Curriculum vitae

Personal details

Name	Dr. M.V.R.K Sarma	**DOB:** 23-08-1981
Designation	Senior Scientist	
Address	Microbiology and Fermentation Technology Department Central Food Technological Research Institute (CSIR-CFTRI) Mysuru 570 020	
E-mail	sarma.mutturi@gmail.com; smutturi@cftri.res.in	
Mobile	+91-9481953524	
Google Scholar	https://scholar.google.com/citations?user=v-KxTHoAAAAJ&hl=en	
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Education

Degree	Year	Institution	Field/Subject(s)
B.E (Hons.)	2003	Birla Institute of Technology & Science, Pilani	Chemical Engineering
M.E	2005	Birla Institute of Technology & Science, Pilani	Biotechnology
Ph.D.	2011	Indian Institute of Technology, Delhi	Biochemical Engg. & Biotechnology

Professional Experience

Period	Duration	Company/Institute and Role
Apr 2011- May 2011	1 Month	Research Scientist, Reliance Industries Ltd. Ghansoli, Mumbai
Jun 2011- Sep 2013	2 Years 4 M	Postdoctoral researcher, Kemiteknik, Lund University, Sweden
May 2014 – May 2018	4 Years	Scientist, CSIR-CFTRI
May 2018 – till date	-	Senior Scientist, CSIR-CFTRI
Apr 2018- Apr 2019	1 Year	JICA-KIRIN Fellow, NFRI, NARO, Tsukuba, Japan (Deputation)

Expertise

Bioprocess Engineering, Modeling & Optimization, Metabolic Engineering

Research Experience

Duration	Brief details
2014 – till date	• Engineering of *Saccharomyces cerevisiae* for synthesis of terpenes • Development of process for Isomaltoologosaccharide synthesis using heterologous host • Constraint-based reconstruction and analysis (COBRA) for strain design • Simultaneous saccharification and fermentation of pretreated rice straw for chitinase synthesis • Machine learning tools for food analysis
2011-2014 (Post-doc)	• Development of novel process regimes for simultaneous saccharification and fermentation of lignocellulosic substrates. *Key research area: Process development* • Investigation of temperature effects on the metabolism of *Saccharomyces cerevisiae* using flux balance analysis. *Key research area: Physiology of yeast in anaerobic cultivations*
2006-2011 (Ph.D.)	• Developed MATLAB- based genetic algorithm tool to optimize nutritional requirements for • enhanced production of siderophore (iron-chelator) and biomass production using fluorescent • pseudomonad R81. • Developed data acquisition and control system for Infors bioreactor, to integrate pH, temperature and DO sensors, peristaltic pumps, agitator, heater, and control valves. Serial communication is developed in LABVIEW along with historian and control programs.

	• Developed LabVIEW- based automated feeding strategies in fed-batch cultivation for enhanced production of an antifungal polyketide using fluorescent pseudomonad R81. • Enumerated efficacy of bio-inoculant formulations of pseudomonad R81 for agronomical purposes.
2009	**Scientific Trainee (July-Oct), Institute of Botany, University of Basel, Switzerland.** Underwent four-month scientific training program with financial support received from the Department of Biotechnology, Government of India, and the Swiss Agency for Development and Cooperation, Government of Switzerland, for the bio-fertilizer network project under the aegis of Indo-Swiss Collaboration in Biotechnology at University of Basel, Switzerland. Research Area: **Molecular Biology and Biostatistics.**
2003-2005 (M.E)	Cloning and over-expression of His-tag exopolyphosphatase in *E. coli* and purification using in-house developed immobilized metal affinity chromatography column. Developed MATLAB®- based simulation code for dynamic analysis of immobilized enzyme reactor for starch hydrolysis. (Chemical Engg. Deptt., CSIR-Indian Institute of Chemical Technology, Hyderabad, India)

Teaching Experience

Duration	Details	Student Level
2014 – till date (Theory & Practical)	Industrial Microbiology Food Biotechnology and Bioengineering Microbial Fermentations Food Engineering, Modeling & Simulation	M.Sc AcSIR (Ph. D course work)
2011-2014	Systems Biology (Theory and Practical)	M.S
2006-2011 (As TA)	Fermentation Technology, Bioprocess Design, Bioprocess Calculations, Mass Transfer Operations, Biostatistics, and Enzyme Engineering and Technology	B.Tech

