

<b>NAME</b>	Dr. Gurumurthy DM	
<b>DESIGNATION</b>	Assistant Professor II	
<b>EMAIL ID</b>	gurumurthydm@amity.edu	
<b>CONTACT NUMBER</b>	6360098171	

<b>RESEARCH INTERESTS</b>	Astrobiology, Bioenergy and Bioelectrochemistry
---------------------------	---

**EDUCATIONAL QUALIFICATIONS:**

Name of College / University	Degree	Year
Kuvempu University	Ph.D in Biochemistry	2013
Pondicherry University	MBA in International Business	2011
Kuvempu University	M.Sc in Biochemistry	2008
Kuvempu University	B.Sc. in Biochemistry	2006

**Title of Ph.D. thesis:**

**EXPERIENCE (in chronological order): Total 10 Years Research & Teaching**

Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From – To)
Postdoctoral Fellow	Research	Montana State University, Bozeman, USA	2021-2022
Assistant Professor	Research and Teaching	GM Institute of Technology	2018-2021
Postdoctoral Fellow	Research	Institute of Urban Environment, Xiamen, China	2015-2018
Postdoctoral Visiting Fellow	Research	Tata Institute of Fundamental Research, Mumbai, India	2013-2014

<b>No. of Ph.D. students supervised</b>	Ongoing: 0
	Awarded: 0

<b>No. of Post-Doc</b>	03
------------------------	----

<b>No. of M.Tech. Students supervised:</b>	00
--	----

<b>No. of B.Tech. Students supervised:</b>	12
--	----

<b>PUBLICATIONS</b> <i>(mention total no. here)</i>	<p><i>Details:</i></p> <ol style="list-style-type: none"> <li>1. K Gouthami, V. Veeraraghavan, Abbas Rahdar, Muhammad Bilal, Anshuman Shah, Vandna Rai, DM Gurumurthy, LFR Ferreira, JHPA Pinheiro, Sk Murari, S Kalia, S I. Mulla. (2022). Molecular docking used as an advanced tool to determine novel compounds on emerging infectious diseases: A systematic review. <i>Prog. Biophy. Mol. Biol.</i> <a href="https://doi.org/10.1016/j.pbiomolbio.2022.10.001">https://doi.org/10.1016/j.pbiomolbio.2022.10.001</a>. (IF: 4.9)</li> <li>2. Dilshad BG, Sikandar IM, Zabin KB, Swati T, Anyi Hu, Swati S, Muhammad B, Ram NB, Luiz FRF, Dummi GM, Ashok Kumar Nanda (2022). A Systematic review on potential microbial carboxylases: Current and Future prospective. <i>Cri. Rev. Food Sci. Nutri.</i> <a href="http://doi.org/10.1080/10408398.2022.2106545">http://doi.org/10.1080/10408398.2022.2106545</a> . (IF: 11.5)</li> <li>3. Azharuddin B D, Siddappa K, Basheerabegum F, Muhammad B, RN Bhargav, LFR Ferreira, Abbas R, DM Gurumurthy, Sikandar IM. (2022). Decolorization of various dyes by</li> </ol>
--	---

