



Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

Chemistry

SUB. CODE- BSCC2402

For B.Sc. 4th Semester

(Polynuclear Hydrocarbons)

Module-V

Anthracene: Synthesis

By

Dr. Rosy Mallik

Assistant Professor,

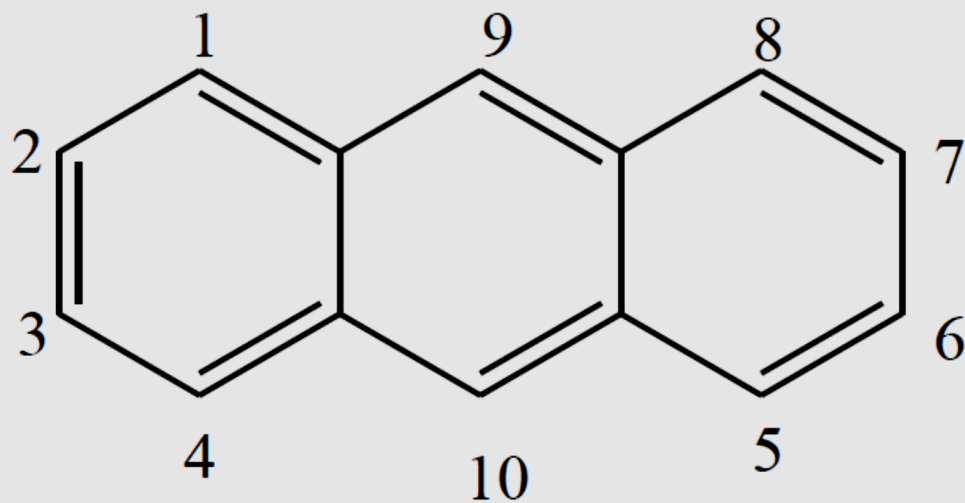
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
ODISHA



Centurion
UNIVERSITY

*Shaping Lives...
Empowering Communities...*

Anthracene

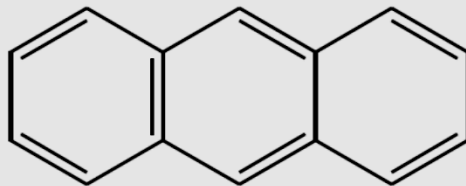




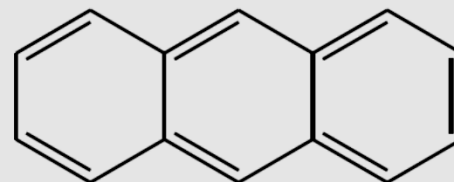
Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

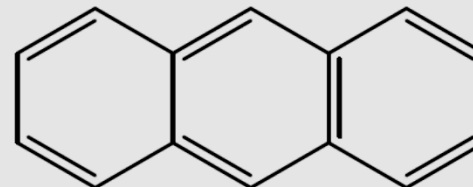
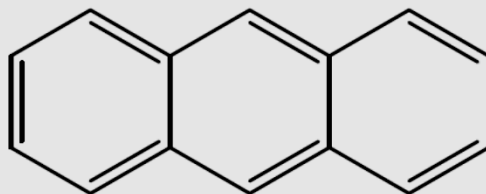
- Anthracene has 4 isomers:



