

Curriculum vitae of Prof. P. Sankar Ganesh

Name : Prof. P. Sankar Ganesh

Date of birth/ Age : 20.07.1975/ 48Y

Nationality : Indian

Gender/ Marital status : Male/ Married

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Education :

<i>Degree/ Fellowship</i>	<i>Date of completion</i>	<i>Institution and University</i>
Post-Doctoral Fellowship (Specialization: Bioprocess Engineering)	November, 2008	Laboratoire D'Ingenierie Des Systemes Biologiques et Des Procedes, Institut National des Sciences Appliquées (INSA) de Toulouse, France
PhD Environmental Science & Engineering (Specialization: Bioprocess Engineering)	April, 2008	Centre for Pollution Control & Energy Technology, Pondicherry University, India
PhD thesis title: Some applications of bioprocess engineering in solid waste management		
MPhil Environmental Science & Engineering (Specialization: Anaerobic Digestion)	November, 1999	Centre for Pollution Control & Energy Technology, Pondicherry University, India
MPhil thesis title: Application of anaerobic fermentation technology for the treatment of liquid and solid biowastes		
MSc Zoology (Specialization: Fishery Biology and Aquaculture)	June, 1998	KM Centre for PG Studies, Pondicherry University, India
BSc Zoology (Specialization: Pest Management)	June, 1996	Tagore Arts College, Pondicherry University, India

Professional Experience :

(Starting from present position)

<i>Position</i>	<i>Dates (from-to)</i>	<i>Location</i>	<i>Organisation</i>
Professor: Department of Biological Sciences	1 st March 2023 – till date	Hyderabad, INDIA	BITS Pilani, Hyderabad Campus
Coordinator: Global Sanitation Graduate school			
<ul style="list-style-type: none"> – Handling courses in General Biology, Ecology & Environmental Science, Environmental Studies, Environmental Biotechnology, Bioconversion Technology, Gene Toxicology, Pollution Control, and Solid Waste Management for Bachelor, Master, and Ph.D. level engineering, technology, and science students. – To undertake quality research in bioprocess engineering, focusing on solid waste & wastewater treatment and the ecotoxicology of nanoparticles. – Guiding Ph.D., Postgraduate, and Undergraduate theses. 			
Associate Professor: Department of Biological Sciences	14 th June, 2016 – 28 th Feb 2023	Hyderabad, INDIA	BITS Pilani, Hyderabad Campus
Assistant Professor: Department of Biological Sciences	5 th June, 2009 – 14 th June, 2016	Hyderabad, INDIA	BITS Pilani, Hyderabad Campus
Senior Consultant: Environmental Management – Swiss Red Cross, Switzerland	5 th Nov, 2008 – 4 th Jun, 2009	Pondicherry, INDIA	INTACH Pondicherry Chapter, India
– To develop and implement suitable systems for safe handling of solid and liquid wastes in Tsunami affected coastal villages at Karaikal & Nagapattinam districts, India			
Post-doctoral Research Fellow: Embassy of France in India	6 th May, 2008 – 3 rd Nov, 2008	Toulouse, FRANCE	Laboratoire d'Ingénierie des Systèmes Biologiques et Procédés, INSA -Toulouse
– Optimisation of the production of bioplastic precursors, polyhydroxyalkanoates (PHAs) from municipal sludge by sequencing batch reactor system under dynamic conditions.			
Senior Research Fellow: Council of Scientific & Industrial Research (CSIR)	April, 2006 – May, 2008	Pondicherry, INDIA	Centre for Pollution Control and Energy Technology, Pondicherry University
<ul style="list-style-type: none"> – R & D activities on bioprocessing and management of waste. – Handling theory and practical courses for MSc, MPhil and MTech students. 			
Project Associate: Waste management	October, 2002 – Jan 2004	Tirupur, INDIA	Centre for Environment Education, Ministry of Env't. & Forests, Govt. of India.
<ul style="list-style-type: none"> – Solid waste management in Tirupur. – Environmental education in Tamil Nadu and Pondicherry. 			
Lecturer: Environmental Studies	June, 2000 – September, 2001	Abu Dhabi, UAE	Mountain State University, EDUSCAN
<ul style="list-style-type: none"> – Teaching environmental studies at the distance education centre of Mountain State University. – Other responsibilities are to supervise student theses, conduct training, undertake field research, educate the common public on various environmental issues, etc. 			

Courses Taught at BITS Pilani:

(Discipline courses)

BIO F110: Biology Laboratory

BIO C111 & BIO F111: General Biology

BIO C322: Ecology

BIO C342: General Physiology

BIO C411: Laboratory

BIO F216: Water, Sanitation and Solid Waste Management

BIO F217: Laboratory for Water, Sanitation and Solid Waste Management

BIO F241: Ecology and Environmental Science

BIO F266: Study-Oriented Project

BIO F366: Laboratory-Oriented Project

BIO F376: Design-Oriented Project

BIO F411: Laboratory

BIO G523: Advanced and Applied Microbiology

BIO G525: Environmental Biotechnology and Waste Management

BIO G661: Gene Toxicology

BIO G671: Bioconversion Technology

MPH G510: Biostatistics and Computers in Public Health

SAN G512: Sanitation and Public Health

SSTM ZG523: Biological Treatment Principles and Design for Wastewater Systems

(Other courses)

BITS C213: Introduction to Environmental Studies

BITS C313: Lab-Oriented Project

BITS C323 & BITS C324: Study Oriented Project

BITS F221: Practice School-I

BITS F412: Practice School-II

BITS F413: Practice School-II

BITS F225: Environmental Studies

BITS G513: Study in Advanced Topics

BITS G540: Research Practice

BITS G629: Dissertation

TA C211: Measurement Techniques I

Theses/ Projects Supervised:

- MSc Biological Sciences: 56
- ME Biotechnology: 43
- PhD: Completed/ Submitted: 2
Ongoing: 5

Research Interest:

- Anaerobic digestion
- Wastewater treatment
- Nano (eco) toxicology
- Composting
- Vermicomposting
- PHA production
- Termigradation
- Solid waste management

Projects Undertaken/ Partaken:

([§]Principal Investigator)

