

Gisella R. Lamas- Samanamud, PhD

Lecturer of Chemical Engineering – University of Kentucky
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Professional Preparation

University of Sao Paulo (SP, Brazil)	Biochemical Engineering	B.S., 2006
University of Sao Paulo (SP, Brazil)	Chemical Engineering	M.S., 2011
UT at San Antonio (San Antonio, TX)	Environmental Engineering	Ph.D., 2015

Appointments

2022 – Present	Visting Professor, Department of Chemical Engineering, UFSJ, Brazil
2018 – Present	Lecturer, Courses: EGR101, CME 006, CME 220, CME 330, CME 420, CME 432, CME 433, CME 470, CME 599 Dept of Chemical & Materials Engineering, UK
2018-2018	Lecturer II in Chemistry I Lab CHE1121, Dept Chemistry, UTSA
2017-2017	Lecturer in Environmental Engineering CE2633, Dept Civil and Environmental Engineering, UTSA
2016-2018	PostDoc Fellowship, Dept Civil and Environmental Engineering, UTSA
2012-2015	Research Assistant, Dept. Civil and Environmental Engineering UTSA
2006-2012	Teacher, Hernandez Carvalho Escola de Idiomas Ltda.
2008-2011	Water Quality Analyst, Env. Engineering Laboratory, USP
2005-2005	Biochemical Engineering Trainee, Sourcotech Quimica Ltda.
2004-2005	Research Assistant, Department of Biotechnology and Chemistry, USP

Products

Five Recent Products

1. Bordin, R. D., Gomes, L. V. G., Naves, F. L., Martins, A. C., Loures, C. C. A., **Samanamud, G. L.**, & de Souza Amaral, M. (2024). Microalgal biodiesel properties based on fatty acid profiles: Modeling, design, and optimization of production conditions. In *Microalgal Biomass for Bioenergy Applications* (pp. 81-98). Woodhead Publishing.
2. **Lamas-Samanamud, G.**, Montante III, A., Mertins, A., Phan, D., Loures, C., Naves, F., ... & Shipley, H. J. (2023). The Role of Quorum Sensing in the Development of Microcystis aeruginosa Blooms: Gene Expression. *Microorganisms*, 11(2), 383.
3. dos Santos, H. A., Santos, I. J. B., Quintão, C. M. F., Knupp, V. F., Lofrano, R. C. Z., de Oliveira, E. C., **Lamas Samanamud, G.**, Amaral, M. S., Franca, A. B., Pereira, M. A., Silva, M. T. A., Loures, C. C. A., Carneiro, M. S., Ponciano, J. A. P., Naves, L. L. & Naves, F. L. (2023). Modeling and optimization of the pyrolysis oil production process from polypropylene for the production of aviation kerosene. *Clean Technologies and Environmental Policy*, 25(4), 1385-1396.
4. **Lamas Samanamud, G.**, Reeves, T., Tidwell, M., Bohmann, J., Lange, K., Shipley, H. (2022). Changes in Chemical Structure of n-Acyl Homoserine Lactones and Their Effects on Microcystin Expression from Microcystis aeruginosa PCC7806. *Environmental Engineering Science*, 39(1), 29-38.
5. Vaz, C. A. S., **Lamas Samanamud, G.**, da Silva, R. S., França, A. B., Finzi Quintão, C. M., Urzedo, A. P., Silva, M. B., Neto, J. C. B., Amaral, M. S., Loures, C. C. A., Naves, L. L. R., Naves, F. L. (2021) Modeling and optimization of hybrid leachate treatment processes and scale-up of the process: Review, *Journal of Cleaner Production*, 2021, 127732, ISSN 0959-6526, <https://doi.org/10.1016/j.jclepro.2021.127732> (<https://www.sciencedirect.com/science/article/pii/S0959652621019508>)

Five Other Significant Products

1. Pinto, M. B., **Lamas Samanamud, G. R.**, Baston, E. P., França, A. B., Naves, L. L. R., Loures, C. C. A., & Naves, F. L. (2019). Multivariate and multiobjective optimization of tannery industry effluent

treatment using *Musa* sp flower extract in the coagulation and flocculation process. *Journal of Cleaner Production*.