I



II





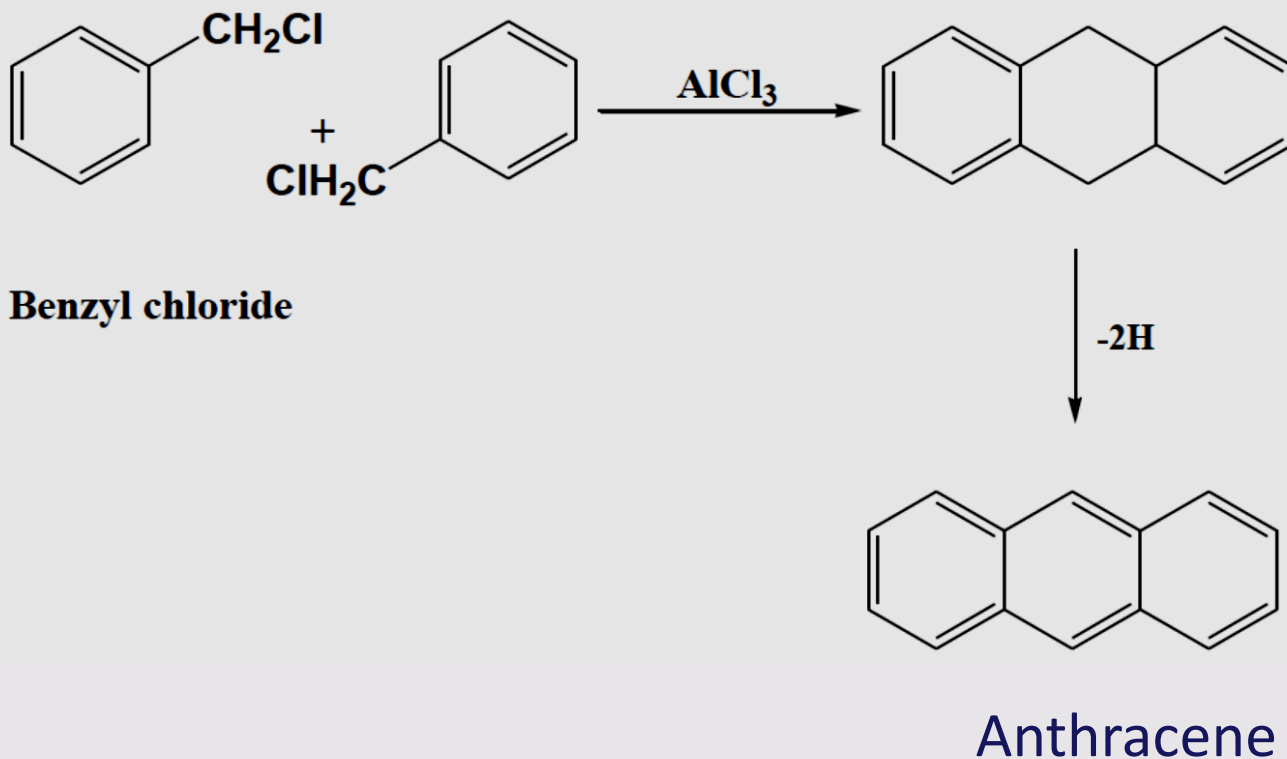
Centurion
UNIVERSITY

Shaping Lives...

Empowering Communities...

Synthesis of anthracene

1. Friedel-Craft reaction





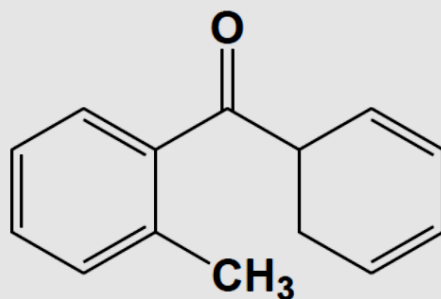
Centurion
UNIVERSITY

Shaping Lives...

Empowering Communities...