- microorganisms and green-synthesized nanoparticles: Current and Future perspective.* *Env. Sci. Pollution Res.* (Accepted). <https://doi.org/10.1007/s11356-022-21196-9> (5.19)
4. DM Gurumurthy, RN Bhargava, A Kumar, B Singh, GD Saratale, U Guzik, SI. Mulla. (2021). Evaluation of cell-wall associated direct extracellular electron transfer in thermophilic *Geobacillus* sp. 3Biotech. (Accepted) (IF: 2.4)
  5. Sikandar IM, Zabin KB, Basheerabegum F, Muhammad B, Jong-Chan Chae, Paul Olusegun Bankole, Ganesh DS, Ram Naresh Bhargava, DM Gurumurthy\*. (2021) Various strategies applied for the removal of Emerging Micropollutant Sulfamethazine: A systematic review. *Env. Sci. Pollution Res.* (Accepted). <https://doi.org/10.1007/s11356-021-14259-w>. (IF: 4.22)
  6. Kotresh KR, Gurumurthy DM\*, Neelagunda SE, Madhuri S, Divya V, Sikandar IM. (2021). Decolorization of Amaranth R I and Fast red E azo dyes by thermophilic *Geobacillus thermoleovorans* KNG 112. *J. Chem. Technol. Biotechnol.* (Accepted). <https://doi.org/10.1002/jctb.6834>. (IF: 3.7)
  7. DM Gurumurthy\*, TP Charanraj, B Faniband, PN Tallur, ZK Bagewadi, SE Neelagund, SI Mulla. (2020) Cyanoxanthomycin, a Bacterial Antimicrobial Compound Extracted from Thermophilic *Geobacillus* sp. Iso5. *Jordan. J. Biol. Sci.* 13(5): 724-729
  8. KR Kotresh, SE Neelagund, DM Gurumurthy (2020). Novel *Geobacillus thermoleovorans* KNG 112 thermophilic bacteria from Bandaru hot spring: A potential producer of thermostable enzymes. *Asian. J. Pharm. Clin. Res.* 13: 134-141. DOI: <http://dx.doi.org/10.22159/ajpcr.2020.v13i1.36008>
  9. DM Gurumurthy\*, RN Bhargava, A Kumar, B Singh, M Ashfaq, GD Saratale, SI. Mulla. (2019). EPS bound flavins driven mediated electron transfer in thermophilic *Geobacillus* sp. *Microbiol. Res.* 229: 126324.[doi.org/10.1016/j.micres.2019.126324](https://doi.org/10.1016/j.micres.2019.126324) (IF: 5.4)
  10. Zheng Yue, Kappler Andreas, Xiao Yong, Yang Fan, Mahadevan Gurumurthy Dummi & Zhao Feng. (2019) Redox-active humics support interspecies syntropy and shift microbial community. *Sci. China. Technol. Sci.* 62: 1695–1702. doi: [10.1007/s11431-018-9360-5](https://doi.org/10.1007/s11431-018-9360-5) (IF: 3.572)
  11. Lu Wang, Yulei Liu, Chao Wang, Xiaodan Zhao, Gurumurthy Dummi Mahadevan, Yicheng Wu, Jun Ma, Feng Zhao (2018) Anoxic degradation of triclosan and removal of its antimicrobial effects in microbial fuel cells. *J. Hazard. Mat.* 344: 669-678 (IF: 10.588)
  12. Gurumurthy DM and Feng Zhao (2017). A concise review on microbial electrochemistry in radionuclides remediation. *J. Radioanal. Nuclear Chem.* 314 (3): 1477–1485 (IF: 1.371)
  13. Sikandar I. Mulla, Fuad Ameen, Preeti N. Tallur, Ram Naresh Bharagava, Manjunatha Bangeppagari, Syed Amas Eqani, Zabin K. Bagewadi, Gurumurthy DM, Chang-Ping Yu and Harichandra Z. Ninnekar. (2017). Aerobic degradation of fenvalerate by a gram-positive bacterium, *Bacillus flexus* strain XJU-4. *3Biotech* (2017) 7:320 (IF: 2.4)
  14. Zejie Wang, Gurumurthy D.M., Yicheng Wu, Feng Zhao (2016) Progress on air-diffusion cathode single-chamber microbial fuel cells. *J. Power. Source.* 356: 245-255 (IF: 9.127)
  15. Vijayalakshmi. A. Edalli, Sikandar I. Mulla, Syed Ali Musstjab Akber Shah Eqani, Gurumurthy D. Mahadevan, Rohit Sharma,

- Yogesh Shouche and Chadrappa M. Kamanavalli (2016). Implication of polyphenol oxidase (PPO) immobilized in various matrices for the determination of p-cresol degradation. 3Biotech 6(2): 229. (IF: 2.4)*
16. *Shuhua Wang, Yue Zheng, Weifu Yan, Lixiang Chen, Dummi Mahadevan Gurumurthy, Feng Zhao (2016) Enhanced bioleaching efficiency of metals from E-wastes driven by biochar, J. Hazard. Mat. 320:393-400 (IF: 10.588)*
17. *Sikandar I. Mulla, Manjunatha Bangeppagari, Gurumurthy DM, Syed Amas Eqani, Preeti N. Tallur, and Harichandra Z. Ninnekar (2016). Biodegradation of 3-Chlorobenzoate and 3-Hydroxybenzoate by Polyurethane from Immobilized Cells of Bacillus sp. OS13. J. Env. Chem. Eng. 4(2): 1423-1431 (IF: 5.9)*
18. *Yulei Liu, Lu Wang, Jun Ma, Xiaodan Zhao, Zhuang song Huang, Gurumurthy DM, Jingyao Qi. (2015). Improvement of settleability and dewaterability of sludge by newly prepared alkaline ferrate solution. Chem. Eng. J. 287:11-18 (IF: 13.273)*
19. *You-Fen Dai, Yong Xiao, En-Hua Zhang, Li-Dan Liu, Ling Qiu, Le-Xing You, Gurumurthy DM, Bi-Lian Chen and Feng Zhao (2016). Effective methods for extracting extracellular polymeric substances from Shewanella oneidensis MR-1. Water sci. Technol. 74(12): 2987-2996 (IF: 1.915)*
20. *Xi-Ming Qu, Le-Xing You, Xiao-Chun Tian, Bin-Wei Zhang, Gurumurthy DM, Yan-Xia Jiang, Shi-Gang Sun (2015) CeO<sub>2</sub> nanorods with high energy surfaces as electrocatalytic supports for methanol electrooxidation. Electrochimica Acta. 182: 1078-1084 (IF: 6.901)*
21. *Gurumurthy DM and Neelagund SE (2013) Thermostable lipase from Geobacillus sp. Iso5: Bioseparation, characterization and native structural studies. J. Basic Microbiol. 54 (5): 386–396 (IF: 2.281)*
22. *Gurumurthy DM and Raghavendra R (2012) Environmental lead exposure to blood: a community health difficulty of among the different Occupation. Global. J. Appl. Env. Sci. 2 (2): 79-84*
23. *Gurumurthy DM and Neelagund SE (2012) Purification and characterization of industrially viable hyperthermophilic  $\alpha$ -amylase from thermoalklophilic Geobacillus sp. Iso5 isolated from geothermal spring. J. Pure. Appl. Microbiol. 6 (4): 1759-1773 (IF: 0.4)*
24. *Mohammed Mohammed Abdu Al-ZaZae, Shivayogeeswar Neelagund, Gurumurthy DM and Rajeshwara. N. Achur. (2011) "Identification and Characterization of a novel Halophilic Bacillus cereus MS6 bacteria: A source for extracellular  $\square$ -amylase. Adv. Env. Biol. 5(5): 992-999*
25. *Ramappa R and Gurumurthy DM (2011) Antimicrobial properties of different plant latex on human pathogens. Int. J. Pharm. Pharmaceut. Sci. 3(4): 70-72*
26. *Gurumurthy DM and Neelagund SE (2010) Geobacillus sp. Iso 5, a novel amylase producing thermophile from Konkan region thermal springs in southern India, J. Earth. Sci. 21 (1): 318-322 (IF: 2.907)*
27. *NR Rakesh, H Gurumurthy, HK Pradeep, S Pradeep, DM Gurumurthy, CL Sachin. (2020). In-Silico Pharmacological and Molecular Docking Studies of Natural Inhibitors form Musa Spp. on Vaca Gene a Vacuolating Cytotoxin Autotransporter. IOP Mat. Sci. Engg. 925: 012051*
28. *S Keerthi, DM Gurumurthy, NM Sneha, S Bhavana, AS Shwetha,*

