Sanku Dattamudi, Ph.D.

Assistant professor, Soil Science and Agroecology
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Education

2016 Ph.D. in Soil and Environmental Chemistry, Louisiana State University, (LSU) Louisiana, USA
2010 M.Sc. in Soil Microbiology, Punjab Agricultural University, (PAU) Punjab, India
2007 B.Sc. in Agriculture (Soil Science major), Visva Bharati University, (VB) West Bengal, India

Thesis and Dissertation

Dissertation Dattamudi, S. Evaluation of ammonia, greenhouse gas emissions, and characterization of different particulate matter during sugarcane production in Southern Louisiana. 2016. Ph.D. Dissertation, Louisiana State University, 135 pp

Thesis Dattamudi, S. Survival of fecal coliform in wastewater irrigated soil and understanding watershed scale nitrogen transport. 2010. M.Sc. Thesis, Punjab Agricultural University, 78 pp

Employment history

2023 – Present Assistant Professor, Department of Agriculture, Agribusiness, and Environmental Sciences, Texas A&M University – Kingsville (TAMUK), Kingsville, TX

2019 – 2022 Research Scientist, Department of Earth and Environment, Florida International University (FIU), Miami, FL

2018 – 2019 Postdoctoral Research Scientist, Department of Agronomy and Horticulture, University of Nebraska-Lincoln (UNL), Nebraska, NE

2016 – 2018 Postdoctoral Research Scholar, Southeast Environmental Research Center (SERC), Florida International University (FIU), Miami, FL

2010 – 2016 Graduate Research Assistant, School of Plant, Environmental, and Soil Sciences, Louisiana State University (LSU), Baton Rouge, LA

2009 – 2009 Visiting Research Scholar, Department of Agricultural and Biological Engineering (ABE), University of Illinois, Urbana-Champaign (UIUC), IL

Honors and Awards

- Texas A&M University – Kingsville (TAMUK) Outstanding Sponsored Research Award, 2026
- TAMUK College of Agriculture and Natural Resources (AGNR) Junior Research Award, 2026
- TAMUK College of Agriculture and Natural Resources (AGNR) Junior Teaching Award, 2025
- Agronomic Science Foundation (ASF, affiliated with Tri-Society) Soil Judging Travel Award, 2025
- Center for Research Excellence in Science and Technology (CREST) FIU faculty travel grant, 2018

- SERC Earth Educators' Rendezvous award for early career faculty, 2018
- National Association of Geoscience Teachers (NGAT), Activity Review Camp award, 2018
- Florida International University EE Faculty Travel Grant award, 2018
- American Society of Sugarcane Technologists (ASSCT)-Louisiana division fellowship award, 2014
- Air and Waste Management Association (AWMA) graduate student award for excellence in air quality research and study, 2014
- Louisiana Environmental Health Association (LEHA) Frank Dautriel outstanding graduate student award, 2014
- Gamma Sigma Delta Graduate Student Merit Honor Roll award at Louisiana State University, 2014
- School of Plant, Environmental and Soil Sciences (SPESS) graduate student award, 2014 & 2015
- Louisiana State University travel grant award, 2013 & 2014
- Graduate Research Assistantship (USDA-AFRI) at Louisiana State University, 2010 to 2016
- US-India Sandwich Research Program fellow, University of Illinois Urbana-Champaign, 2009

Awards and Academic accomplishments of my graduate students

1.	**Erik Zamora**	a. TAMUK Graduate Student Distinguished Student Award, 2025 b. Outstanding graduate student award in the College of AGNR, 2024 c. Conference of Southern graduate schools' 3MT thesis finalist, Dallas, TX, 2025 d. Winner of TAMUK 3-Minute Thesis (3MT) presentations (First place), 2024 e. Winner of TAMUK 3MT Thesis peoples' choice award, 2024
2.	**Amberly Zaragoza**	a. Outstanding graduate student award in the College of AGNR, 2023 b. Second place at PhD oral competition at ASA-SSSA-CSSA annual meeting, Salt Lake City, UT, 2025 c. First place at graduate student poster competition at SAES annual conference, Mission, TX, 2025
3.	**Mahima Gumadala**	a. Distinguished poster award, Southern ASA meeting, Louisville, KY, 2026 b. Winner of 3MT Thesis peoples' choice award, 2025

Research and scholarly activities

A. Research proposals – funded (PI, Co-PI and Senior Personnel)

	Role	Project information	Funding agency	Total funding	TAMUK Share
1.	PI	Fostering climate-friendly sustainable farming through integration of biochar and cover crops in Texas and Florida Project period: 2024 to 2027	USDA Southern SARE	$399,220	$297,264

