

### Research Center Department of Chemistry

Thrust areas of research as identified by the department: Carbohydrate Chemistry, Medicinal Chemistry, Organic Synthetic Chemistry, Heterocyclic Chemistry, Synthetic organic chemistry, Metal Organic Framework, Supramolecular Chemistry, Advanced energy materials, photocatalysis , gas sensing, Basic and applied enzymology Plant pest interactions Insect biochemistry. Our research area also revolves around the intricate interconnections among lipid metabolism, Next-Generation Sequencing (NGS), transcriptional regulation, and biotransformation. By harnessing advanced NGS technologies, our focus is on unraveling the intricate transcriptional networks that govern lipid-related pathways and identifying key players. Through an integrative approach, our research seeks to advance our comprehension of gene regulation in lipid metabolism, with potential implications for understanding and addressing metabolic disorders and enhancing cellular health. Currently 21 students are working for PhD. programme.

**Information about research grants, projects completed and ongoing during the last five year from government funding agencies (like UGC, CSIR, DST, and DBT etc):**

Name of the Principle Investigator (Co-investigator)	Title of the Project	Completed / ongoing ( 2018-19 )	Funding Agency	Duration	Amount (in Lakh)
Dr. S. R. Deshmukh	L-Ascorbic Acid	Ongoing	Aspire, SPPU, Pune	2018-19	3.00
Dr. A .K. Kulkarni	Nanomaterials	Ongoing	Aspire SPPU	2018-19	2.5
Dr. Kawade V.A.	Supramolecular Chemistry	Completed	SERB-DST	2016-19	24.5
Dr. S. R. Thopate	Ascorbic Acid	Completed	CSIR New Delhi	3 Years July. 2017 – June- 2020	25.00