Program: Chemistry (15025012071P6)

Course: STEREOCHEMISTRY

Code: PPGQU0046

Workload: 60 hours

Credits: 04

Syllabus:

Structure and symmetry of molecules; Three-dimensional formulas; Fisher, Newman, and sawhorse projections; Conformational analysis; Stereochemistry of cyclic and acyclic compounds; Stereoisomers: Diastereomers and Enantiomers; Chirality and Optical activity; Prochirality; Racemization; Axial Chirality; Stereochemistry of bicyclic and polycyclic compounds; Stereochemistry of bridged cyclic systems – Bredt's' Rules; Absolute and relative configuration; Nomenclature of stereoisomers: E/Z, D/L, and R/S; Stereoselectivity and stereospecific reactions; Stereochemistry of eliminations reactions.

Bibliography:

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CLAYDEN, J.; GEEVES, N. and WARREN, S. Advanced Organic Chemistry, Paperback, 1234 pages, 2nd edition, Oxford University Press, 2012.

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