

# Curriculum Vitae



**Name** Dr. Duggirala Srinivas Murty

**Date of Birth** 18<sup>th</sup> November 1969

**Current Position** Professor, Head and Dean

**Field** Microbiology

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### **Academic Qualifications**

<b>Exam passed</b>	<b>Board University</b>	<b>Subjects</b>	<b>Year</b>	<b>Class Division</b>
Ph.D.	Gujarat University	Microbiology	2004	Awarded
M.Sc.	Gujarat University	Microbiology	1993	II <sup>nd</sup>
B.Sc.	Gujarat University	Microbiology	1990	I <sup>st</sup>

### **Employment Details**

<b>Sr. No.</b>	<b>Experience</b>	<b>Designation</b>	<b>University</b>
1	1-11-1993 to 31-1-1995	Research Assistant	Gujarat Vidyapith
2	1-2-1995 to 31-1-2006	Lecturer	Gujarat Vidyapith
3	1-2-2006 to 31-1-2012	Associate Professor	Gujarat Vidyapith
4	Since 1-2-2012	Professor	Gujarat Vidyapith

### **Contribution to Teaching**

<b>Courses Taught</b>	<b>Name of University /College Institution</b>	<b>Degree/ Semester Theory and Practicals</b>
Immunology	Gujarat Vidyapith	M.Sc. Semester 1
rDNA Technology	Gujarat Vidyapith	M.Sc. Semester 2
Biomethanation	Gujarat Vidyapith	M.Sc. Semester 3
Dissertation	Gujarat Vidyapith	M.Sc. Semester 4
Ph.D.	Gujarat Vidyapith	Course Work and Research Work

### **Area of Specialization**

<b>Sr.</b>	<b>Research Area</b>	<b>Since Year</b>
1	Microbiology and Environmental Biotechnology	1995
2	Biomethanation and Co-Digestion	1995
3	Microbial Enzymology and Applications	2004
4	Anaerobic Microbiology, Rumen Microbiology	2001
Presently Working in the areas of		
1	Anaerobic Treatment of Paper and Pulp industry waste	
2	“Solid State Fermentation for Animal Feed Improvement” jointly with researchers of Department of Animal Nutrition, Anand Agricultural University (AAU), Anand, Gujarat 388001, India	
3	Valorization of Vegetable Market waste by Solid State Fermentation	
3	“Isolation and characterization of Specific Tropic Groups of Strict Anaerobes from Cattle Rumen” jointly with researchers of Department of Animal Biotechnology, College of Veterinary Science and Animal Husbandry, Anand Agricultural University (AAU), Anand, Gujarat 388001, India	
4	“Isolation and characterization of Specific Tropic Groups of Strict Anaerobes from Camel Rumen” jointly with researchers of ICAR-National Research Centre on Camel, Jorbeer, Bikaner, Rajasthan 334001, India	

### **Academic Programme and Courses Evolved:**

1. Immunology
2. Recombinant DNA Technology
3. Methanogenesis Ecology Physiology and Genetics
4. M. Phil. and Ph.D. course work

### ***Involvement in Departmental Development***

1. Induction of P.G Diploma, B.Sc. and M.Sc. Courses
2. Development of Campus
3. Development of Laboratories

### ***Research Guidance***

1. Master Thesis: 85
2. M. Phil. : 6
3. Ph.D.: Awarded: 1 (Co-Guide)
4. Registered: Pursuing 04

### ***Publications: Papers Published***

Sr. No	No. Title of Paper/Report/Book	Author(s)	Name & Vol. of Journal & Year	Page No	
				From	To
1	A Study on Production of plant Growth Promoters and Mineral Solubilization Ability of Indigenous Rhizobacteria Isolated from <i>Allium cepa</i> (L).	Ashruti Pawar, Sharada Patil, Srinivas Murty Duggirala	<i>International Journal of Research and Analytical Reviews (IJRAR)</i> Year 2019, Vol 6, Issue 1, ISSN 2349-5138	138-143	
2	Influence of Supplementing Solid State Fermented Biomass on Digestibility, Microbial Nitrogen Supply and Enteric Methane Emissions in Cattle	P.L. Sherasia, P.R. Pandya, S. Parmerkar, M.V. Prajapati, S. Murty	<i>Indian Journal of Animal Nutrition, Year 2018, Volume-35, Issue-2 (June) pp 138-143</i> Print ISSN : 0970-3209 Online ISSN : 2231-6744	138	143
3	In Vitro Digestibility and Methane Production as Affected by Incorporation of Different Levels of Solid State Fermented Biomass in Total Mixed Rations	P.L. Sherasia, P.R. Pandya, S. Parmerkar, S. Murty, B.R. Devalia	<i>Indian Journal of Animal Nutrition, Year 2017, Volume-34 (4):420-424</i> Print ISSN : 0970-3209 Online ISSN : 2231-6744	420	424

