

# Molecular and Homology Modeling with Rational Drug Designing

(Course duration: 45days)

## **COURSEWORK**

Introduction to chemoinformatics and Drug Development

Chemical and Drug Database

Proteomics

Sequence analysis of Receptor molecule

Structural Bioinformatics in Drug Development

Small molecule hits

Designing chemical structures

Homology Modeling

Pathways studies and Drug Targeting

Lead design with Geometry optimization and Energy Minimization

Computer simulations

Chemical reaction indexing

Pharmacophore analysis

Docking

Relevant soft wares and Tools

Chemical Patents

FDA in drug trials

**Research Project**