Projects

Project No	Title	Funding Agency	Role	Duration	Cost (INR)
GAP 577	Metabolic engineering of *Saccharomyces cerevisiae* for production of linalool, a food grade flavoring compound	SERB, DST, India	PI	Feb 2020 – Feb 2023	49 Lakhs
MLP 281	Production of isomaltooligosaccharides (lMO) using indigenous transglucosidase from primary and secondary starch sources	CFTRI	PI	Apr 2020 –Mar 2022	40 Lakhs
YSS/2014/000565	Metabolic engineering of *Saccharomyces cerevisiae* for overproduction of squalene	SERB, DST, India	PI	Dec 2015 – Dec 2018	14.9 Lakhs
GAP 555	Thermotolerant *Streptomyces* sp. for chitinase production using rice straw	KIRIN Holdings Co. and JICA, Japan	PI	Jul 2019 – Jun 2020	8.0 Lakhs
GAP 521	Quantitative modeling of regulatory processes associated with bacterial stress response	DBT, India	Co-PI	Aug 2017 – Jul 2020	40 Lakhs
MLP 267	Development of aptamer for recombinant SARS-CoV-2 Spike Glycoprotein-S1	CFTRI	Co-PI	Aug 2020 – Dec 2020	25 Lakhs
MLP 164	Analysis of genome- scale model of Saccharomyces cerevisiae towards production of food-grade terpenes	CFTRI	PI	Sep 2014 – Mar 2017	14.0 Lakhs

MLP 195	Non-alcoholic vegelactic beverage(s) - 'Laβev'	CFTRI	Co-PI	Aug 2016 – Mar 2017	10 Lakhs
MLP 225	Microbes and their metabolites for food and health	CFTRI	Co-PI	Aug 2017 – Mar 2019	15.0 Lakhs

Publications

1. Rani Amsaraj, **Sarma Mutturi**, 2020. Real-coded GA coupled to PLS for rapid detection and quantification of tartrazine in tea using FT-IR spectroscopy. LWT- Food Science and Technology. Accepted https://doi.org/10.1016/j.lwt.2020.110583

2. Sandeep Kumar, **Sarma Mutturi**, 2020. Expression of a novel α-glucosidase from *Aspergillus neoniger* in *Pichia pastoris* and its efficient recovery for synthesis of isomaltooligosaccharides. Enzyme and Microbial Technology 141 (2020) 109653. DOI: https://doi.org/10.1016/j.enzmictec.2020.109653

3. Sandeep Kumar, Anindya Basu, Anu Appaiah KA, Gnanesh Kumar BS, **Sarma Mutturi**, 2020. Identification and characterization of novel transglycosylating α-glucosidase from *Aspergillus neoniger*, 129, 1644--1656. DOI: https://doi.org/10.1111/jam.14757

4. Sandeep Kumar, Aruna Mannil, **Sarma Mutturi**, 2020. Modified chemical method for efficient transformation and diagnosis in *Pichia pastoris*, Protein Expression and Purification, 170, 105685. DOI: https://doi.org/10.1016/j.pep.2020.105685

5. **Sarma Mutturi**, Masakazu Ike, Kenji Yamagishi, Ken Tokuyasu, 2020. Isolation, characterization, and application of thermotolerant Streptomyces sp. K5 for efficient conversion of cellobiose to chitinase using pulse-feeding strategy, Process Biochemistry. 94, 58-65. DOI: https://doi.org/10.1016/j.procbio.2020.04.009

6. Kalaivani Paramasivan, Punil Kumar HN, **Sarma Mutturi***, 2019. Systems-based *Saccharomyces cerevisiae* strain design for improved squalene synthesis, Biochemical Engineering Journal. 148, 37-45. DOI: https://doi.org/10.1016/j.bej.2019.04.025

7. Paramasivan K, Rajagopal K, **Mutturi S**. (2019). Studies on squalene biosynthesis and the standardization of its extraction methodology from *Saccharomyces cerevisiae*. Appl. Biochem. Biotechnol. 187 (3):691–707. DOI: http://dx.doi.org/10.1007/s12010-018-2845-9

8. **Mutturi S**. (2018). Dynamic optimization of fed-batch bioprocesses using flower pollination algorithm. Bioprocess Biosyst Eng. 41(11):1679-1696 DOI: http://dx.doi.org/10.1007/s00449-018-1992-2