4	Genome sequencing of <i>Pediococcus acidilactici</i> (NRCC1), a novel isolate from dromedary camel ( <i>Camelus dromedarius</i> ) rumen fluid	Rakesh Ranjan & Ramesh J. Pandit & Srinivas M. Duggirala & Chaitanya G. Joshi & Shradhdha Sharma & Niteen V. Patil	<i>Annals of Microbiology</i> 68(2) 103-110, Year 2017 <a href="https://doi.org/10.1007/s13213-017-1320-0">https://doi.org/10.1007/s13213-017-1320-0</a>	103	110
5	Mechanistic aspects of Au(III) sorption by <i>Aspergillus terreus</i> SRD49	Kruti R. Shah, Srinivas M. Duggirala, Devayani R. Tipre and Shailesh R. Dave.	<i>Journal of the Taiwan Institute of Chemical Engineers</i> 80:46-51, Year 2017	46	51
6	Influence of Incorporating Different Levels of SSF Biomass containing DFM in Total Mixed Ration on <i>In vitro</i> Digestibility and Methane Production	P.L. Sherasia, P. R. Pandya, S. Parnekar, Srinivas Murty and B. R. Devalia	<i>Indian Journal Of Animal Nutrition</i> 34(2):145-149, Year 2017 Doi:10.5958/2231-6744.2017.00067.	145	149
7	Antibacterial Activity Of <i>Abutilon pannosum</i> And <i>Grewia tenax</i> Leaves Extracts	Mital K. Aadesariya, Bhagwati M. Gauni, Srinivas M. Duggirala, Vijay R. Ram, Suhas J. Vyas.	<i>World Journal of Pharmaceutical Research</i> , 6(16) 1259-1274, Year 2017 ISSN 2277- 7105 doi: <a href="https://doi.org/10.20959/wjpr201716-10325">10.20959/wjpr201716-10325</a>	1259	1274
8	Characterization and Bio-prospecting of Fungi for Ag(I), Au(III) and Pd(II) sorption	Kruti R. Shah, Srinivas M. Duggirala, Devayani R. Tipre and Shailesh R. Dave.	<i>International Journal of Current Microbiology and Applied Sciences</i> ISSN: 2319-7706 doi: 10.20546/ijcmas.2016.505.065 5(5): 647-656, Year 2016	647	656
9	Pretreatment optimization of Sorghum pioneer biomass for bioethanol production and its scale-up.	Manoj Koradiya, Srinivas Duggirala, Devayani Tipre, Shailesh Dave.	<i>Bioresource Technology</i> . 199:142-149, Year 2016 doi.:10.1016/j.biortech.2015.08.156. ISSN: 0960-8524 Elsevier	142	149
10	Correlation between genomic analyses with metatranscriptomic study reveals various functional pathways of <i>Clostridium sartagoforme</i> AAU1, a buffalo rumen isolate.	Neelam M. Nathani, Srinivas M. Duggirala, Vaibhav D. Bhatt, Amrutlal K Patel, Ramesh K. Kothari & Chaitanya G. Joshi.	<i>Journal of Applied Animal Research</i> . 44(1) pp. 498-507, Year 2016 <a href="http://dx.doi.org/10.1080/09712119.2015.1091346">http://dx.doi.org/10.1080/09712119.2015.1091346</a>	498	507
11	Isolation of chitinolytic <i>Clostridium</i> sp. NCR from Mehsani buffalo rumen, its genomic analysis and potential role in rumen	Neelam M. Nathani, Srinivas M. Duggirala, Chandra Shekar M., Ramesh K. Kothari, Chaitanya G. Joshi	<i>Genomics Data</i> ISSN: 2213-5960 2(5):109-111, Year 2015 <a href="http://dx.doi.org/10.1016/j.gdata.2015.05.017">http://dx.doi.org/10.1016/j.gdata.2015.05.017</a> 2213-5960	109	111
12	<i>Bacillus nealsonii</i> AAU1; Anaerobic; Phenotypic Characterization; Genomic Analysis.	Neelam M. Nathania, Srinivas M. Duggirala, M. Chandra Shekara, Ramesh K. Kothari, Chaitanya G. Joshi.	<i>Journal of Genomics Data</i> . 2(5): 109-111 doi:10.1016/j.gdata.2015.05.017. Publisher: Elsevier Year 2015	109	111