	<p><i>NG Abhishek, SP Kaushik. (2020). Plant design, optimization, and ethanol production from Zea maize L. IOP Mat. Sci. Engg. 925: 012041</i></p> <p>29. <i>Gurumurthy H, Gurumurthy DM, Sikandar I Mulla. (2022). Biosorption of Industrial wastewater my microalgae. In Microorganisms in sustainability: Enzymes in pollution research. Springer, Singapore.</i></p> <p>30. <i>Prakash KK, Rangaswamy BE, Gurumurthy DM*. (2022). Probiotic enzymes in value added products. In Microorganisms in sustainability: Enzymes in pollution research. Springer, Singapore.</i></p> <p>31. <i>Dilshad BGM, Syeda UTK, Satish Kumar M, DM Gurumurthy, Muhammad B, Ram Naresh Bharagava, Anyi Hu, Paul Olusegun Bankole, Luiz Fernando R. Ferreira, Sikandar I. Mulla. (2022). Physicochemical–biotechnological approaches for removal of contaminants from wastewater. In Integrated Environmental Technologies for Wastewater Treatment and Sustainable Development. Elsevier Inc., Philadelphia PA, USA</i></p> <p>32. <i>Neelagund SE, Gurumurthy DM, Rajkumar S Meti (2020). Novel thermophilic microorganism and their Industrial applications. LAP Lambert, Mauritius. ISBN 978-620-0-56751-2.</i></p> <p>33. <i>Feng Zhao and Gurumurthy DM (2016) Resource Recovery based on Extracellular Electron transfer. In Environmental Materials and Waste: Resource Recovery and Pollution Prevention. Elsevier Inc., Philadelphia PA, USA</i></p>
<b>PATENTS (total no.)</b>	<p><b>Details:</b></p> <p>1. Enhanced storage method of gravitational energy to manage renewable resources. Published: 202141000258A (2020)</p> <p>2. IBAM-Mineral Water Quality Testing System: IoT-Based Automated Mineral Water Quality Testing and Management System Published 202041051636 A (2020)</p>
<b>RESEARCH PROJECTS</b> Completed: (total no.) Ongoing: (total no.)	<p><b>Details: NIL</b></p>
<b>AWARDS &amp; HONOURS/ DISTINCTIONS</b>	<p><b>Details:</b></p> <ul style="list-style-type: none"> <li>• 2020: SERF-UNESCO Research &amp; Innovation Award by Sidhartha Educational and Research Federation, Odisha, India</li> <li>• 2020: Best Student Project of the Year Award by Institute Scholar (InSc), Bengaluru, India</li> <li>• 2020: Young Scientist Award by DK International Research Foundation, Perambalur, Tamil Nadu, India</li> <li>• 2015-2018: NSF Distinguished Young Scholar, Institute of Urban Environment, Xiamen, Fujian Province, China.</li> </ul>
<b>MEMBERSHIP</b> with Professional/ Academic bodies	<p><b>Details:</b></p> <ul style="list-style-type: none"> <li>▪ Indian Society for Technical Education (ISTE)- Life member (LM129506)</li> <li>▪ Teaching and Education Research Association (TERA)</li> </ul>

- |  |   |
|--|---|
|  | <p>member (TERA-M19661)</p> <ul style="list-style-type: none"><li>▪ Scientific and Technical Research Association (STRA) member (STRA-M19322)</li><li>▪ UACSE: Senior member (SNM10100059554)</li><li>▪ International Association of Engineers (IAENG): Member (231314)</li></ul> |
|--|---|