9. Angelina Stanley, Punil Kumar HN, **Sarma Mutturi***, Vijayendra SVN*, 2017. Fed-batch strategies for production of PHA using a native isolate of *Halomonas venusta* KT832796 strain, Applied Biochemistry and Biotechnology, 184(3):935-952 DOI: http://dx.doi.org/10.1007/s12010-017-2601-6

10. Kalaivani Paramasivana and **Sarma Mutturi***, 2017. Regeneration of NADPH Coupled with HMG-CoA Reductase Activity Increases Squalene Synthesis in *Saccharomyces cerevisiae*, Journal of Agricultural and Food Chemistry 65 (37), 8162–8170. http://dx.doi.org/10.1021/acs.jafc.7b02945

11. Shwetha Nanjundaiah, **Sarma Mutturi***, Praveena Bhatt*, 2017. Modeling of caffeine degradation kinetics during cultivation of *Fusarium solani* using sucrose as co-substrate, Biochemical Engineering Journal, 125 (15), 73-80. https://doi.org/10.1016/j.bej.2017.05.018

12. **Sarma Mutturi***, 2017. FOCuS: a metaheuristic algorithm for computing knockouts from genome-scale models for strain optimization, Molecular Biosystems, 13 (7), 1355-1363, DOI: http://dx.doi.org/10.1039/C7MB00204A

13. Kalaivani Paramasivana and Sarma Mutturi*, 2017. Progress in terpene synthesis strategies through engineering of *Saccharomyces cerevisiae*, Critical Reviews in Biotechnology, 37:8, 978-989, DOI: https://doi.org/10.1080/07388551.2017.1299679

14. Anindya Basu**, Sarma Mutturi***, Siddalingaiya Gurudutt Prapulla, 2016. Production of isomaltooligosaccharides (IMO) using simultaneous saccharification and transglucosylation from starch and sustainable sources. Process Bicohemistry. 51, 11, 1464-1471.
http://dx.doi.org/10.1016/j.procbio.2016.06.008

15. Anindya Basu, **Sarma Mutturi**, Siddalingaiya Gurudutt Prapulla, 2015. Modeling of enzymatic production of isomaltooligosaccharides: a mechanistic approach. Catalysis Science & Technology. 5, 2945-2958. doi**:** 10.1039/C5CY00003C

16. **Sarma Mutturi**, Gunnar Lidén, 2014. Model-based estimation of optimal temperature profile during simultaneous saccharification and fermentation of *Arundo donax. Biotechnology and Bioengineering*, 111, 866–875. doi: 10.1002/bit.25165 (Highlight: First report to implement dynamic temperature control for a real lignocellulose conversion to ethanol during SSF)

17. Mekonnen Demeke, Heiko Dietz, Yingying Li, María R. Foulquié-Moreno, **Sarma Mutturi**, Sylvie Deprez, Tom Den Abt, Beatriz M. Bonini, Gunnar Lidén, Françoise Dumortier, Alex Verplaetse, Eckhard Boles and Johan M. Thevelein, 2013, 'Development of a D-xylose fermenting and inhibitor tolerant industrial yeast strain with high performance in lignocellulose hydrolysates using metabolic and evolutionary engineering'. *Biotechnology for Biofuels*, **6**:89. doi:10.1186/1754-6834-6-89 (Highlight: Evolutionary and metabolically engineered yeast improves xylose fermentation)

18. **Sarma Mutturi**, Gunnar Lidén, 2013. Effect of temperature on simultaneous saccharification and fermentation of pretreated spruce and arundo. *Industrial Engineering & Chemistry Research* 52, 1244−1251. doi: 10.1021/ie302851w (Highlight: Non-Isothermal SSF of Arundo improved ethanol yields)

19. **M.V.R.K. Sarma**, K. Saharan, A. Prakash, V.S. Bisaria and V. Sahai, 2009. Application of fluorescent pseudomonas inoculant formulation on *Vigna mungo* through field trial, *Int. J. Biol. Life Sci.* 1, 25–28.www.waset.org/journals/ijbls/v5/v5-1-5.pdf

20. V. Kumar*, **M.V.R.K. Sarma***, K. Saharan, R. Srivastava, L. Kumar, V. Sahai, V.S. Bisaria, A.K. Sharma, 2012. Effect of formulated root endophytic fungus *Piriformospora indica* and plant growth promoting rhizobacteria fluorescent pseudomonads R62 and R81 on *Vigna mungo. World Journal of Microbiology and Biotechnology*. 28, 595-603 (*Joint-First-Authorship). doi: 10.1007/s11274-011-0852-x