13	Bacterial b-glucosidase production.	Ruchita Bhuvu, D. Srinivas Murty, Bhatt Nikhil.	<i>Vidyapith.</i> Vol 1:88-99, Year 2015 ISSN-0976-5794	88	99
14	Field Scale Comparative Study on Application of DAP, Urea and Humic Acid on Soil Flora and Crop Productivity.	Sheth Niraj T., Desai Jigeesha K., Patodiya Mehula M., Bhatt Nikhil S., Duggirala Srinivas M.	<i>Vidyapith.</i> Vol 4:17-31, Year 2015 ISSN-0976-5794	17	31
15	Vermiconversion of Potato Waste By <i>Eisenia foetida</i> and Its application on the growth of <i>Vigna radiate</i> and <i>Trigonella foenumgraecum</i>	Bhumi Patel, Niraj Sheth, Srinivas Murty, Nikhil Bhatt and Rajendra Khimani	<i>Vidyapith.</i> Vol 4:48-64, Year 2015 ISSN-0976-5794	48	64
16	Study on Reactive decolourization by Anaerobic Bacteria	Sheth Niraj T., Bhimani Bhumika M., Bhatt Nikhil S., Duggirala Srinivas M.	<i>Vidyapith.</i> Vol 4:65-81, Year 2015 ISSN-0976-5794	65	81
17	Isolation Structural Characterization and Production of EPS using batch culture by Bacillus Sp. Isolated from soil.	Viral Shukla, Manisha Patel, D Srinivas Murty.	<i>International Journal of Research in Engineering and Applied Science.</i> ISSN: 2248-1862, Year 2015 IJERS Vol 2(3):102-109	2248	1862
18	Genomic analysis of a novel strain of <i>Bacillus nealsonii</i> , isolated from Surti buffalo rumen.	Neelam M. Nathania, Srinivas M. Duggirala, Ramesh K. Kothari, Chaitanya G. Joshi	<i>Advances in Bioscience and Biotechnology.</i> 5: 235-245, , Year 2014 ISSN Online: 2156-8502 Publisher: Hindwai	235	245
19	Remediation of Textile Reactive Dyes Using Anaerobic Rumen Consortium.	D Srinivas Murty, Sheth Niraj, Nikhil S Bhatt, Unnati Vanjani.	<i>International Journal of Recent Scientific Research.</i> Vol. 4(9):1400-1405, , Year 2013 ISSN: 0976-3031	1400	1405
20	Characterization of Bacillus sp. and Protease Production in SSF.	D Srinivas Murty, Patel Himanshu, Koradiya Manoj, Nikhil S. Bhatt.	<i>JSR - International Journal of Scientific Research.</i> Volume : 2(9):22-24, Year 2013 ISSN No 2277-8179	22	24
21	Isolation and Characterization of Bacteria from Dye Wastewater Treating Down Flow Fixed Film Reactor (DFFR).	D Srinivas Murty, Sheth Niraj, Pawar Ashruti, Nikhil S Bhatt.	<i>International Journal of Engineering Research &amp; Technology.</i> 2(10):3270-3280, Year 2013 ISSN: 2278-0181	3270	3280
22	Isolation and Identification of Bacterial Culture for Azo Dye Degrading Capability.	D Srinivas Murty, Patel Suhagi, Soni Rakesh, Nikhil S Bhatt.	<i>International Journal For Research In Chemistry and Environment.</i> 2: 69-79, Year 2012 ISSN: 2248-9649	69	79
23	Antibacterial activity of certain commonly used spices against opportunistic pathogenic bacteria.	D Srinivas Murty, Nikhil S. Bhatt, Nishant S Junnarkar and Divyesh Chauhan.	<i>Bioscience Guardian.</i> 2(1):167-170, Year 2012 ISSN 2277-9493	167	170
24	Biodegradation study on Reactive Blue 222 by bacterial consortium.	Bhatt Nikhil S, Vaghasiya Harsha M and D Srinivas Murty.	<i>Bioscience Guardian.</i> 2(1): 137-150, Year 2012 ISSN 2277-9493	137	150

25	Metagenomic analysis of Surti buffalo ( <i>Bubalus bubalis</i> ) rumen a preliminary study.	Singh K.M., Ahir V.B., Tripathi A.K., Ramani U.V., Sajnani M., Koringa P.G., Jakhesara S., Pandya P.R., Rank D.N., Murty D.S., Kothari R.K., Joshi C.G.	<i>Molecular Biology Reports</i> . 39: 4841–4848, Year 2011 DOI 10.1007/s11033-011-1278-0. ISSN 1573-4978 Publisher: Springer	4841	4848
26	Interrelationship between alkaline phosphatase activity and soil characteristics.	Bhatt Nikhil S, Asma Sherasiya, D Srinivas Murty and Nishant S. Junnarkar.	<i>Bioscience Guardian</i> . 1(2): 473-480, Year 2012 ISSN 2277-9493	473	480
27	Anaerobic treatment of dairy wastewater with laboratory scale up flow fixed film anaerobic reactor.	Bhatt Nikhil S, Acharya D. K, Acharya R. D and D. Srinivas Murty.	<i>Bioscience Guardian</i> . 1(2): 441-448, Year 2012 ISSN 2277-9493	441	448
28	Decolorization of diazo dye Direct Red 81 by a novel bacterial consortium.	Bhatt Nikhil S, Asma Sherasiya, D. Srinivas Murty and Nishant S Junnarkar.	<i>World Journal of Microbiology and Biotechnology</i> . Vol: 6 407-418, Year 2012 ISSN: 0959-3993 DOI: 10.1002/jobm. 200410504 Publisher: Springer	407	418

### Book Chapter

Sl	Year	National/ International	Name of Book and Publisher
1.	2009	National	Chapter: “Anaerobic Digestion and Methanogenesis for Waste Treatment.”  Duggirala S. M., and Dave S. R. Book: <i>Environmental Microbiology</i> (Eds: B. B. Mishra, D.R. Nanda and S. R. Dave)  ISBN: 978-81-313-0655-0 APH Publishing Corporation New Delhi. 2009.