1. Industrial-scale Thermophilic Biomethanation of Food Waste and Sewage Sludge for Production of Bioenergy and Biofertilizer[§]
(Department of Biotechnology, Government of India, March, 2023).
2. Waste-to-Energy: Technology Integration for Production of Clean Energy from Organic Waste, (Promotion of University Research and Scientific Excellence (PURSE))[§]
(Department of Science and Technology, Government of India, March, 2022).
3. Feasibility Studies to Assess the Use of Spent Grains as Feedstock for Biomethanation[§]
(GPS Renewables, Bangalore, India, January, 2022).
4. Technology Integration for the Production of Clean Energy from Organic Waste (Biomethanation, Catalytic Conversion, Photocatalysis and Fuel Cell) [§]
(BITS Pilani, Hyderabad Campus, February, 2021).
5. Maintenance of Sanitation and Solid Waste Management for Swachh Andhra Pradesh[§]
(Municipal Administration & Urban Development, Government of Andhra Pradesh, Oct 2016).
6. Co-treatment of domestic septage and municipal solid waste landfill leachate using dry-thermophilic anaerobic digestion for the production of bioenergy and biofertilizer[§]
(Biotechnology Industry Research Assistance Council, BIRAC, July 2016).
7. Anaerobic co-digestion of food waste and organic fraction of municipal solid waste for the production of biogas and concomitant use of biogas as fuel for cooking and spent slurry as fertilizer[§]
(Centre of Research Excellence in Waste, Water & Energy, BITS Pilani, 2014-2107).
8. Novel biomarker responses to validate acute toxicity of engineered nanoparticles and their physicochemical interactions in earthworms as a model bioindicator of nano(eco)toxicology[§]
(Department of Biotechnology, Government of India, 2013-2017)
9. Studies on the characterization of engineered nanoparticles (ENPs) and their toxicological and biochemical effects on *Eisenia foetida* earthworms[§]
(BITS Pilani, 2011 – 2013)
10. Improvement of the existing systems for disposal of municipal solid waste in Tsunami affected coastal villages at Karaikal & Nagapattinam districts, Tamil Nadu, India[§]
(Swiss Red Cross, 2009 – 2010)
11. To develop design criteria for high-rate vermicomposting systems based on experimentation, mathematical modelling, and optimization.
(Senior Research Fellow, Department of Biotechnology, Government of India, 2005 – 2008).
12. Pro-Poor Public Private Partnership for Pondicherry Urban Environment, PURE.
(Consultant, ADEME, France, 2006 – 2007).

13. Asia Pro Eco Programme.
(Consultant, European Commission, 2006).
14. Asia Urbs Programme.
(Consultant, European Commission, 2004 – 2005).
15. Ward Adoption Programme
(Project Associate, CEE Tirupur Field Office, 2002 – 2003).

Publications: (Book)

1. Circular Economy in Municipal Solid Waste Landfilling: Biomining & Leachate Treatment, Pankaj Pathak and **Sankar Ganesh Palani**, Springer Nature, 2022.
2. Assessment of Titanium dioxide Nanoparticle Toxicity in Earthworms
Ecotoxicity of Titanium dioxide nanoparticles
Ashwini Sri Hari, Siva Prasad Bitragunta, **Sankar Ganesh Palani**
ISBN: 978-3-659-55283-0, Lambert Academic Publishing, 2014.

Publications: (Book Chapters)

1. A comparative assessment of techno-commercial feasibility of yielding biogas from the co-digestion of organic municipal solid waste and slaughterhouse waste, Atun Roy Choudhury, **P. Sankar Ganesh**, Prasenjit Mondal, Saikat Dutta, T. S. Sasi Jyothsna, Anaya Ghosh, Debkumar Chakraborty, Nagati Amulya, In: Microbial Degradation and Detoxification of Pollutants, DeGruyter (Accepted) 2022.
2. An overview of physicochemical and biological treatment of landfill leachate, MD Tanvir Hasnine., N Anand., Ali Zoungrana., **P. Sankar Ganesh.**, Qiuyan Yuan, In: “Circular Economy in Municipal Solid Waste Landfilling: Biomining & Leachate Treatment”. Springer Nature, 2022. https://doi.org/10.1007/978-3-031-07785-2_6
3. Anaerobic co-digestion of landfill leachate with other feedstocks, N. Anand, **P. Sankar Ganesh**, Pankaj Pathak, B. Siva Prasad, In: “Circular Economy in Municipal Solid Waste Landfilling: Biomining & Leachate Treatment”. Springer Nature, 2022. https://doi.org/10.1007/978-3-031-07785-2_8
4. Valorization of solid waste from landfill activities, M.S.S.R Tejaswini, Pankaj Pathak, **P. Sankar Ganesh**, In: “Circular Economy in Municipal Solid Waste Landfilling: Biomining & Leachate Treatment”. Springer Nature, 2022. https://doi.org/10.1007/978-3-031-07785-2_10
5. Biomined and Fresh Municipal Solid Waste as Sources of Refuse Derived Fuel, Atun Roy Choudhury, Lakshmi Prasad Boyina, D. Laxman Kumar, Neha Singh, **P. Sankar Ganesh**, Mohammad Mehdizadeh, M.V. Praveen Kumar, A. Leelavathi, B. Koteswara Rao, S.U. Abitha Begum, Kayibanda Patrick, In: “Circular Economy in Municipal Solid Waste Landfilling: Biomining & Leachate Treatment”. Springer Nature, 2022. https://doi.org/10.1007/978-3-031-07785-2_11
6. Toxicological Evaluation of TiO₂ Engineered Nanoparticles in Soil Invertebrates: A Cue for Revisiting Standard Toxicity Testing for Nanomaterials, B. Siva Prasad, J. Usha Rani and **P. Sankar Ganesh**, In: Shanker, U., Hussain, C.M., Rani, M. (eds) Handbook of Green and Sustainable Nanotechnology. Springer, Cham. 2022, ISBN: 978-3-030-69023-6, https://doi.org/10.1007/978-3-030-69023-6_62-1.
7. Role of Microplastics as Attachment Media for the Growth of Microorganisms, Megha Ukil, Srinjoy Roy, Atun Roy Choudhury, **P. Sankar Ganesh**, In: Sillanpää, M., Khadir, A., Muthu, S.S. (eds) Microplastics Pollution in Aquatic Media. Environmental Footprints and Eco-design of Products and Processes. Springer, Singapore. https://doi.org/10.1007/978-981-16-8440-1_14