21. K. Saharan, **M.V.R.K Sarma**, N. Mathimaran, V.S. Bisaria, V.Sahai, A. Dominguez, A. Wiemken, T. Boller, 2010. Plant growth promoting pseudomonad produce elicitors which induce ethylene in host plants. *Journal of biotechnology*, 50, supplement 1, 538. doi:10.1016/j.jbiotec.2010.09.883

22. Krishna Saharan*, **M.V.R.K Sarma***, Rashmi Srivastava, A.K. Sharma, B.N. Johri, A. Prakash, Vikram Sahai, V.S. Bisaria, 2010. Development of non-sterile inorganic carrier-based formulations of fluorescent pseudomonad R62 and R81 and evaluation of their efficacy on agricultural crops. *Applied Soil Ecology*, 46, 251-258. (*Joint-First-Authorship). https://doi.org/10.1016/j.apsoil.2010.08.004

23. Krishna Saharan*, **M.V.R.K Sarma***, A. Prakash, B.N. Johri, Vikram Sahai and V.S. Bisaria, 2011. Shelf-life enhancement of bio-inoculant formulation by optimizing the trace ions in the culture medium for production of DAPG using fluorescent pseudomonad R62, *Enzyme and Microbial Technology*, 48, 33-38. (*Joint-First-Authorship). doi:10.1016/j.enzmictec.2010.09.002

24. **M.V.R.K Sarma,** G Ashwani, L Kumar, K Saharan, A Kapoor, N Shrivastava, V Sahai, V.S. Bisaria. 2013. Bioprocess strategies for mass multiplication of and metabolite synthesis by plant growth promoting pseudomonads for agronomical applications, *Process Biochemistry*. 48 (9), 1418-1424. doi: 10.1016/j.procbio.2013.04.017

25. **M.V.R.K Sarma**, V Kumar, K Saharan , R. Srivastava, A.K. Sharma, A. Prakash, V. Sahai, V.S. Bisaria, 2011. Application of inorganic carrier-based formulations of fluorescent pseudomonads and *Piriformospora indica* on tomato plants and evaluation of their efficacy. *Journal of Applied Microbiology*, 111, 456–66. doi: 10.1111/j.1365-2672.2011.05062.x

26. **M.V.R.K Sarma**, Vikram Sahai, V. S. Bisaria, 2009. Genetic algorithm based medium optimization for enhanced production of fluorescent pseudomonad R81 and siderophore, *Biochemical Engineering Journal*, 47, 100-108. doi: 10.1016/j.bej.2009.07.010

Book Chapters

1. **Sarma Mutturi**, Benny Palmqvist, Gunnar Lidén. Development in bioethanol fuel- focused biorefineries, In: Advances in Biorefineries: Biomass and Waste Supply Chain Exploitation, Ed. Keith W Waldron. *Woodhead Publishing, Cambridge*, UK, pp: 259.

2. **Sarma Mutturi**, Anindya Basu, 2016. Modeling and Theoretical Analysis of Isomaltooligosaccharide (IMO) Production Using Fed-Batch Process, B.D. Prasanna et al. (eds.), Biotechnology and Biochemical Engineering, Springer SBM Singapore Private Ltd 2016. DOI 10.1007/978-981-10-1920-3_8

3. **Sarma Mutturi**, Vikram Sahai, Shilp Sharma, and V.S. Bisaria, 2016. Strategies for High-Density Cultivation of Bio-inoculants in Submerged Culture with Special Reference to Pseudomonads, D. P. Singh, H. B. Singh, Prabha Ratna (Eds.), Microbial Inoculants in Sustainable Agricultural Productivity, Vol. 1: Research Perspective, Pages:181-196, Springer, India, DOI 10.1007/978-81-322-2647-5_10.