### Presentation in Seminars and Conferences

No	Duration	Subject/National/International	Institute
1	2-3 Feb 2019	XXXIII Gujarat Science Congress  Poster: Cellulase Production by SSF and Its Scale up (S Patel and D Srinivas Murty)	LJ Institute of Applied Sciences Ahmedabad
2	15-16 March 2019	Recent Trends and Emerging Issues in Microbiology and Pharmaceutical Biotechnology  Poster: Optimization of Physicochemical	Department of Microbiology and Biotechnology Gujarat University Ahmedabad

		Parameters for Enhanced Production of Lignolytic Enzymes Using P. Sajor caju in SSF (S Sharma and D Srinivas Murty)	
3	5-8 Oct 2018	India International Science Festival -2018 Poster: In-Vitro Anticancer Activity and Cytotoxicity Study of Some Novel Heterocyclic Compounds of Tetralone Derivatives (B. Gauni and D Srinivas Murty)	Indira Gandhi Pratisthan Lucknow
4	5-8 Oct 2018	India International Science Festival -2018 Poster: Screening of Agro residue Biomass For Ligninase and Hemicellulase Production in SSF	Indira Gandhi Pratisthan Lucknow
5	Dec 8-10 2016	International Conference on Current Trends in Biotechnology ICCB 2016  Poster (Fungal Solid State Fermentation for Cellulase Production and Its Application, S. Patel and S. Murty) p14	School Of Biosciences, VIT University, Vellore.
6	Dec 8-10 2016	International Conference on Current Trends in Biotechnology ICCB 2016 Poster (Isolation and characterization of anaerobic bacteria from camel rumen S. Sharma and S. Murty) p27	School Of Biosciences, VIT University, Vellore.
7	Dec.27-28 2013	International Symposia on 'Integrating Basic and Translational Research in Modern Biology Biology'. Poster (An investigation on Bacterial L-Asparaginase)	Maharaja Sayaji Rao University, Baroda.
8	Nov. 17-20 2013	International Symposium on 'Frontier Discoveries and Innovations in Microbiology and Its Interdisciplinary Relevance" AMI-54. Poster (Importance of Pre-Treatment of Sorghum for Organic Acid Production.)	AMI And Maharshi Dayanand University, Rhotak.
9	Nov. 17-20 2013	International Symposium on 'Frontier Discoveries and Innovations in Microbiology and Its Interdisciplinary Relevance" AMI-54. Poster (Screening and Characterization of Fungi as Potential Biosorbent for Eco-friendly remediation of Silver.)	AMI And Maharshi Dayanand University, Rhotak
10	Nov. 21-23 2012	International Conference on Industrial Biotechnology. Poster (Development of Bio refinery from Sorghum Biomass.)	BRSI Department of Biotech. Punjab University, Patiala
11	Nov. 21-23 2012	International Conference on Industrial Biotechnology. Poster (Effect of heavy metals on decolorization of Reactive Red 35 by	BRSI Dept of Biotech Punjabi University Patiala



		<i>Pseudomonas aeruginosa</i> ARSKS 20.)	
12	28 <sup>th</sup> July 2012	National Seminar on Biosafety	Gujarat University, Shivrath Clinical Research and GSBTM
13	31 <sup>st</sup> March, 2012	National Seminar on “Bioinformatics in High-Throughput Era”: Poster Presentation- A novel organism identified from buffalo rumen using Ion Torrent PGM –a high throughput sequencing platform.	Gujarat Cancer Research Institute Ahmedabad and GSBTM Gandhinagar
14	Nov. 2011	UGC Sponsored National Seminar. Research Advances In Microbial Technology. Poster (Isolation and Characterization of Novel Keratinolytic Bacillus Spp.)	Virani Science College Rajkot.
15	3-6 Nov. 2011	52 <sup>nd</sup> Annual Conference Of AMI. “International Conference on Microbial Biotechnology for Sustainable Development” Poster (Study on Physicochemical Pretreatment of Biomass For Bioethanol Production.)	AMI and Punjab University Chandigarh, India
16	16-25 2011 May (10 Days)	CSIR Sponsored National Worksop: Short Course. “Role of Whole Genome Sequencing In Animal and Plant Biotechnology”	Dept. Of Animal Biotech. Collage Of Vet. Sci. And Animal Husbandry, AAU Anand, Gujarat
17	28 <sup>th</sup> Feb. 2011	UGC Sponsored National Seminar. Research Advances In Microbial Technology Dept. of Microbiology. Isolation and Characterization of Novel Keratinolytic Bacillus Spp.	Virani Science College Rajkot
18	2 <sup>nd</sup> Jan. 2011	National Conference: Current Developments in Microbial Biotechnology. Poster (Comparative Study on amylase and b-glucosidase production from two isolates.)	M.G. Science Institute, Ahmedabad.and GSBTM, Gandhinagar at AMA
19	23-24 Jan. 2010	UGC Sponsored National Seminar: Current Trends In Microbiological Sciences. Characterization and Partial Purification of Keratinase from Bacterial Isolate.	M.G. Science Institute Ahmedabad at AMA
20	23-24 Jan. 2010	UGC Sponsored National Seminar: “Current Trends In Microbiological Sciences”. Poster (Isolation and Characterization of Amylolytic Organisms.)	M.G. Science Institute Ahmedabad at AMA
21	15-18 Dec. 2009	International Conference: Poster Presentation: 3 <sup>rd</sup> Golden Era of Microbiology. 50 <sup>th</sup> Annual Conference AMI.	NCL, Pune