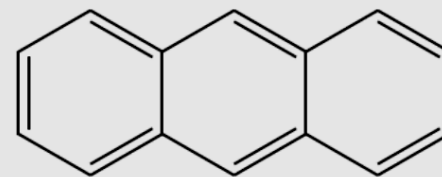
Synthesis of anthracene

2. Elbe reaction



o- Methyl- benzenophenone
or o- Benzoyl- toluene

Pyrolysis →



Anthracene



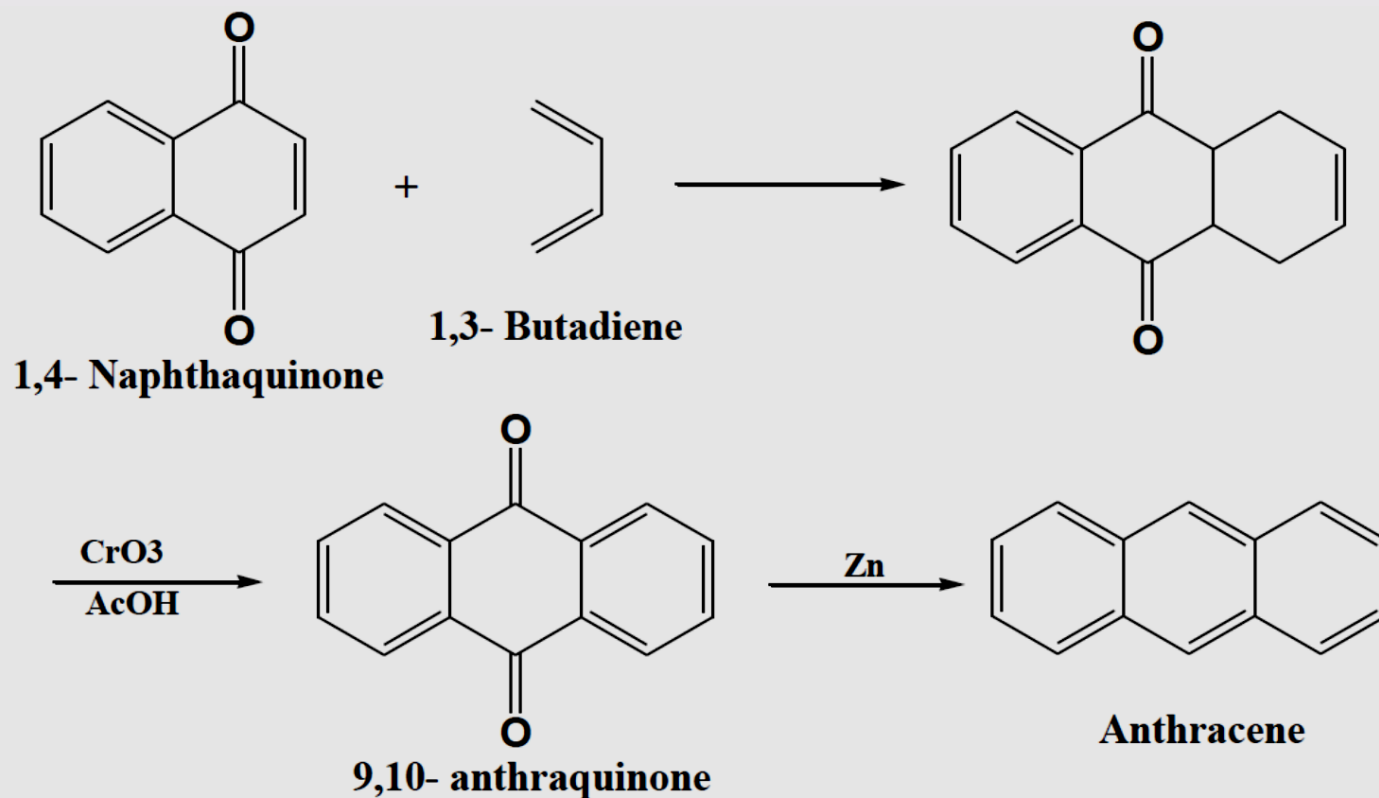
Centurion
UNIVERSITY

Shaping Lives...

Empowering Communities...

Synthesis of anthracene

3. From 1,4-Naphthaquinone



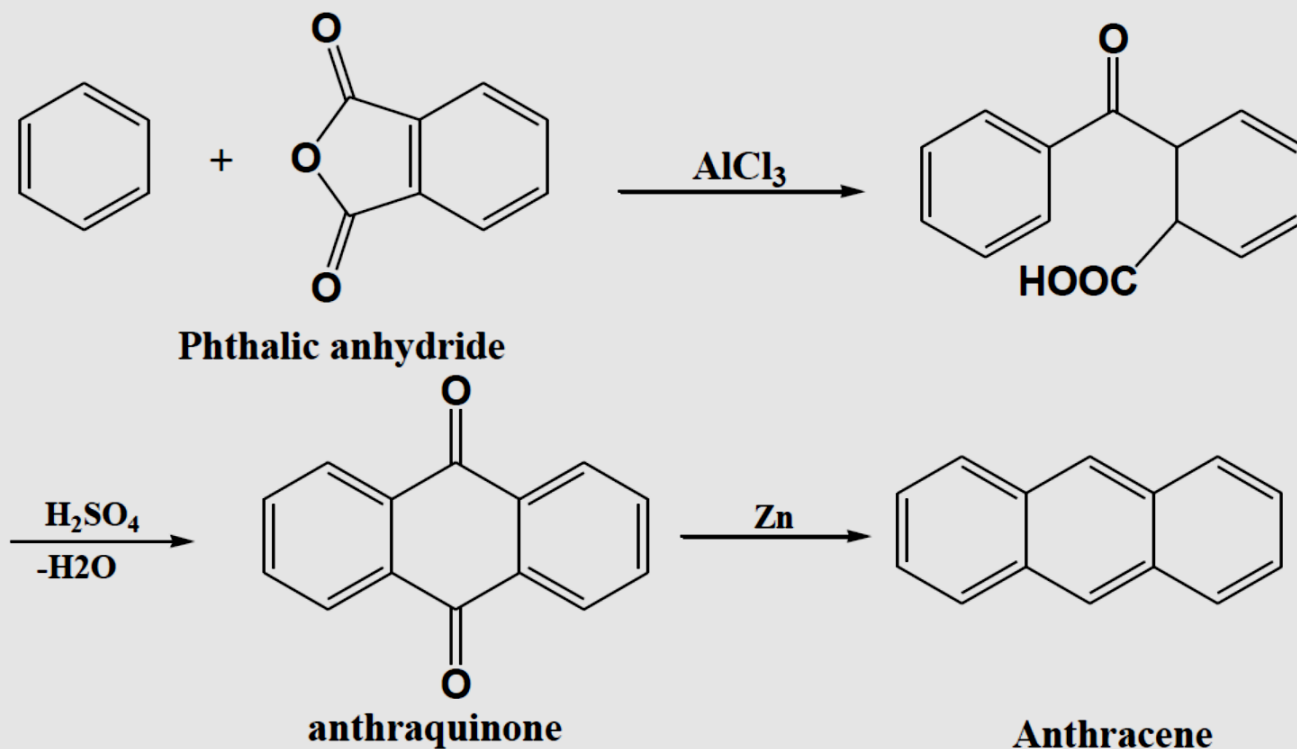


Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

Synthesis of anthracene

4. From benzene and phthalic anhydride





Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

References

1. K.D Sharma and Y. R. Sharma, Kalyani Publishers, Unit-II page-233;
2. University Chemistry, Vol-IV, Dr. U. N. Dash, Dr. KK. Ojha, Himalaya Publishing house, Unit III, page-304