4. **Sarma Mutturi**, Vikram Sahai, V.S. Bisaria, 2017. Fed-Batch Cultivation for High Density Culture of Pseudomonas Spp. for Bioinoculant Preparation, A. Varma, A.K Sharma (Eds.), Modern Tools and Techniques to Understand Microbes, Pages: 381-400, Springer International Publishing, DOI: 10.1007/978-3-319-49197-4_24

5. **Sarma Mutturi**, V.S. Bisaria, 2018. Bacterial Biofertilizers: High Density Cultivation, Ho Nam Chang (Ed.), Emerging Areas in Bioengineering, Pages: 429-439, Wiley-VCH Verlag GmbH & Co. KGaA

6. Sandeep Kumar, Praveena Bhatt, **Sarma Mutturi,** 2020. Biotechnology: A tool for synthesis of novel bioactive compounds, In: Functional and Preservative Properties of Phytochemicals, Ed. Bhanu Prakash. Academic Press, Elsevier Inc. London, UK, pp: 269-315

Invited Lectures/Symposia/Conferences

1. Sarma Mutturi (2020) Production of phytochemicals in microbial cell factories: A way forward, Keynote lecture during "International conference on plant microbe interaction and its implications in agriculture (Nov. 16th -18th, 2020" organized by Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela.

2. Kalaivani Paramasivan* and Sarma Mutturi (2018) *In-silico* target Based Strain Engineering of *Saccharomyces cerevisiae* for Terpene Improvement. Metabolic Engineering 12, Systems Metabolic Engineering for Superior Bio-Production, June 24-28, 2018, Munich, Germany (* Presenter)

3. Delivered guest lecture titled "Strain Engineering Strategies for Bioprocess" at Vellore Institute of Technology (VIT), Vellore – 632014, Tamil Nadu, India (February 23rd , 2018)

4. Delivered two lectures titled (i) Structured Modeling (and beyond) for understanding Industrial Fermentation (ii) Strain improvement Strategies at Department of Biotechnology, NMAM Institute of Technology (Nitte)- 574110, Karkala, Udupi district, Karnataka as part of VGST- sponsored faculty development programme (February 9th, 2018)

5. Delivered a talk on "Systems Approach in Biology" at Mar Athanasios College For Advanced Studies (MACFAST) Tiruvalla, Kerala, India-689 101 (November 24th, 2017)

6. Kalaivani Paramasivan*, Krutika Srivastava and Sarma Mutturi (2016) Estimation of theoretical yields and in-silico model based cofactor manipulations for terpene synthesis in *Saccharomyces cerevisiae*, Oral Presentation, 85th Annual meeting SBC (India), CSIR-CFTRI, Mysore (* Presenter)

7. Anindya Basu*, Sarma Mutturi, S.G.Prapulla (2016) Production of prebiotic isomaltooligosaccharides from starch and sustainable starch rich sources. 2016, Ausbiotech, Melbourne, Australia, during 24-26 Oct 2016 (* Presenter)

8. Sarma Mutturi, Anindya Basu, 2016. Modeling and Theoretical Analysis of Isomaltooligosaccharide (IMO) Production Using Fed-Batch Process, ICACE, NIT-Suratkal, December 2015. (*Presenter*)

9. Bioethanol from lignocellulosic bio-feedstocks. Lecture, Sahyog Summer School, Athens, Greece, June 9-16, 2013. (*Invited lecture*)

10. Heat effects on metabolism of *Saccharomyces cerevisiae*. Cell factories and Biosustainability, Copenhagen Bioscience Conferences, May 5-8, 2013. (*Presenter*)

11. Culture Strategies for High Cell Density Cultivation of a Pseudomonad Bioinoculant for Increased Wheat Productivity. World Biotechnology Congress, June 3-6, 2013, Boston, USA. *(Non-presenter)*

12. Lignocellulosic- based ethanol: New Challenges for an old "work-horse" International Congress on Yeast (USA, 2012). (*Non-presenter*)

13. COBRA 2012 – 2nd International Conference on Constraint-based Reconstruction and Analysis, Helsingør, Denmark, October 2012. (*Attendee*)

14. Long-term adaptation of an industrial *Saccharomyces cerevisiae* strain: combining lignocellulosic-derived inhibitors robustness and thermotolerance, Italy 2012. (*Non-presenter*)

15. Plant growth promoting rhizobacterial strains enhance the nutrients in various crops, Indo Swiss Collaboration in Biotechnology Symposium, New Delhi (10-11 March 2011). (*Non-presenter*)

16. Mass scale multiplication and application of fluorescent pseudomonad R62 as a biofertilizer and biocontrol agent" at International Conference on Microorganisms in Environmental Management and Biotechnology, Barkatullah University, Bhopal 2011 (1-3 July 2011). (*Non-presenter*)