2. Braga, W. L. M., de Melo, D. H. A., de Moraes, D., Samanamud, G. R. L., França, A. B., Quintão, C. M. F., ... & Naves, F. L. (2020). Optimization of the treatment of sanitary landfill by the ozonation catalysed by modified nanovermiculite in a rotating packed bed. *Journal of Cleaner Production*, 249, 119395.
3. Pei, R. **Lamas-Samanamud, G. R.**, (2014) Inhibition of biofilm formation by T7 bacteriophages producing quorum quenching enzymes. *Applied and Environmental Microbiology*. 80 (17), 5340-5348
4. Loures, C. C. A., Alcântara, M., Izario Filho, H. J., Teixeira, A., Silva, F., Paiva, T., **L. Samanamud, G. R.**, (2013) Advanced Oxidative Degradation Processes: Fundamentals and Applications. *International Review of Chemical Engineering (IRECHE)*. 5(2), pp. 102-120.
5. **Lamas Samanamud, G. R.**, Loures, C. C. A., Souza, A. L., Salazar, R. S. F., Oliveira, I. S., Silva, M. B., Izario Filho, H. J., (2012) Heterogeneous Photocatalytic Degradation of Dairy Wastewater Using Immobilized ZnO. *ISRN Chemical Engineering*.

Synergistic Activities

1. Reviewer for the journals of *Science of Total Environment*, *Applied and Environmental Microbiology*, *Environmental Engineering Science*.
2. Professional Organizations Member: Association of Environmental Engineering & Sciences Professor, Society of Women Engineers, American Institute of Chemical Engineers, American Society for Engineering Education, International Biodeterioration & Biodegradation
3. Grant: ASEE APA (2023), stEm Fellow (2023), CNPQ (2018), San Antonio Postdoctoral Research Forum Travel Grant (2016), NSF Travel Assist Grant (2016), UTSA Connect Fund (2016) and NSF CBET-1438622 (2015).
4. Honors and Awards: 2022 Engaged Advocate, NSF Travel award 2020, NSF - ACADEME – Early Faculty Career Development (2018), 2nd Place Poster Presentation at EcoExchangeEdu (2018).
5. National Science Foundation Graduate Panel Reviewer (2019), COS Research Conference Judge (2018), Ecybersubmission Cyber Judge ('17,'18), HENAASC Scholarships Reviewer ('17, '18), State of Texas Science Fair judge ('14-'16), UTSA Morese Colloquium Judge (2013)
6. Faculty advisor SWE – Paducah campus, SWENext counselor for Paducah campus, SWE Women In Academia Chair Elect, AIChE K-12 Outreach committee secretary

Collaborators and Other Affiliations

Collaborators and Co-editors: (18)

Carla C. A. Loures (CEFET)

Fabiano Naves (UFSJ)

Heather J. Shipley (UTSA)

Helcio J. Izario Filho (USP)

Messias B. Silva (USP)

Mateus Amaral (UFOP)

Ana Paula B. R. de Freitas (UNESP)

Leandro V. de Freitas (PETROBRAS)

Marco Alcantara (USP)

Antonio Teixeira (USP)

Teresa Paiva (USP)

Flavio Silva (USP)

Ruoting Pei (UTSA)

Adetoun Yeaman (NU)

Janie Moore (TAMU)

Xiaojing Jiang (UH)

Heather Beem (Ashesi University)

Malgorzata Chwako (UKY)

Undergraduate advisors: (10)

Andrea Mertins (UTSA)

Fernando Lopez (UTSA)

Armando Montante III (UTSA)

Nikolas Carwile (UTSA)

Abigail Feese (UKY)

Caitlyn York (UKY)

Emilye Garner (UKY)

Kiersten Stryker (High school)

Alex Branch (UKY)

Alyssa Lozano (UKY)