**Course Title: Stereochemistry**

**Course Code: CH-829**

**Credit Hours:3+0**

**Prerequisite: Nil**

**Course Objectives**

To get knowledge about stereochemical nomenclature, classification of objects with regard to symmetry, desymmetrizations, chiroptical properties of organic compounds, stereochemical discrimination, separation of stereoisomers.

**Course Outcomes**

The students would enable to understand Stereochemistry of organic compounds and conformational analysis of cyclohexane derivatives. Course Contents Configuration and conformation of cyclic molecules, Stereochemistry and conformational analysis of cyclohexane systems, Six membered sp 2-hybrid cyclic systems, Six membered saturated heterocycles, Stereochemistry and conformational effects in ring systems, Small and common rings, Medium bicyclic, Polycyclic fused ring, Bridged rings and stereochemical restrictions, Chiroptical properties, Optical rotatory dispersion (ORD), Circular dichroism (CD)

**Recommended Books**


1. Nasipuri, Stereochemistry of Organic Compounds-Principles and Applications, New Age International Publishers (P) Limited, New Delhi, India 1991.
2. P.S. Kalsi, Stereochemistry and Mechanism Through Solved problems, New Age International Publishers (P) Limited, New Delhi, India 2001.
3. J. Eames (Queen Mary and Westfield College, University of London) and J. M. Peach, Stereochemistry at a Glance, Blackwell Publishing 2003.
4. D.G. Morris, Stereochemistry, Royal Society of Chemistry, U.K. 2001.
5. R. Gabba, Stereochemistry, Campus Books International, New Delhi, India 2002.
6. L. Eliel, and S.H. Wilen, Stereochemistry of Organic compounds, Wiley& Sons, Inc., New York 2014(reprint).