

Department of Industrial Chemistry

ICP 407: ORGANIC CHEMISTRY PRACTICALS-I

Course Outcomes:

• Students attain knowledge in single and two stage organic preparation, purification, analytical and TLC.

Single and Two stage organic preparations, purification and characterization: Preparations of 1,2,3,4–tetrahydrocarbazole, 7–hydroxy-4-methyl-coumarin, aspirin, adipic acid, Para red and Methyl red Preparations of p-bromo & p-nitroaniline from acetanilide, Ethyl resorcinol from Resorcinol, ε-Caprolactam from cyclohexanone, p-Amionobenzoic acid from p-Nitrotoludine, s-Tribromobenzene from aniline, Benzylic acid from Benzoin, p-Chlorotoluine from p-Toludine, 2,4-Dinitrophenylhydrazine from Chlorobenzene, m-Nitrobenzoic acid from methyl benzoate, 2,4-Dinitrophenol from Chlorobenzene, o-Aminobenzoic acid from Phthalic anhydride, hydantoin from benzyl, p-Aminoazobenzene from Aniline, thiazoles from acetophenones, pyrimidines from aldehydes/ketones and thiourea, , eosin from resorcinol & phthalic anhydride, Indigo from anthranilic acid, methyl orange from aniline, 5-hydroxy-1,3-benzothiole from hydroquinone,Benzimidazole from urea.

Any other interesting experiments

References

- 1. Experimental Organic Chemistry-Vol. I & II-P. R. Singh et al, TMH New Delhi, 1981
- 2. Laboratory Manual in Organic Chemistry–Dey & Sitaraman, Allied, New Delhi, 1992.
- 3. Vogel's Text Book of Practical Organic Chemistry including Qualitative Organic Analysis- B. S. Furniss et al., Longman-ELBS, London, 1989.
- 4. Organic analytical chemistry, Theory and Practice-Jag Mohan, Narosa, 2003.
- 5. Practical organic chemistry by F.G. Mann & B.C. Saunders, 4th Edition, Longman, 1970.
- 6. Laboratory Manual of Organic Chemistry Raj K Bansal, 2nd Edition, Wiley, 1990.
- 7. Systematic Lab Experiments in organic chemistry-Arun Sethi, New Age International, 2006.
- 8. Advanced Practical organic chemistry-Jag Mohan, Himalaya Publishing House, 1992.