17. Bioprocess Strategies for Mass Multiplication of and Metabolite Synthesis by Plant Growth Promoting Pseudomonads for Agronomical Applications, *Asian Congress on Biotechnology* (ACB 2011), *Shanghai, China, May 11-15, 2011*. (*Non-presenter*)

18. Process optimization for enhanced production of cell biomass and metabolites of fluorescent pseudomonad R81. *World Academy of Science, Engineering and Technology (WASET 2010), Tokyo, Japan, May 26-28, 2010*. (*Non-presenter*)

19. Development of Non-sterile Inorganic Carrier-based Formulations of Fluorescent Pseudomonad for Agronomical Applications. *KSBB Fall Meeting and International Symposia, 2010, Songdo Convensia, South Korea, Oct 7-10.* (*Non-presenter*)

20. Cell growth and metabolites produced by fluorescent pseudomonad R62 in modified chemically defined medium. *World Academy of Science Engineering and Technology (WASET 2010), Bali, Indonesia July 14-16, 2010.* (*Non-presenter*)

21. Inorganic carrier based formulations of fluorescent pseudomonads R62 and R81 and evaluation of their efficacy. *International Conference on Food Security and Environmental Sustainability (FSES 2009) IIT Kharagpur, December 17-29, 2009*. (*Presenter*)

22. Plant growth-promoting pseudomonads produce elicitors that induce ethylene production in host plants. *Plant microbe interactions 2009, Zurich-Basel, Switzerland.* (*Non-presenter*)

23. Medium optimization for production of siderophore from fluorescent pseudomonad using genetic algorithm. *CHEMCON- 2008, Chandigarh, December 27-30, 2008*. (*Presenter*)

Thesis (B. Tech/ M.Tech./M.Sc.) Supervision

Sl.No	Name	Affiliation	Year	Title of Thesis
1.	Ms. Sarah Hintermeyer	(Erasmus Mundus- Master's project) Lund University, Sweden	July 2012	Metabolism of mannose in spruce hydrolysates by *Sacchoromyces cerevisiae*
2.	Mr. Carl Wiklund	Lund University, Sweden	Dec 2012	Temperature effects in *Sacchoromyces cerevisiae* using metabolic flux analysis
3.	Ms. Nivishna Jerald	Karunya University, Coimbatore	Dec 2014	Studies on the production of squalene from *Saccharomyces cerevisiae*
4.	Ms. Krutika Shrivastava	Dept. of Bioscience and Biotechnology, Banasthali University, Banasthali	June 2015	Understanding of *Saccharomyces cerevisiae* cellular network for harnessing terpene compounds

5.	Ms. B Rabina Sharma	Dept. of Food and Biotechnology, Jayoti Vidhyapeeth Women's University, Jaipur	August 2015	Understanding of transport process, sugar consumption and growth of *Saccharomyces cerevisiae*
6.	Ms. R Kavya	Dept. of Biotechnology, University of Madras, Chennai	Jan 2016	Metabolite analysis of sterol pathway in *Saccharomyces cerevisiae*
7.	Ms. Wairok Tomuishang Makunga	Dept. of Food Technology, Central Agricultural University, Imphal	Feb 2016	Studies on vegetable based fermented non-alcoholic beverage
8.	Mr. Bhupender Kumar	Pandit Deendayal Upadhyaya Shekhawati University	Aug 2016	Sustainable Production of *Lactobacillus spp.* for Industrial Purposes
9.	Ms. Subhalaxmi Rath	Deptt. of Botany, Utkal University, Bhubaneshwar, Odisha	Jan 2017	Isolation and screening of epsilon poly lysine producers
10.	Ms. Chanchala Kumari	Deptt. of Applied Microbiology, MITS School of Biotechnology, Utkal University, Odisha	Feb 2017	Studies on molasses-based fermentation for production of S. cerevisiae
11.	Ms. Sirisha Bonela	Deptt. of Applied Microbiology, MITS School of Biotechnology, Utkal University, Odisha	Feb 2017	Understanding of yeast molecular techniques
12.	Mr. Ankit Sharma	Dr. B. Lal institutes of Biotechnology, Jaipur	Dec 2017	Optimization of Microbial Production of Ɛ-PL Using Native Isolate
13	Ms. Apoorva Raman	St. Joseph's College, Bangalore	April 2018	Production and Characterization of an Antimicrobial Compound for Food Applications
14	Ms. Aruna Mannil	PSG College of arts and science, Coimbatore	June 2018	Studies on the expression of recombinant proteins in *Pichia pastoris*
15	Ms. Rabina Basista Sharma	Lovely Professional University, Jalandhar, Punjab	Aug 2018	Studies on the production of Baker's yeast
16	Mr. Indrajeet Ambegaonkar	D.Y Patil School of Biotechnology and Bioinformatics	April 2019	Studies on the production of a recombinant protein using *Pichia pastoris* platform
17	Mr. Pratik Vijay Pasi	D.Y Patil School of Biotechnology and Bioinformatics	May 2020	Studies on the production of chitinase using rice straw from *Streptomyces* sp.
18	Mr. Dhruv Nilesh Mistry	School of Arts and Sciences, Ahmedabad University	June 2020	In-silico studies on alpha-glucosidase for improving transglycosylation activity
19	Mr. Mohankumar N	Sri Krishna Arts and Science College, Coimbatore	June 2020	Cultivation of evolutionary engineered *Saccharomyces cerevisiae* strain for squalene production in a reactor
20	Ms. Forum Kalpesh Bhansali	K.J. Somaiya College of Science and Commerce, Mumbai	June 2020	Studies on alpha and beta glucosidase production from *Aspergillus* isolate for food applications

Ph. D Supervision

Sl. No	Student	Fellowship	Date of Joining	Status
1	Kalaivani P (RF0645)	JRF-DBT	2nd February 2015	Awarded
2	Sandeep Kumar (RF0722)	JRF (UGC-RGNF)	10th August 2015	Thesis submitted
3	Rani A (RF0930)	ICMR-SRF	29th November 2018	Ongoing
4	Trisha Tissopi (RF0878)	JRF(UGC-NFST)	19th August 2019	Ongoing
5	Aneesha A (RF1023)	JRF-NET(UGC)	13th January 2020	Ongoing

Prizes and awards

- SERB Young scientist start-up grant award
- JICA-KIRIN Fellowship 2018-2019, NFRI, Tsukuba, Japan
- FITT award for Best Industry Relevant Ph.D Thesis (Cash prize).
- Fellowship (2006-2010) received from IIT Delhi for doctoral studies.
- Certificates of distinction for state Math, Physics and Chemistry during X and XII standards.
- Received P.G. Honorarium during Master's studies at BITS-Pilani.
- Top 2% during Master's studies at BITS-Pilani.

Membership of Professional Societies

1. Society of Biological chemists (India) (Life Member)
2. Indian Science Congress Association (Life Member: L33063)
3. AFSTI (Life Member)

Dr. Ken Tokuyasu (**Association: Adviser during JICA-KIRIN Fellowship**)
Unit Leader, Bioresource Conversion Unit
Division of Food Biotechnology, Food Research Institute
National Agriculture and Food Research (NARO)
2-1-12 Kanondai, Tsukuba 305-8642, Japan
✉: tokuyasu@affrc.go.jp

Prof. Gunnar Lidén (Association: Adviser during post-doctoral studies)
Department of Chemical Engineering
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221 00 Lund, Sweden; Phone: +46 46 2220862
✉ : Gunnar.Liden@chemeng.lth.se

Prof. V.S. Bisaria (Association: Adviser during doctoral studies)
Professor (Rtd.)
Department of Biochemical Engineering and Biotechnology, and
Former Dean, Ind'l Research and Development (IRD)
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Phone: +91 11 2659 1002 & 2659 1001 Fax: +91 11 2658 2282
✉ : vsbisaria@hotmail.com, vbisaria@dbeb.iitd.ac.in
webpage: http://web.iitd.ac.in/~vsbisaria/

Dr. Vikram Sahai (Association: Co-adviser during doctoral studies)
Chief Scientific Officer (Rtd.)

Department of Biochemical Engineering and Biotechnology
Indian Institute of Technology, Delhi
Hauz Khas, New Delhi – 110016
✉: vikramsahai@hotmail.com,

Note: Kindly note that my complete name is **Sarma** (first name) **Venkata Ravi Krishna** (middle name) **Mutturi** (last name). In official records (including 10th marks sheet) it is stated as M.V.R.K Sarma. In certain research publications the name is mentioned as '**Sarma Mutturi**' and it should be assumed to be the alias of same person

[M.V.R.K Sarma]