		Poster (Cellulolytic Enzyme Production on Agricultural Biomass by SSF)	
22	6-8 Dec. 2009	International Conference: Environmental Issues in Emerging and advanced Economies: Canada, India. Oral Presentation: Use of Starch Industry Waste for Enzyme Production.	Department of Chemistry, Gujarat University, at AMA Ahmedabad
23	17-20 Dec. 2010	International Conference: Organic Farming	Bhaikkaka Farm: At Sojitra, Anand.
24	2-3 March 2009	Regional Conference: Microbial Technology For Sustainable Environment. Poster (Isolation of Anaerobic Starch and Cellulose Degrading Bacteria from Cattle Rumen.)	Department of Microbiology, Gujarat University, Ahmedabad.
25	2-3 March 2009	Regional Conference: Microbial Technology For Sustainable Environment. Poster (Isolation of an Anaerobic Tannin Degrading Bacteria from Cattle Rumen.)	Department of Microbiology, Gujarat University, Ahmedabad.
26	2-3 March 2009	Regional Conference: Microbial Technology For Sustainable Environment. Oral Presentation "Isolation and Characterization of Keratinolytic Bacteria".	Department of Microbiology, Gujarat University, Ahmedabad.
27	2-3 March 2009	Regional Conference: Microbial Technology For Sustainable Environment. Oral Presentation "Isolation and study of Ferrous Oxidation by Two Bacterial Isolates"	Department of Microbiology, Gujarat University, Ahmedabad.
28	2-3 March 2009	Regional Conference: Microbial Technology For Sustainable Environment. Oral Presentation "Hydrolytic Enzyme Production On Agricultural Biomass by SSF"	Department of Microbiology, Gujarat University, Ahmedabad.
29	17-25 May 2007	Wokshop: 2 <sup>nd</sup> Multi Institutional Teacher's Training Program in Molecular Biology & 14Bioinformatics	GSBTM, DFS, AAU Govt. of Gujarat. Gandhinagar
30	4 <sup>th</sup> March 2006	National Symposium on Contemporary Development in Life Sciences. Oral Presentation "Tolerance of Heavy Metals by <i>Thiobacillus feroxidance</i> "	Department of Microbiology, North Gujarat University, Patan
31	4 <sup>th</sup> March 2006	National Symposium on Contemporary Development in Life Sciences. Oral Presentation "A study on EPS production by Bacterial Isolates".	Department of Microbiology, North Gujarat University, Patan
32	4 <sup>th</sup> March 2006	National Symposium on Contemporary Development in Life Sciences. Oral Presentation "Deflouridization of	North Gujarat University, Patan

		drinking water”.	
33	4 <sup>th</sup> March 2006	National Symposium on Contemporary Development in Life Sciences. Oral Presentation “Bioremediation of Duck weeds”.	North Gujarat University, Patan
34	22-23 Jan. 2005	Regional Symposium on Microbial Technology. Oral Presentation “Anaerobic Treatment of Dairy waste”.	Department of Microbiology: Gujarat University, Ahmedabad
35	29 Nov.- 11 Dec. 2004	National Workshop: Methods in Molecular Biology	Department of Biosciences. S.P. University, Vallabh Vidyanagar, Anand.
36	22 Nov.-18 Dec 2004	National Workshop: Perspective in Biological Research- UGC-DSA sponsored winter school.	Department of Biosciences. S.P. University, Vallabh Vidyanagar, Anand.
37	1-2 March 2003	National Symposium on Microbial Diversity on Sustainable development: Oral Presentation “Anaerobic treatment of dairy waste.”	Department of Microbiology, Gujarat University, Ahmedabad

### **Research Projects**

No	Approved In Year	Allotting Agency	Major/Minor/ Student Investigator/ Co-investigator	Title	Amount	Status
1	1 <sup>st</sup> Feb. 2011	GUJCOST	Student Project (Pi)	Metabolic Characterization of Anaerobic Bacteria.	16000/	Completed
2	1 <sup>st</sup> Feb. 2011	GUJ-COST	Student Project (Pi)	Isolation and Metabolic Characterization of SRB from Mangrove Ecosystem.	19000/	Completed
3	2011	GSBTM	Major (Pi)	Degradation of Tannary waste and Phenolic Compounds by Novel Anaerobic Tannin Degrading Bacterial Isolate in Pure and Mixed Culture.	14.4 Lakhs	Completed