8. Plant and bacteria mediated green synthesis of silver nanoparticles, Kalyani Sakhare, Kaval Reddy Prasasvi, **Sankar Ganesh Palani**, In Micro and Nano Technologies, Editor(s): Uma Shanker, Chaudhery Mustansar Hussain, Manviri Rani, Green Functionalized Nanomaterials for Environmental Applications, Elsevier, 2022, Pages 155-178, ISBN 9780128231371, <https://doi.org/10.1016/B978-0-12-823137-1.00006-3>.
9. Conversion of biogas generated from anaerobic digestion of food waste to electricity using internal combustion engine and fuel cell, N. Anand, Ankur Bhattacharjee, K. Supradeepan, Satyapaul A. Singh, Chanchal Chakraborty, **P. Sankar Ganesh**, In: Bio-Clean Energy Technologies, Volume 2, Springer, 2022. https://doi.org/10.1007/978-981-16-8094-6_4.
10. Anaerobic co-digestion of landfill leachate and sewage sludge: role of substrate ratio, Anand. N., Srinjoy Roy, **Sankar Ganesh. P.**, In: Biomethane through resource circularity: Research, Technology and Practices, ISBN: 9781032069005, Routledge, Taylor & Francis Group, 2022. <https://doi.org/10.1201/9781003204435>.
11. Characterization of Engineered Nanoparticles: New Developments, B. Siva Prasad, P. Sankar Ganesh, J. Usha Rani, In: Cutting Edge, Spinco Biotech, Vol 11, Issue 1, May 2021.
12. An introduction to salt stress perception and toxicity level -Worldwide report at a glance, Atun Roy Choudhury, Neha Singh, Ayushi Gupta, **P Sankar Ganesh**, In: Physiology of Salt stress in Plants: Perception, Signalling, Omics and Tolerance Mechanism, ISBN: 978-1-119-70049-4, Wiley, 2021.
13. Effect of inoculation on anaerobic digestion of food waste, Anand. N., Chinnumole. V.V., **Sankar Ganesh. P.**, In: Bioresource Utilization and Bioprocess, ISBN: 9789811516078, Springer, 2020. https://doi.org/10.1007/978-981-15-1607-8_3.
14. Recent advances in toxicology of gold nanoparticles, Siva Prasad Bitragunta, Aarathi Menon Sankar, **Sankar Ganesh Palani**, In: Handbook of Environmental Materials Management, ISBN: 9783319585383, Springer, 2018. https://doi.org/10.1007/978-3-319-58538-3_59-1.
15. Thermophilic biomethanation of food waste for production of biogas and concomitant use of biogas as fuel supplement for cooking, Debkumar Chakraborty, **P. Sankar Ganesh**, P. C. Suryawanshi, B. G. Prakash Kumar, S. Ramachandran, In: Bioprocess Engineering for a Green Environment, ISBN: 9781138035973, Routledge, Taylor & Francis, 2018. <https://doi.org/10.1201/b22021>.
16. Current Developments in Mass Production of Microalgae for Industrial Applications, S. Ramachandran, **P. Sankar Ganesh**, V. Sivasubramanian, B. G. Prakash Kumar, In: Environmental Sustainability Using Green Technologies, ISBN: 9781498753050, CRC Press, Taylor & Francis, 2016. <https://doi.org/10.1201/9781315364339>.
17. Should we say NO to NaNO? Preliminary study to corroborate occurrence of nanoparticles in treated wastewater samples?, B. Siva Prasad, Ashwini Sri Hari, **P. Sankar Ganesh**, In: Small Experiments in Sustainability, ISBN: 8190293116, Trans-Knowledge Book Company, 2015.

Selected Publications: (In peer-reviewed journals)

1. Choudhury, Atun Roy, Neha Singh, Arutchelvan Veeraraghavan, Ayushi Gupta, **Sankar Ganesh Palani**, Mohammad Mehdizadeh, Anahita Omid, and Duraid K. A. Al-Taey. 2023. "Ascertaining and Optimizing the Water Footprint and Sludge Management Practice in Steel Industries" *Water* 15, no. 12: 2177. <https://doi.org/10.3390/w15122177>.
2. Yash Pujara, Janki Govani, Harshit T. Patel, Pankaj Pathak, Deepak Mashru, **P. Sankar Ganesh**, Quantification of environmental impacts associated with municipal solid waste management in Rajkot city, India using Life Cycle Assessment, *Environmental Advances*, Volume 12, 2023, 100364, ISSN 2666-7657, <https://doi.org/10.1016/j.envadv.2023.100364>.

3. Debkumar Chakraborty, **Sankar Ganesh Palani**, Makarand M. Ghangrekar & Jonathan W.C. Wong (2023), Reactive extraction of lactic and acetic acids from leached bed reactor leachate and process optimization by response surface methodology, *Environmental Technology*, <https://doi.org/10.1080/09593330.2023.2186272>.
4. Chandhini Muthukumar, Swastik Nagrikar, Derrick A. Rodrigues, Ramachandran Subramanian, **Sankar Ganesh Palani**, Murchana Changmai, B.G. Prakash Kumar, A spherical fountain prototype photoreactor operated under natural sunlight: Mechanism, toxicology assessment, and economics, *Journal of Water Process Engineering*, Volume 51, 2023, 103467, ISSN 2214-7144, <https://doi.org/10.1016/j.jwpe.2022.103467>.
5. Debkumar Chakraborty, Sulogna Chatterjee, Avanthi Althuri, **Sankar Ganesh Palani**, S. Venkata Mohan, Sustainable enzymatic treatment of organic waste in a framework of circular economy, *Bioresource Technology*, Volume 370, 2023, 128487, ISSN 0960-8524, <https://doi.org/10.1016/j.biortech.2022.128487>.
6. Debkumar Chakraborty, **Sankar Ganesh Palani**, M. M. Ghangrekar, N. Anand, Pankaj Pathak, Dual role of grass clippings as buffering agent and biomass during anaerobic co-digestion with food waste. *Clean Technologies and Environmental Policy* (2022). <https://doi.org/10.1007/s10098-022-02355-5>.
7. Rishita Bonu, N. Anand, **Sankar Ganesh Palani**, Impact of thermal pre-treatment on anaerobic co-digestion of sewage sludge and landfill leachate, *Materials Today: Proceedings*, 2022, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.06.130>.
8. N. Anand, **Sankar Ganesh Palani**, A comprehensive investigation of toxicity and pollution potential of municipal solid waste landfill leachate, *Science of The Total Environment*, 2022, 155891, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2022.155891>.
9. M.S.S.R. Tejaswini, Pankaj Pathak, Seeram Ramkrishna, **P. Sankar Ganesh**, A comprehensive review on integrative approach for sustainable management of plastic waste and its associated externalities, *Science of The Total Environment*, Volume 825, 2022, 153973, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2022.153973>.
10. Debkumar Chakraborty, Obulisamy Parthiba Karthikeyan, Ammaiappan Selvam, **Sankar Ganesh Palani**, Makarand M. Ghangrekar, Jonathan W.C. Wong, Two-phase anaerobic digestion of food waste: Effect of semi-continuous feeding on acidogenesis and methane production, *Bioresource Technology*, Volume 346, 2022, 126396, <https://doi.org/10.1016/j.biortech.2021.126396>.
11. Vaishnavi Koyilath Nandakumar, **Sankar Ganesh Palani**, Murari Raja Raja Varma; Interactions between microplastics and unit processes of wastewater treatment plants: a critical review. *Water Science and Technology*, 1 January 2022, 85 (1): 496-514, wst2021502. doi: <https://doi.org/10.2166/wst.2021.502>
12. Abrha Mulu Hailu, **Sankar Ganesh Palani**, Seyoum Leta Asfaw, Tenalem Ayenew Tegaye, Insight into microbial community diversity and composition of two-stage anaerobic digestion: Focusing methanogenic stage, *Bioresource Technology Reports*, Volume 15, 2021, 100764, ISSN 2589-014X, <https://doi.org/10.1016/j.biteb.2021.100764>
13. D. Nath, P. Sai Kiran, P. Rewatkar, B. Krishnamurthy, **P. Sankar Ganesh** and S. Goel, "Escherichia Coli Fed Paper-Based Microfluidic Microbial Fuel Cell With MWCNT Composed Bucky Paper Bioelectrodes," in *IEEE Transactions on NanoBioscience*, vol. 18, no. 3, pp. 510-515, July 2019, doi:10.1109/TNB.2019.2919930.
14. B. Siva Prasad, **P. Sankar Ganesh**, K. Lagan, T. Vishaka, S.S. Vutukuru, S.K. Sarkar, Evaluation of antioxidant enzyme responses in earthworms exposed to polystyrene nanoparticles and PAMAN dendrimers, *Pollution Research*, Vol 36(2), 312-318, EM International, 2017.