2.	PI	Effects of cover crops, organic amendment, and tillage practices on soil water dynamics Project period: 2024 to 2027	Texas Water Development Board (TWDB)	$256,000	$256,000
3.	PI	Developing Soil Carbon Balance (SCB) in a long-term row crop production system Project period: 2024 to 2026	USDA Southern SARE	$21,992	$21,992
4.	PI	Organic farming: A gateway for healthy and sustainable food production Project period: 2024	Greater Texas Foundation (Internal grant)	$2,996	$2,996
5.	PI	The use of cyanobacteria biofertilizer to increase crop productivity, improve soil health, and agricultural sustainability in Florida Project period: 2021 to 2024	USDA Southern SARE	$242,000	
6.	PI	Efficacy of cyanobacteria biofertilizer and two other common organic nutrient sources for snap bean (*Phaseolus vulgaris*) production Project period: 2022	USDA Southern SARE; YES grant	$4,433	
7.	PI	Evaluation of biochar on soil health in an alkaline soil Project period: 2026	USDA Southern SARE; YES grant	$4,994	$4,994
8.	PI	Efficacy of biochar to improve water holding capacity of soil: experiential learning for an undergraduate student Project period: 2025	USDA Southern SARE; YES grant	$4,994	$4,994
9.	PI	Efficacy of organic nutrient sources to improve water holding capacity: An experiential learning for young scholar in agricultural science Project period: 2024	USDA Southern SARE; YES grant	$4,939	$4,939
10.	Co-PI	Strengthening faculty for teaching the next generation of wicked problem solvers Project period: 2024 to 2027	USDA NIFA HEC	$733,343	$348,478
11.	Co-PI	Cross Training on Data Analytic Experience in Agriculture (CODE-AG) Project period: 2023 to 2027	USDA NIFA HSI	$996,251	$195,024
12.	Co-PI	Fostering sustainable organic cotton production in the US through research and outreach on organic regenerative practices Project period: 2023 to 2026	USDA OARI	$3.5 M	$61,455

13.	Senior personnel	CREST Phase II: Center for Research, Education, Application, and technology Transfer Excellence for AI-Driven Agricultural Water Sustainability (CREATE-AI Water)	NSF	$4.99 M	$4.99 M
14.	Co-PI	Expanding natural resources career development program Project period: 2023 to 2024	USDA NRCS	$150,000	$150,000
15.	Co-PI	A partnership between NRCS and TAMUK to provide on-the-job training and employment opportunities with the intent of encouraging aspiring Hispanic students towards pursue NRCS careers Project period: 2024 to 2029	USDA NRCS	$750,000	$750,000

Bibliography of publications

Google Scholar citations: 583 (h-index 12; i10-index 14). ResearchGate Score: 349.4 (h-index 11) (as of Aug 2026)

* PhD graduate student closely worked with; ¶ MSc graduate student worked or working

A. Refereed journal articles (published)

1. Saoli Chanda, **Sanku Dattamudi**, Krishnaswamy Jayachandran, Leonard J Scinto, and Mahadev Bhat. 2024. Application of cyanobacteria as biofertilizer for okra production with a focus on environmental and ecological sustainability. *Environments*, 11(3), 45
2. Bharat Sharma Acharya, Syam Dodla, Jim J Wang, Kiran Pavuluri, Murali Darapuneni, **Sanku Dattamudi,** Bijesh Maharajan, and Gehendra Kharel. Biochar impacts on soil water dynamics – knowns, unknowns, and research directions. 2024. *Biochar*, 6(1), 34.
3. Ariel Freidenreich*, **Sanku Dattamudi**, Yuncong Li, and Krishnaswamy Jayachandran. 2022. Influence of leguminous cover crops on soil chemical and biological properties in a no-till tropical fruit orchard. *Land* 11(6) 932.
4. Ariel Freidenreich*, Saoli Chanda, **Sanku Dattamudi**, and Krishnaswamy Jayachandran. 2022. Effect of glyphosate and carbaryl applications on okra (*Abelmoschus esculentus*) biomass and arbuscular mycorrhizal fungi (AMF) root colonization in organic soil. *Horticulturae* 8(5), 415.
5. **Sanku Dattamudi**, Saoli Chanda, and Leonard J. Scinto. 2021. Microbial respiration and enzyme activity downstream from a phosphorus source in the Everglades, Florida, USA. *Land* 10(7) 696.
6. Maimona Saeed, Noshin Ilyas, Fatima Bibi, Krishnaswamy Jayachandran, **Sanku Dattamudi**, and Muthusamy Govarthanan. 2021. Biodegradation of PAHs by Bacillus marsiflavi, genome analysis and its plant growth promoting potential. *Environmental Pollution*. 292, 118343. https://doi.org/10.1016/j.envpol.2021.118343
7. Havalend E. Steinmuller, Susana L. Stoffella, Rosario Vidales, Michael S. Ross, **Sanku Dattamudi**, and Leonard J. Scinto. 2021. Characterizing hydrologic effects on soil physicochemical variation within tree islands and marshes in the coastal Florida Everglades. *Soil Science Society of America Journal*, 85(4), 1269-1280. https://doi.org/10.1002/saj2.20270