4	2011	ICAR	Major (Multi-institutional) (Co-Pi)	Niche Area of Excellence, "Metagenomic Analysis of Ruminant Microbes".	258.0 Lakhs	Completed
5	2014	GSBTM	Major (Multi-institutional) (Co-Pi)	Exploring Bioremediation Strategies For Treatment of Chromophore Linked Contaminated Waste Water Using Sequential Anaerobic-Microaerophilic Reactors.	18.81 Lakhs	Completed
6	2014	GUJ-COST	Major (Co-Pi)	Enzymatic Deconstruction of Agro. Residues for Biofermentation and Biofuel Production.	7.00 Lakhs	Completed
7	2015	DBT	Major (Multi-institutional) (Pi)	Bio prospecting of Crop Residues By SSF To Enhance Nutrient Utilization and Feed Efficiency in Ruminants.	83.86 Lakhs	Completed March - 2018
8	2019	GSBTM	Major (Multi-institutional) (Pi-Coordinator)	An Integrated Process to Enhance the Biological Treatment Efficiency and Improve the Quality of Effluent Discharge from Paper and Pulp Industry	66.01 Lakhs	On Going
9	2019	GSBTM	Major (Multi-institutional) (Co-Pi)	Valorization of Vegetable and Food Market Waste By Bioconversion	53.04 Lakhs	On Going

## Patents

Sl. No	Title	Status
1	<b>Invention:</b> Laboratory scale biphasic anaerobic packed bed reactor for treating High BOD containing waste water. Application Number 2220/MUM/2013 Date: 01/07/2013.	Granted
2	<b>Invention:</b> Microbiological growth medium containing mushroom extract. Application no. is 508/MUM/2015 Date: 18/02/2015.	Pending

## Lectures Delivered (National/ Local level Programmes)

No	Date	Organizer	Conference/ Seminar/Workshop	Title of Lecture Delivered
1	18-11-11	AAU- GSBTM	Invited Lecture in National Seminar. “Changing Roles of Bio informaticians in NGS Era”.	“Challenges and Solutions in Metagenomic Analysis of NGS Data”.
2	23-2-12	AAU- ICAR 15-24 Feb 2012	Short course on "Recent Advances in Crop Residue Based Total Mixed Rations for Improving Animal Productivity" 10 Day National Workshop	“Solid State Fermentation Technology- Process and Applications.”
3	4-3-12	Gujarat University GSBTM	Invited Lecture in National Seminar. “Bioinformatics in Microbial Diversity”.	“Metagenomic Approach to Study Microbial Diversity and Interactions”
4.	1-3 Feb 2018	Junagadh Agricultural University	Lead Paper XVII Biennial Conference of Animal Nutrition Society of India Nutritional Challenges For Raising Animal Productivity To Improve Farm Economy	Solid state fermentation of crop residues and its use in livestock ration  Dr. D. Srinivas Murty , Dr. P. R. Pandya, Dr. B. R. Devalia, Shruti Patel
5	15/9/2018	Shree Ramkrishna Institute of Computer Education and Applied	Expert Lecture Coordinately organized by Environment Science and Biotechnology Department	Anaerobic Technology and Reactor Designs for Waste Water Treatment

		Science, M.T.B. College campus, Athwalines, Surat.		
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***Dissertation work carried out by the Post graduate (M. Sc.)  
Students***

<b>Sl. No</b>	<b>Name of Student</b>	<b>Title of Thesis</b>
<b>2000-01</b>		
<b>1</b>	Gaurang C. Patel	Isolation and Identification of Hydrocarbon degrading organisms (Aliphatic).
<b>2</b>	Shailesh R. Patel	Biodegradation of dairy waste water.
<b>3</b>	Hitendra K. Patel	Microbial diversity of sugarcane crops.
<b>4</b>	Viral Y. Shukla	Isolation and Identification of Hydrocarbon degrading organisms (Chlorocarbons).
<b>5</b>	Vishal D. Shah	To study cultivation of mushroom using various raw materials to decrease the preliminary growth period of mushroom by changing the nitrogen source.
<b>2001-02</b>		
<b>6</b>	Amankumar R. Thakur	A survey on Individual Biogas Plant of Gandhinagar district.
<b>7</b>	Ashish H. Dave	Drinking water analysis of Gandhinagar district.
<b>8</b>	Apurava S. Joshi	Drinking water analysis of Gandhinagar district.
<b>9</b>	Kaushal R. Trivedi	A Survey on health and sanitary condition in Gandhinagar district.
<b>10</b>	Manish K. Patel	A Survey of water and food quality in Gandhinagar district.
<b>2002-03</b>		
<b>11</b>	Kamal R. Patel	Isolation and identification of pathogenic microorganisms from Currency Coins.
<b>12</b>	Meghna M. Vyas	Biocide testing for saccharolytic microorganisms

		isolated from sugarcane and sugar syrup.
13	Sarswati D. Patel	Drinking water analysis of Dehgam taluka.