15. Dibyendu Rakshit, Kadarkarai Murugan, Jayanta Kumar Biswas, Kamala Kanta Satpathy, **P. Sankar Ganesh**, Santosh Kumar Sarkar, Environmental impact on diversity and distribution of tintinnid (Ciliata: Protozoa) along Hooghly Estuary, India: A multivariate approach, *Regional Studies in Marine Science*, Volume 12, 2017, Pages 1-10, ISSN 2352-4855, <https://doi.org/10.1016/j.rsma.2017.02.007>
16. Siva Prasad Bitragunta, **Sankar Ganesh Palani**, Anil Gopala, Santosh Kumar Sarkar, Venugopal Reddy Kandukuri. Detection of TiO₂ Nanoparticles in Municipal Sewage Treatment Plant and Their Characterization Using Single Particle ICP-MS. *Bull Environ Contam Toxicol* 98, 595–600 (2017). <https://doi.org/10.1007/s00128-017-2031-8>
17. Dibyendu Rakshit, Santosh K. Sarkar, Kamala K. Satpathy, **Palani Sankar Ganesh**, Nallamuthu Godhantaraman, Jayanta K. Biswas, (2016), Diversity and Distribution of Microzooplankton Tintinnid (Ciliata: Protozoa) in the Core Region of Indian Sundarban Wetland. *Clean Soil Air Water*, 44: 1278-1286. <https://doi.org/10.1002/clen.201500781>
18. B. Siva Prasad and **P. Sankar Ganesh**, Nanowaste and environment: Current understanding and Way Forward, *Society for Materials Chemistry Bulletin*, Vol 7 (1), 15-20, 2016.
19. Dibyendu Rakshit, **P. Sankar Ganesh**, Santosh Kumar Sarkar, Choreotrich ciliate tintinnid (Protozoa: Ciliophora) in a tropical meso–macrotidal estuary, eastern part of India, *Regional Studies in Marine Science*, Volume 3, 2016, Pages 89-100, <https://doi.org/10.1016/j.rsma.2015.06.003>.
20. Ranju Chowdhury, Paulo J.C. Favas, J. Pratas, M. P. Jonathan, **P. Sankar Ganesh**, Santosh Kumar Sarkar, Accumulation of Trace Metals by Mangrove Plants in Indian Sundarban Wetland: Prospects for Phytoremediation, *International Journal of Phytoremediation*, 2015, 17:9, 885-894, DOI: 10.1080/15226514.2014.981244
21. Mohandass. D, Puyravaud. JP, Hughes. AG, Davidar. P, **Ganesh. PS**, Campbell. M, Edge transition impacts on swamp plant communities in the Nilgiri mountains, Southern India, *Applied Ecology and Environmental Research*, Alok, 2014, 12(4): 909-929, DOI: 10.15666/aeer/1204_909929
22. CH. Surekha, NRR Neelapu, B. Siva Prasad, **P. Sankar Ganesh**, Induction of defense enzymes and phenolic content by *Trichoderma viride* in *Vigna mungo* infested with *Fusarium oxysporium* and *Alternaria alternate*, *International Journal of Agricultural Science and Research*, Transtellar, 2014, Vol 4 (4), 31-40.
23. CH. Surekha, NRR Neelapu, G. Kamala, B. Siva Prasad, **P. Sankar Ganesh**, Efficacy of *Trichoderma viride* to induce disease resistance and antioxidant responses in legume *Vigna mungo* infested by *Fusarium oxysporium* and *Alternaria alternate*, *International Journal of Agricultural Science and Research*, Transtellar, 2013, Vol 3 (2), 285-294.
24. **P. Sankar Ganesh**, S. Gajalakshmi, S.A. Abbasi, Vermicomposting of the leaf litter of acacia (*Acacia auriculiformis*): Possible roles of reactor geometry, polyphenols, and lignin, *Bioresource Technology*, Volume 100, Issue 5, 2009, Pages 1819-1827, <https://doi.org/10.1016/j.biortech.2008.09.051>
25. **P. Sankar Ganesh**, R. Sanjeevi, S. Gajalakshmi, E.V. Ramasamy, S.A. Abbasi, Recovery of methane-rich gas from solid-feed anaerobic digestion of ipomoea (*Ipomoea carnea*), *Bioresource Technology*, Volume 99, Issue 4, 2008, Pages 812-818, <https://doi.org/10.1016/j.biortech.2007.01.024>.
26. **P. Sankar Ganesh**, E.V. Ramasamy, S. Gajalakshmi, R. Sanjeevi, S.A. Abbasi, Studies on treatment of low-strength effluents by UASB reactor and its application to dairy industry wash waters, *Indian Journal of Biotechnology*, NISCAIR, 2007, (6) 234-238.
27. S. Gajalakshmi, T. Abbasi, **P. Sankar Ganesh**, S.A. Abbasi, Rapid treatment of shampoo industry waste to significantly reduce capital and operational costs, *Journal of the Institution of Public Health Engineers*, IPHE, 2007, (4) 25-27.