8. Joseph E. Rodrigues, Syam K. Dodla, Jim J. Wang, Guillermo Scaglia, and **Sanku Dattamudi**. 2021. Effects of Biochars and N-Stabilizers on Greenhouse Gas Emissions from a Pasture Field. *Journal of Environmental Management*. 306, 114423. https://doi.org/10.1016/j.jenvman.2021.114423
9. Ariel Freidenreich*, **Sanku Dattamudi**, Yuncong Li, and Krishnaswamy Jayachandran. 2021. Soil respiration and carbon balance under cover crop in a no-till tropical fruit orchard. *Frontiers in Environmental Science* 9:1-8. DOI: 10.3389/fenvs.2021.766638
10. **Sanku Dattamudi,** Prasanta K. Kalita, Saoli Chanda, A.S. Alquwaizany, and Bikkar Singh Sidhu. 2020. Agricultural nitrogen budget for long-term row crop production in a Midwest US watershed. *Agronomy* 10(11), 1622.
11. **Sanku Dattamudi,** Jim J. Wang, Syam K. Dodla, Ronald DeLaune, April Hiscox, Howard Viator, and Changyoon Jeong. 2020. Mass concentration and size distribution of particles released from harvesting and biomass burning of sugarcane. *Agricultural and Environmental Letters* 5(1). e20028.
12. Shagufta Gaffar*, **Sanku Dattamudi**, Amin Rabiei Baboukani, Saoli Chanda, Jeffrey M. Novak, Donald W. Watts, Chunlei Wang, and Krishnaswamy Jayachandran. 2020. Physiochemical characterization of six different biochar feedstocks and their effects on sorption behavior of atrazine in organic rich soil. *Agronomy* 11(4) 716.
13. Ariel Freidenreich*, Brittany Harris, **Sanku Dattamudi*#**, Eric Betancourt, Mariana Santos Reis, and Krishnaswamy Jayachandran. 2020. Effects of prescribed fire on soil properties in a Pine Rockland ecosystem. *Agricultural and Environmental Letters* 5(1). e20026.
14. **Sanku Dattamudi**, Syam K. Dodla, Jim Wang, Sonny Viator, and Ron DeLaune. 2019. Greenhouse Gas Emissions as Influenced by Nitrogen Fertilization and Harvest Residue Management in Sugarcane Production. *Agrosystems, Geosciences, & Environment*, 2 (1), 10 Pp
15. Claudia Lyl. Garcia¶, **Sanku Dattamudi**, Saoli Chanda, and Krishnaswamy Jayachandran. 2019. Effect of salinity stress and microbial inoculations on glomalin production and plant growth parameters of Snap Bean (*Phaseolus vulgaris*). *Agronomy*, 9(9), 545.
16. **Sanku Dattamudi***, Geetika Banta, Bikkar S. Sidhu, Hargopal Singh, and Saoli. Chanda. 2018. Effect of treated sewage water on survival of microbial community and rice production in northwest India. *Acta Scientific Agriculture* 12(2):103-111.
17. **Sanku Dattamudi,** Jim J. Wang, Syam K. Dodla, Allen. Arceneaux, and H P Viator. 2016. Effect of nitrogen fertilization and residue management practices on ammonia emissions from subtropical sugarcane production. *Atmospheric Environment* 139: 122-130.
18. Jim J. Wang, Syam K. Dodla, Sonny Viator, Manoch Kongchum, Stephen Harrison, **Sanku D. Mudi**, Shuai Liu, and Zhou Tian. 2013. Agricultural field management practices and greenhouse gas emissions from Louisiana soils. *Louisiana Agriculture*, Spring edition, 9 pp.

B. Refereed journal articles (under review/in preparation)

19. James Russell, **Sanku Dattamudi**, Ambrose O. Anoruo, Tushar Sinha, Shad D. Nelson and Benjamin L. Turner. Sociohydrologic analysis reveals unintended trade-offs among stakeholders: a case study from the Lower Rio Grande Valley, Texas, USA. Submitted to *Journal of the American Water Resources Association* (under review). 2026
20. Erik Zamora¶, Jamie foster, Joshua McGinty and **Sanku Dattamudi.** Effect of cover crops and tillage practices on crop production and soil health in a long-term research field. Target journal: *Agronomy*

21. **Sanku Dattamudi,** Jim J. Wang, Syam K. Dodla, A. Arceneaux and R DeLaune. Physiochemical characterization of smoke and particles released during sugarcane harvesting in Louisiana. Target journal: *Journal of Hazardous Materials*
22. **Sanku Dattamudi,** Saoli Chanda, Krishnaswamy Jayachandran. Efficacy of cyanobacteria biofertilizer for sustainable tomato production and soil health improvement. Target journal: *Frontiers in Environmental Science*
23. **Sanku Dattamudi** and Saoli Chanda, and Krishnaswamy Jayachandran. Warm season perennial grasses and carbon accumulation in the soil: a review. Target journal: *GCB Bioenegry*

C. Technical bulletin/project report

24. