CHARUSAT
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

P. D. Patel Institute of APPLIED SCIENCES

Department of Biological Sciences,
P D Patel Institute of Applied Sciences,
Charotar University of Science and Technology

Research Areas

P D Patel Institute of Applied Sciences

RESEARCH
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DEPARTMENT OF BIOLOGICAL SCIENCE (DBS)

Faculty Name	Research area(s)
 **Palash Mandal**	Fatty Liver Disease, Development of therapeutic interventions to normalize both alcohol and nonalcoholic-induced increases in hepatic inflammation, which could be used to treat patients with ALD, NASH, Role of gut-microbioata in Fatty Liver Disease, Obesity and Diabetes.
 **Gayatri Dave**	Product and Process Development such as Eco-friendly fabric and Reporter assays for Microbial activity testing Anti-microbial activity testing Product characterization Toxicity analysis assays

Faculty Name	Research area(s)
 **Janki N. Thakker**	Ecofriendly Bricks and construction materials: Plant Microbe interaction Agriwaste management (Biochar preparation and use as bio fertilizer) Purification and applications of plant as well as microbial pigments
	Use of Magnetic nanoparticles in controlling plant pathogens
 **Aditi Buch**	Nonbiological applications of biomolecules

Faculty Name	Research area(s)
 **Bragadish Iyer**	Study of redox reactions, electroactive biopolymers, corrosion due to biofilms, biocatalysis
	Development of Bioadhesives
 **Seema Amin**	Liquid Waste Management
	Biotransformation
	Liquid Waste Management
 **Anamika Jha**	Nanotechnology for post-harvest storage applications
	Biofertilizers and plant-microbe interactions

Faculty Name	Research area(s)
 **Anoop Markande**	Bioconcrete development
	Developmemtn of Moonlighting proteins
	Effect of medical imaging on surface microflora
	Protein Molecular Dynamics simulation
 **Kirankumar Patel**	Plant Microbe interaction, Optimization of Large scale Bio-control cultivation, Enzyme Engineering

Faculty Name	Research area(s)
 **Chirayu Desai**	**Integrated eco-electrogenic system** for efficient and sustainable treatment of textile wastewater
	Microaerophilic-aerobic based treatment of textile effluents
	Microbial diversity across the Ganges
 **Bhavtosh Kikani**	**Protein engineering:** Purification of various enzymes; Enzyme Immobilization using nanomaterils to increase its stability

Inter Disciplinary Research @ Biological Sciences, PDPIAS

Faculty Name	Research area(s)
 **Tapan A. Patel**	Toxicity (in vitro and in vivo) and ameliorative studies of herbal-natural compounds, phytochemical analysis, cytogenetics
 **Mandar Kulkarni**	Nutrition (Probiotics), Host-microbe interactions and Computational Biology
 **Janki K. Patel**	Plant-Microbe interaction; Biocontrol activity, ISR and SAR response in plant

Faculty Name	Research area(s)
 **Neeraj Jain**	**Cancer Biology:** Development of novel cancer therapeutic approach using magnetic nanoparticles for the treatment of solid tumors
	Synthesis of heterocyclic derivatives and evaluation of anti-cancer parameters
	Immunotherapy for Colorectal Cancer: Focus on Cancer like Stem Cells & Advance stages