28. S. Gajalakshmi, **P. Sankar Ganesh**, S.A. Abbasi, Bioprocessing and resource recovery of solid waste by low-income citizens, Indian Journal of Chemical Technology, NISCAIR, 2006, (13) 24-29.
29. **P. Sankar Ganesh**, E.V. Ramasamy, S. Gajalakshmi, S.A. Abbasi, Extraction of volatile fatty acids (VFAs) from water hyacinth using inexpensive contraptions, and the use of the VFAs as feed supplement in conventional biogas digesters with concomitant final disposal of water hyacinth as vermicompost, Biochemical Engineering Journal, Volume 27, Issue 1, 2005, Pages 17-23, <https://doi.org/10.1016/j.bej.2005.06.010>.
30. S. Gajalakshmi, **P. Sankar Ganesh**, S.A. Abbasi, A highly cost-effective simplification in the design of fast-paced vermireactors based on epigeic earthworms, Biochemical Engineering Journal, Volume 22, Issue 2, 2005, Pages 111-116, <https://doi.org/10.1016/j.bej.2004.09.003>.

Selected Publications: (In conference proceedings)

1. Biocontrol of antimicrobial resistance in MBBR treating domestic sewage, International Conference on Climate Change, Sustainable Development & Smart Agriculture (ICSSA-2023), Chhattisgarh, April, 2023.
2. Who is the culprit for directly inhibiting closed landfill leachate biological treatment: Carbon or nitrogen? National Conference on "Sustainable Technologies in Chemical-Biological Systems" (STCBS), Tiruvannamalai, April 2023.
3. Mathematical modelling of simultaneous nitrification and denitrification in bioreactor systems, National Conference on "Sustainable Technologies in Chemical-Biological Systems" (STCBS), Tiruvannamalai, April 2023.
4. Deciphering microplastics-induced impacts on biomethanation of sewage sludge, National Conference on "Sustainable Technologies in Chemical-Biological Systems" (STCBS), Tiruvannamalai, April 2023.
5. Inhibition mechanisms of microplastics on anaerobic digestion of waste-activated sludge, National Conference on "Sustainable Technologies in Chemical-Biological Systems" (STCBS), Tiruvannamalai, April 2023.
6. Increased energy recovery from food waste biomethanation co-digested with poultry waste, National Conference on "Sustainable Technologies in Chemical-Biological Systems" (STCBS), Tiruvannamalai, April 2023.
7. Brewery waste management by anaerobic digestion for bioenergy production, National Conference on "Sustainable Technologies in Chemical-Biological Systems" (STCBS), Tiruvannamalai, April 2023.
8. Microalgae-induced control of antimicrobial resistance during aerobic sewage treatment, National Conference on "Sustainable Technologies in Chemical-Biological Systems" (STCBS), Tiruvannamalai, April 2023.
9. Methods for the extraction of microplastics from environmental samples, National Conference on "Sustainable Technologies in Chemical-Biological Systems" (STCBS), Tiruvannamalai, April 2023.
10. Microbial resilience mediated by granular activated carbon for enhanced food waste biomethanation, National Conference on "Biotechnological Developments for Sustainability in Agriculture, Environment and Health" (BDSAEH-2023), Chennai, March 2023.
11. Antimicrobial resistance from municipal wastewater in moving bed biofilm reactors, National Conference on "Biotechnological Developments for Sustainability in Agriculture, Environment and Health" (BDSAEH-2023), Chennai, March 2023.

12. Adsorption-desorption cycle of total soluble products using ion-exchange resins during food waste biomethanation, National Conference on 'Bioenergy & Bio-products from Agro-industrial sector and its associated Circular Economy (BACE-2023), Puducherry, March 2023.
13. Stability and performance enhancement of food waste biomethanation using granular activated carbon, ESSSENCE Symposium on Sustainability to explore Role of Science and Technology in India's Journey to Net Zero Emissions, Pallakad, January 2023.
14. Efficiency of activated sludge process for the antibiotics removal in raw sewage, International conference on Recent Advances in Biotechnology and Environmental Science (ICRABES) and 16th convention of ABAP, Vellore, December 2022.
15. Enhanced production of methane in food waste biomethanation using granular activated carbon, International conference on Recent Advances in Biotechnology and Environmental Science (ICRABES) and 16th convention of ABAP, Vellore, December 2022.
16. Targeted total soluble product recovery during food waste biomethanation for process control and circular economy, International Conference on Recent Trends in Science, Engineering and Technology (ICRTSET-2022). Coimbatore, November, 2022.
17. Concomitant dark fermentation and biomethanation of brewery spent grains for biohydrogen production, *International Conference on Recent Trends in Science, Engineering and Technology (ICRTSET 2022)*, Coimbatore, November, 2022.
18. Targeted total soluble product recovery during food waste biomethanation for process control and circular economy, *International Conference on Recent Trends in Science, Engineering and Technology (ICRTSET 2022)*, Coimbatore, November, 2022.
19. Environmental and economic benefits of food waste management in academic institutions, *MVN University international conference (MVNUIC-2022)*, November, 2022.
20. Circular economy in brewery waste management: Role of anaerobic digestion, *MVN University international conference (MVNUIC-2022)*, November, 2022.
21. Diphasic anaerobic digestion of brewery spent grains for biohydrogen production, *National Virtual Conference on "Current Trends in Biotechnology and Biomedicine"*, Sathyamangalam, October, 2022.
22. Enhanced production of methane and value-added products by regulating volatile fatty acids, *National Virtual Conference on "Current Trends in Biotechnology and Biomedicine"*, Sathyamangalam, October, 2022.
23. Design and fabrication of a novel triphasic anaerobic bioreactor for the co-treatment of assorted substrates, International Conference on Green Energy and Sustainable Environmental Technology (GESET-2022), Bhubaneswar, September, 2022
24. Anaerobic digestion of cigarette butts: An eco-friendly process for biodegradation and energy generation, *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2022)*, Tiruvannamalai, June, 2022.
25. Biopharmaceutical wastewater treatment technologies: A fight against antimicrobial resistance, *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2022)*, Tiruvannamalai, June, 2022.
26. Effect of inocula on ammoniacal nitrogen removal from composting leachate, *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2022)*, Tiruvannamalai, June, 2022.
27. Microplastics-associated biofilm formation and antimicrobial resistance in aquatic environment, *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2022)*, Tiruvannamalai, June, 2022.

28. Sustainable treatment and concomitant energy recovery from faecal sludge through bimethanation process, *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2022), Tiruvannamalai, June, 2022.*
29. Impact of Microplastics on Marine Life Conservation, *National Conference on Insights into the Current Scenario of Conservation of Natural Resources in India, Tiruchirapalli, March, 2022.*
30. Impact of thermal pretreatment on anaerobic co-digestion of sewage sludge and landfill leachate, *International conference on Novel Materials and Technologies for Energy and Environmental Applications (NMTE²A 2022), Hyderabad. February, 2022.*
31. What is (y)our food print?, *Human Behaviour and Environmental Sustainability, Coimbatore, December, 2021.*
32. Composting: A Tool for Circular Economy, *Human Behaviour and Environmental Sustainability, Coimbatore, December, 2021.*
33. Design and Fabrication of a Novel Triphasic Anaerobic Bioreactor for the Co-treatment of Organic Municipal Solid Waste and Slaughterhouse Waste, *10th International Conference on Sustainable Waste Management towards Circular Economy (IconSWM-CE-2020), Kolkata, December, 2020.*
34. Phytotoxic assessment of landfill leachate emanating from young and legacy landfills using *Lepidium sativum* var., *10th International Conference on Sustainable Waste Management towards Circular Economy (IconSWM-CE-2020), Kolkata, December, 2020.*
35. Modeling steady-state performance of MBBR treating municipal sewage, *10th International Conference on Sustainable Waste Management towards Circular Economy (IconSWM-CE-2020), Kolkata, December, 2020.*
36. Phytotoxic effect of landfill leachate based compost on seed germination and radicle growth of *Lycopersicon esculentum* Mill, *International Virtual Conference on Plant Specialized Metabolism and Metabolic Engineering (PSMME 2020), Lucknow, October, 2020.*
37. Physicochemical characterization of leachate emanating from young and legacy municipal solid waste landfills, *International E-Conference on Frontiers in Industrial Biotechnology, (ICFIBT 2020), Chennai, July, 2020.*
38. Enhanced anaerobic digestion of food waste employing grass clippings as buffering agent, *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2020), Tiruvannamalai, February, 2020.*
39. Some studies on treatment of municipal sewage using moving bed biofilm reactor (MBBR), *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2020), Tiruvannamalai, February, 2020.*
40. Studies on thermophilic anaerobic co-digestion of landfill leachate with domestic septage and sewage sludge, *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2020), Tiruvannamalai, February, 2020.*
41. Inexpensive larval trapping mechanism for small scale farming applications, *National Conference on Bioprospecting and Biotechnology, (HAPTEN 2020), Tiruvannamalai, February, 2020.*
42. Anaerobic co-digestion of landfill leachate and sewage sludge: Role of Substrate ratio, *9th International Conference on Sustainable Waste Management, (IconSWM- 2019), Bhubaneswar, November, 2019.*
43. Changes in compost characteristics upon addition of effluent from anaerobic digester, *4th International Conference on Bioenergy Environment & Sustainable Technologies, Tiruvannamalai, January, 2019.*

44. Role of Applied Research in Enabling Teaching and Learning Process- wrt *Practice School & Entrepreneurship, Faculty Development Programme in Chemistry for UG Teachers: A Re-orientation to the Restructured CBCS Curriculum, Hyderabad, December, 2018.*
45. Effect of Inoculation on Anaerobic Digestion of Food Waste, *8th International Conference on Sustainable Waste Management (IconSWM 2018), Guntur, November, 2018.*
46. Effect of effluent addition on compost characteristics, *Life Science Research & its Interface with Engineering and Allied Sciences (LSRIEAS 2018), Pilani, November, 2018.*
47. Anaerobic co-digestion of landfill leachate and septage at mesophilic and thermophilic regimes, *International Conference on Biotechnological Research and Innovation for Sustainable Development (BioSD-2018), November, 2018.*
48. Application of Engineered Nanomaterials for Microalgae Cultivation and Biodiesel Production, *International Conference on Biotechnological Research and Innovation for Sustainable Development (BioSD-2018), November, 2018.*
49. Application of ICP-OES in evaluating agglomeration of Titanium dioxide nanoparticles, *National Seminar on Emerging Trends in Analytical Sciences (ETAS-2018), Hyderabad, July, 2018.*
50. Toxicity Assessment of Engineered Titanium Dioxide Nanoparticles, *SETAC Europe 28th Annual Meeting, Rome, May, 2018.*
51. Label-Free Quantitation of Proteomic Responses Triggered by Rutile Titanium Dioxide Nanoparticles, *Society of Toxicology's 57th Annual Meeting, Texas, March, 2018.*
52. Co-Biomethanation of Municipal Solid Waste Landfill Leachate and Domestic Septage, *National symposium on "Emerging environmental challenges: An Engineering approach (EEC-2018)", Hyderabad, February, 2018.*
53. Biological Treatment of Municipal Solid Waste Landfill Leachate, *National symposium on "Emerging environmental challenges: An Engineering approach (EEC-2018)", Hyderabad, February, 2018.*
54. Extraction and Purification of Bromelain from Pineapple Waste, *National symposium on "Emerging environmental challenges: An Engineering approach (EEC-2018)", Hyderabad, February, 2018.*
55. Nanowaste: Need for Paradigms in Waste Management, *The Third International Conference on Bio-resource and Stress Management, Jaipur, 2017.*
56. Anaerobic co-digestion of municipal solid waste landfill leachate and domestic septage in mesophilic and thermophilic conditions using novel continuously stirred tank reactors, *International Conference on Emerging Trends in Biotechnology for Waste Conversion (ETBWC- 2017), Nagpur, October, 2017.*
57. Anaerobic digestion technology for treatment of organic waste and concurrent production of value added products: A case study of BITS Pilani, Hyderabad Campus, *National Seminar on Design for sustainability using principles of Environment Management Hyderabad, October, 2017.*
58. Novel challenges posed by emerging contaminants on bioprocessing of wastewater: Implications of engineered nanoparticles: *National Seminar on Advances in Bioprocess Engineering, Hyderabad, November, 2016.*
59. Toxicology in the era of nanotechnology, *Lead Lecture, National Conference in Research Advances in Biotechnology, Hyderabad, October, 2016.*
60. Evaluating the effects of TiO₂ nanoparticles on cholinergic and antioxidant defensive systems in earthworm, *Eisenia fetida, National Conference in Research Advances in Biotechnology, Hyderabad, October, 2016.*

61. Assessing Sub-lethal Effects of Gold Nanoparticles on Oxidative Stress and Neurotoxicity in Earthworm, *Eisenia fetida*, *Society of Environmental Toxicology and Chemistry Asia/Pacific 2016 Conference, National University of Singapore, September, 2016.*
62. Behavior and Fate of Engineered Gold Nanoparticles in Environmentally Relevant Aquatic Media: A Clue to Predict the Toxicity of Nanoparticles in Marine Environment, *International Conference on Aquatic Resources & Sustainable Management, Kolkata, February, 2016.*
63. Integrated 'Omics' of Coelomic Fluid: An Attempt to Understand Phenomics of TiO₂ Nanoparticle Toxicity, *The Toxicologist, 150 (1), PS-1501, 117, 2016.*
64. Ecotoxicology of Engineered Nanomaterials: Current Understanding and Future Challenges, *35th Annual Conference of Society of Toxicology, Hyderabad, November, 2015.*
65. Investigating Silver Nanoparticle Toxicity in Horn Snail: A Potential Biomonitoring System of Intertidal Sediments in Sundarbans, *35th Annual Conference of Society of Toxicology, Hyderabad, November, 2015.*
66. Solid and Liquid Waste Management in Developing Countries, *International Training Program on Management of Rural Drinking Water and Sanitation Projects, Hyderabad, July, 2015.*
67. Effect of TiO₂ nanoparticles on trace element homeostasis: An inquiry into metallomics in earthworm, *Eisenia foetida*, *4th Young Environmental Scientists Meeting, SETAC Europe, Belgrade, Serbia, March, 2015.*
68. TiO₂ nanoparticle induced cytotoxicity and genotoxicity in earthworm coelomocytes: Effects on trace metals, antioxidant enzymes and DNA, *National Conference on Natural Therapeutics for Cancer, Diabetes and Renal Diseases, Visakhapatnam, India, March, 2015.*
69. An integrated analytical approach to monitor TiO₂ nanoparticles in sewage water: An early warning for safety assessment of engineered nanomaterials in aquatic environment, *102nd Indian Congress, Mumbai, India, January, 2015.*
70. Nanotoxicity: Public Health Concerns, *Winter Institute in Global Health, Hyderabad, India, January, 2015.*
71. Nanomaterials and Nanotoxicology: Two sides of the same coin, *National Conference on Advanced Materials for Defence and Aerospace Applications, Hyderabad, India, December, 2014.*
72. Evolution of UASB reactor: Descent with modifications pertaining to treatment efficiency and methane productivity, *Conference on Decentralized Biogas Digesters & their Slurry Management, Goa, India, November, 2014.*
73. Confounding factors and future challenges to delineate ecotoxicity of TiO₂ nanoparticles, *9th SETAC Asia Pacific 2014 conference, Adelaide, Australia, September, 2014.*
74. Physicochemical Characterization and Ecotoxicological Evaluation of TiO₂ Nanoparticles in Earthworm *Eisenia foetida*, *Annual Meeting and ToxExpo of The Society of Toxicology, Phoenix, Arizona, USA, March, 2014.*
75. Acetylcholinesterase response in fish *Catla catla* as a biomarker of chlorpyrifos contamination in fresh water ecosystem, *Annual International Conference on Advances in Biotechnology, BIOTECH 2014, Dubai, UAE, March, 2014.*
76. Should we say NO to NaNO? Preliminary study to corroborate occurrence of nanoparticles in treated wastewater samples, *National Conference on Technology, Policy and Community: Small Experiments in Sustainability, Hyderabad, India, March, 2014.*
77. Potential applications of enzymes derived from termite gut microflora for biochemical degradation of lignocellulosic waste and concomitant biofuel production, *National*

Conference on Innovations in Chemical Engineering, ICE-2013, Hyderabad, India, November, 2013.

78. Occupational safety and health management skills development for the prospective entrepreneur and the professional manager, *National Conference on Rethinking the Role of Humanities in Technical Education: Pedagogies and Possibilities, Hyderabad, India, October, 2013.*
79. Development of environmental biomarkers to monitor endocrine disrupting chemicals in water and wastewater, *National Conference on Sustainable Water Resources Planning, Management and Impact of Climate Change, Hyderabad, India, April, 2013.*
80. Treatment and disposal of municipal solid waste in third world countries: A critical review, *National Conference on Environment and Biodiversity New Delhi, India, December, 2012.*
81. Flipped Teaching: Insight, Interpretation and Feasibility in the Indian Scenario, *ISTE 42nd Annual Convention, Hyderabad, India, December, 2012.*
82. Rapid assessment of persistent organic pollutant, Sulfamethoxazole in aquatic ecosystems, using surface plasmon resonance based biosensors, *National Conference on conservation and management of wetland ecosystems, LAKE 2012, Kottayam, India, November, 2012.*
83. A wireless sensor network approach to monitor process temperature in composting heaps, Part II: Thermocouple Thermometers, *National Seminar on sustainable Development: Recent Trends in Meeting the Challenges, NSSD 2012, Kottayam, India, January, 2012.*
84. A wireless sensor network approach to monitor process temperature in composting heaps, Part I: Routing Protocols, *International Conference on Mobile Internet Devices, Hyderabad, India, December, 2010.*
85. Vermicomposting of the Leaf Litter of Acacia (*Acacia Auriculiformis*), *Global Symposium on Recycling, Waste Treatment and Clean Technology, REWAS 2008, Mexico, 2008.*
86. The Roles of Reactor Geometry, Polyphenols, and Lignin in Vermicomposting, *Global Symposium on Recycling, Waste Treatment and Clean Technology, REWAS 2008, Mexico, 2008.*
87. Modeling and Design of the Composting and Vermicomposting Processes, *Global Symposium on Recycling, Waste Treatment and Clean Technology, REWAS 2008, Mexico, 2008.*
88. Recovery of Methane-rich Gas from Solid-feed Anaerobic Digestion of the Pernicious Weed Ipomoea (*Ipomoea carnea*), *R'07 World Congress – Recovery of materials and energy for resource efficiency, Davos, Switzerland, September, 2007.*
89. The Challenge of Treating Low-Strength Effluents by Upflow Anaerobic Sludge Blanket (UASB) Reactor and the Application of the Technique to Dairy Industry Wash Waters, *R'07 World Congress – Recovery of materials and energy for resource efficiency, Davos, Switzerland, September, 2007.*
90. Treatment of 'hard' bio-wastes with resource recovery by termite action – a new frontier in solid waste management, *R'07 World Congress – Recovery of materials and energy for resource efficiency, Davos, Switzerland, September, 2007.*
91. Treatment of biodegradable wash waters with simultaneous recovery of fuel gas using a new upflow granular anaerobic sludge reactor (UGAS-R), *R'07 World Congress – Recovery of materials and energy for resource efficiency, Davos, Switzerland, September, 2007.*
92. Emerging frontier in bio-process engineering: Termigradation, *Intl. Conference on Cleaner Technologies & Env'tl. Management, Pondicherry, India, January, 2007.*
93. Termitechnology, *International Seminar on Environmental Biotechnology, ENVIROTECH 2006, Chennai, India, July, 2006.*

94. Effective control of mal odour emission during aerobic composting of municipal solid waste, *National Conference on MBI, Chidambaram, March, 2006.*
95. Treatment of low-to-medium strength dairy wastewaters with two types of sludge granules in UASB reactors, *Anaerobic Digestion 2004, 10th World Congress, Montreal, Canada, October, 2004.*

Conferences and workshops conducted:

1. Session Chair, Biological Science
International Conference on Recent Trends in Science, Engineering and Technology, (ICRTSET 2022).
November, 18 - 19, 2022
PSG College of Arts and Science, Coimbatore, India
2. Session Chair, Emergence and Multidimensional Interactions of Engineered Nanoparticles in Toxicology
Society of Environmental Toxicology and Chemistry (SETAC), Europe, 28th Annual Meeting
May 13 - 17, 2018
Rome Convention Centre La Nuvola, Rome, Italy
3. Session Chair, Fermentation Technology: Optimization of Bioproduction
National Seminar on Advances in Bioprocess Engineering
November 24 - 25, 2016
Department of Biotechnology & Microbiology, Kasturba Gandhi Degree College, Hyderabad
4. Session Co-Chair, Global perspectives in Toxicological Risk Assessment of Nanoparticles in Environment
Society of Environmental Toxicology and Chemistry (SETAC), Asia-Pacific 2016 Conference
September 16 - 19, 2016
National University of Singapore, Singapore
5. Convener, Workshop on Innovations in Waste, Water and Energy Technologies for Rural Development
July 13 - 14, 2015
BITS Pilani, Hyderabad Campus, India
National Institute of Rural Development & Panchayati Raj, Ministry of Rural Development, Government of India
6. Editor-In-Chief, 1st Annual International Conference on Ecology, Biodiversity & Environment, 2014,
Dec 15 - 16, 2014
GSTF, Singapore
7. Coordinator, Dly: Engineering the Eye
July 7 - Jul 13, 2013
BITS Pilani, Hyderabad Campus, India
MIT Media Lab, L V Prasad Eye Institute, Perkins School for the Blind
8. Coordinator, Idea Carnival: Summer Product Idea Camp
May 25 - Jul 6, 2013
BITS Pilani, Hyderabad Campus, India
Hyderabad4Innovation, National Entrepreneurship Network, The Indus Entrepreneurs (TiE), Hyderabad, Progress Software

Technology Developed: iSTAR® is a novel thermophilic anaerobic digestion technology used to treat hazardous wastes such as landfill leachate and domestic septage. It can be used to treat single or multiple substrates (co-digestion). The inbuilt 'Remote Monitoring System' keeps track of the bioreactor's health. Organic matter present in the substrate(s) is converted into methane-rich biogas. Effluent sludge is composted and used as a soil amendment. This technology has been developed as part of the SPARSH project No. BT/SPARSH0144/03/15, funded by BIRAC.

Patent Filed: Patent on intelligently stirred thermophilic anaerobic reactor (iSTAR®)
Title: An anaerobic reactor for efficient biomethanation of organic waste
Indian Patent No. 202111051662, dated 11/11/2021

Technology Commissioned: A 12,000 Lt thermophilic biogas digester to treat food waste was commissioned in 2014 at the students' hostel dining hall in BITS Pilani, Hyderabad Campus. The biogas produced is used as a supplement for cooking gas, and the spent slurry is used as a soil amendment/ biofertilizer for horticulture.

Entrepreneurship: ALMaC Protech: Transferred the anaerobic digestion technology for the waste and wastewater treatment and incubated a start-up company named ALMaC Projects and Technologies Private Limited at Technology Business Incubator, BITS Pilani, Hyderabad Campus. ALMaC Protech is a Technology Development, Technology Adaptation, Systems Engineering and Projects Management Company, specializing in the domains of Biological Systems, Solar, IoT and IC Technologies.

Academic Achievements:

- **Adjudicator**, Member of the board of adjudicators for PhD thesis evaluation: Addis Ababa University, Ethiopia, Pondicherry (Central) University, India; Mahatma Gandhi University, Kottayam, India; NIMS University, India, Bharathidasan University, India; Anna University, India.
- **Reviewer**, Journal of The Institution of Engineers, Springer; Fuel, Elsevier; "Malaysian Journal of Microbiology" Malaysian Society of Microbiology; Journal of Life Sciences; Toxicology Mechanisms and Methods, Taylor & Francis; Journal of Water and Climate Change, IWA Publishing, Environmental Science and Pollution Research, Springer, Journal of The Institution of Engineers (India): Series A, Springer, Toxicology Mechanisms and Methods, Taylor & Francis.
- **Editor-in-Chief**, GSTF Journal of Biosciences
- **Co-Editor**, GSTF Journal of Ecology
- Qualified in Joint **CSIR-UGC NET**, Council of Scientific & Industrial Research, India
- Qualified in **TOEFL**
- Pondicherry University **Second Rank** holder in MSc degree

Membership in Professional Bodies:

- IWA, International Water Association
- ACSE, Asian Council of Science Editors
- BRSI, Biotech Research Society, India
- AoT, Association of Toxicology, India
- SAVE FOOD, Global Initiative on Food Losses and Waste Reduction, FAO, UN

- SETAC, Society of Environmental Toxicology and Chemistry, USA
- ISTE, Indian Society for Technical Education, India
- STOX, Society for Toxicology, India
- ISWA, International Solid Waste Association, Vienna, Austria
- NSWAI, National Solid Waste Association of India
- CWG, Collaborative Working Group on Solid Waste Management in Low- and Middle-Income Countries, St. Gallen, Switzerland

Declaration : I certify that the information given in this bio-data is correct.

Date/ Place : 15th June, 2023/ Hyderabad, INDIA.

Signature : 