
- Use non-covalent interaction (π - π stacking) to encourage threading of linear component through ring.

Porquat / BPP [34]C10 interaction



Preview from Notesale.co.uk
Page 2 of 4



- π - π stacking between electron rich crown and electron poor porquat aromatic rings.
- H-bonding between crown O and acidic, aromatic H of porquat.

Synthesis of Higher Order Catenanes.

Similar to principles but requires:

- (i) Larger crown ether ring - reduces steric constraints
- (ii) More forcing conditions.