<b>2003-04</b>		
14	Jigneshkumar Y. Raval	Biosorption of Metals.
15	Jigneshkumar V. Vyas	Co- digestion of cow dung, poultry manure and leaf litter.
16	Neeta M. Chaudhari	Bioleaching of ore.
<b>2004-05</b>		
17	Manoj V. Koradiya	Optimization of iron oxidizing bacteria in laboratory scale air lift reactor and bioleaching of ore.
18	Jyoti H. Bhavsar	Anaerobic treatment of distillery waste water by biphasic reactor.
19	Neha J. Kaneriya	Biomethanation of duckweeds.
20	Jatin G. Patel	Defluoridation of drinking water.
<b>2005-06</b>		
21	Amit V. Prajapati	Biomethanation of night soil.
22	Akashkumar	Bioleaching studies using <i>Thiobacillus ferrooxidans</i> .
23	Chetan A. Patel	Anaerobic digestion of dairy waste water (butter waste) by biphasic reactor.
24	Pooja H. Shah	Biomethanation of duck weeds.
25	Sinkandarkhan U. Bihari	Defluoridation of drinking water.
26	Hetal D. Dave	A study on EPS production by bacterial isolates.
<b>2006-07</b>		
27	Dhavalkumar B. Patel	Biooxidation studies of metal sulfides by using <i>Thiobacillus. Sp.</i>
28	Nilam R. Patel	Optimization of nutrient concentration for EPS production.
29	Madura A. Joshi	Desulphurization of biogas.
<b>2007-08</b>		
30	Amitkumar M. Patel	Optimization of growth medium of an EPS producing bacterial isolate.
31	Prateek H. Kharecha	Solid state fermentation for protease production.
32	Manisha R. Prajapati	Improvement in physical, chemical and microbial characteristics of soil.
33	Mona G. Patel	Purification of biogas.
<b>2008-09</b>		
34	Urjit K. Gor	Isolation of anaerobic cellulose and starch degrading bacteria from cattle rumen.
35	Devang N. Upadyay	A study on ferrous bio-oxidation by two bacterial isolates.
36	Nirav A. Parmar	Characterization of phosphate solubilizing bacterial isolate.

37	Neha R. Shah	A study on effect of pre-treatment of wheat straw on biogas production.
38	Parul V Gondaliya	Characterization of an EPS producing isolate.
39	Rahulkumar R. Maurya	Isolation of anaerobic tannin degrading bacteria from cattle rumen.
40	Himansu K. Patel	Characterization of a protease producing bacterial isolate.
<b>2009-10</b>		
41	Ankita J. Acharya	Isolation and characterization of sulfate reducing and tannin degrading rumen bacteria.
42	Dipaliben J. Parmar	Characterization of amylase producing bacterial isolates.
43	Pragna V. Katba	Isolation and characterization of hydrolytic rumen bacteria.
<b>2010-11</b>		
44	Unnati N. Vanjani	Decolorization of reactive dyes (RV 12, RR 152, RB 250).
45	Chhayaben R. Chaudhari	A comparative study of amylase and b-glucosidase production of two bacterial isolates.
46	Jigar J. Prajapati	Isolation and characterization of reactive dye decolorizing suspended bacterial flora from down flow fixed film bioreactor.
47	Jignesh P. Makwana	A study on antimicrobial activity of <i>Camellia sinensis</i> extract.
48	Himanshu Parmar	A study on antimicrobial activity of purified Curcumin.
49	Mehula M. Patodiya	A study on effect of humic acid on plant growth and soil character.
<b>2011-12</b>		
50	Heena Doliya	Alcohol Fermentations.
51	Jigisha Desai	A field study on effect of humic acid application on soil flora and crop productivity.
52	Ashruti Pawar	Isolation and characterization of bacteria from down flow fixed film reactor.
53	Bhumi Patel	Physico-chemical and enzymatic saccharification of wood chips.
54	Krutika Raval	Isolation and characterization of anaerobic sulfate reducing bacteria.
55	Zankhana Makwana	Bio prospecting of fungi.
56	Mintu Chaudhari	Isolation and bio prospecting of lignocellulolytic fungi.
57	Hetal Kanzariya	Isolation and characterization of anaerobic isolates.
<b>2012-13</b>		
58	Akta N Poshiya	A laboratory scale study on degradation of plant



		phenolics by anaerobic rumen isolates.
<b>59</b>	Neelam R. Prajapati	Isolation and characterization of tannin protein complex degrading micro-organisms from tannery waste.
<b>60</b>	Rajeshwari Jadeja	A study on treatment of tannery waste by two stage lab scale reactor.
<b>61</b>	Bhavesh M. Chaudhary	A study on physiological characterization of potent tannin degrading isolates from rumen fluid sample.
<b>2013-14</b>		
<b>62</b>	Preeti Mahala	Characterization of protease producing isolates.
<b>63</b>	Jitendra Gowswami	Characterization of multi-enzyme producing anaerobic isolate.
<b>2014-15</b>		
<b>64</b>	Shradhdha Sharma	Isolation and characterization of starch degrading anaerobic microbes from camel rumen.
<b>65</b>	Sadhna Panelia	Isolation and characterization of cellulose degrading anaerobic microbes from camel rumen.

