

Faculty Mapping with Bank of Thrust Areas of the Research

Identified Thrust Area	Sub Area	Faculty Name
Microbiology and Its Applications in Health, Environment, and Biotechnology	<ol style="list-style-type: none"> 1. Environmental Microbiology & Bioremediation 2. Probiotics & Functional Foods 3. Microbial Therapeutics & Disease Biology 4. Plant-Microbe & Molecular Microbiology 	Prof. Sagarkumar Joshi
Agriculture Microbiology	<ol style="list-style-type: none"> 1. Isolation & characterization of plant growth-promoting microbes 2. Bio fertilizers & bio stimulants development 3. Microbial Biocontrol of Plant Pathogens 4. Microbial composting & agricultural waste biodegradation 5. Microbial inoculants in integrated nutrient & pest management 6. Molecular approaches to microbe-plant interactions 	Prof. Rinkal Gohil
Bioremediation & Nano-structure	<ol style="list-style-type: none"> 1. Bioremediation of Dyes 2. Bioremediation of Organic Pollutants 3. Bio-based Nanostructure Synthesis and Applications 	Dr. Priya Vithalani
Probiotics, Prebiotics & Gut Microbiome Research	<ol style="list-style-type: none"> 1. Isolation & Characterization of Probiotic Strains 2. Functional validation & safety assessment of probiotics 3. Mechanisms of probiotic action (immune modulation, gut barrier, pathogen inhibition) 4. Screening & identification of novel prebiotics 5. Effects of prebiotics on gut microbiota diversity & metabolism 6. Metagenomics' & metabolomics profiling of gut microbiota 7. Dysbiosis and links to metabolic & inflammatory diseases 	Dr. Amishi Bhatt
Microbial Enzymology & Application of Biofertilizer	<ol style="list-style-type: none"> 1. Production, purification, and characterization of microbial proteases 2. Industrial applications of microbial proteases 3. Development of efficient microbial consortia for crop productivity 	Prof. Milan Gami


I/C Dean
Faculty of Science