***Research work carried out by the Master of Philosophy (M. Phil.)***

<b>Sr. No.</b>	<b>Year</b>	<b>Name of the Student</b>	<b>Title of the thesis</b>
1	2004-05	Gopal D. Soni (As Co-Guide )	Biomethanation and Biodegradation of distillery (Spent Wash) wastewater by Fixed Film Anaerobic Bioreactor.
2	2005-06	Rakesh K.Soni.	Fate of Enteropathogens during Anaerobic Digestion.
3	2006-07	Akash Kumar Yadav	Influence of pesticides on physico-chemical and microbiological properties of soil and anaerobic digester.
4	2007-08	Nilam R. Patel	Optimization of nutrient and process parameters for EPS production of a bacterial isolate.
5	2008-09	Khusali A. Shah	Isolation and characterization of keratinolytic bacterial isolates.
6	2014-15	Shrusti Patel	Cellulase Production by anaerobic rumen isolates.

***Research work carried out by the (Ph.D.) Students***

<b>Sr.No.</b>	<b>Year</b>	<b>Name of the Student</b>	<b>Title of the thesis</b>
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1	2013	Manoj V. Koradiya (As Co-Guide )	Bioconversion of agricultural biomass and production of value added products.
2	2014	Ahsruti Pawar Ongoing	Application of Biostimulation and Biocontrol to Improve Onion Productivity
3	2015	Shradhdha Sharma Ongoing	Improving Digestibility of Lignocellulosics through Fungal SSF from Agrobiomass Used for Cattle Feed
4	2015	Srushti Patel Ongoing	Study on Amylase and Cellulase Production by SSF of Agro waste by Fungi and its Applications
5	2016	Bhagwati M Gauni Ongoing	Antibacterial and Anticancer Study of Novel Small Molecule Library

### ***Ph.D., Evaluation***

1. Evaluated four M.Phil. Thesis and three Ph.D. Thesis.

### ***Examiner ship***

1. Involved in departmental examinations i.e., M.Sc. M.Phil., and Ph.D. as a paper setter, evaluator and moderator.
2. External Examiner in Gujarat University, Sardar Patel University, Saurashtra University, North Gujarat University, Veer Narmad South Gujarat University in practical examinations and theory paper setting.

### ***Committee Member***

1. Ex-Committee member in Gujarat Vidyapith Trust (2009-10),
2. Ex-Executive committee member in Gujarat Vidyapith (2009-10),
3. Core committee Member of NAAC committee of Gujarat Vidyapith (2015-16)
4. Presently a member in Academic Council of Gujarat Vidyapith.
5. Presently a member in Administrative Council of Gujarat Vidyapith.
6. Presently having responsibility as Coordinator of IQAC of Gujarat Vidyapith.

### ***Administrative Work***

1. Conducting UG, PG, M. Phil and Ph.D. Examinations,
2. Admission counseling,
3. Administrative work pertaining to laboratory,
4. Administrative work pertaining to ongoing research projects.
5. Head of Microbiology department and Dean Faculty of Science and Applied Science Since April 2019.

### ***Membership in Professional and other Bodies***

1. Member in Biotech Research Society of India
2. Member of Gujarat Science Academy.

### ***Board of Studies***

1. Member of Academic Council in Gujarat Vidyapith,
2. Member of Planning and Monitoring Board for Higher Education and Research in Gujarat Vidyapith
3. RDC Committee Member in Veer Narmad South Gujarat University.

### ***Participation in extra-curricular activities***

<b>Sr. No.</b>	<b>Name of Event</b>	<b>Place</b>	<b>Year/Duration</b>
1	NSS-Camps	Sadra Jakhora Madhav Ghadh Shertha Aniyod	1994 1995 2011 2014 2016
2	NSS PO Training 7/7/2015 to 14/4/2015	Gujarat Vidyapith Sadra	2015
3	Gujarat Vidyapith-Sevak Shibir	Dethali	2004

4	Research Methodology Shibir	Gujarat Vidyapith- Ahmedabad	2005
5	NSS-flood relief camp	Dethli	2003
6	Educational tour	Gujarat, Maharashtra, Madhyapradesh	1997; 2008; 2014
7	Gram Jeevan Padyatra	Participated eight times	Since 2008-2014
9	Udyog Activity: Composting and Innoculum Preparation.	Sadra	2012-2015
10	Gandhi Katha: Duty allotted by Vidyapith and our department.	Sadra	2012
11	Sports Activity: Department of Microbiology	In Campus and During Annual Sports Day	Since 1995
12	Participation in all activities organized by the department and Gujarat Vidyapith.		Since 1993

### ***Extension Activities***

- As a Part of NSS activity i have been actively involved in popularization of Biogas technology and Non-conventional Energy in rural areas and had sensitized students towards rural issues.
- Through padyatra, we had been involved in creating awareness among rural people, school children's and farmers about health and sanitation, organic farming and drinking water issues.
- Through NSS Programme, participated in organizing health check up's and blood donation camps.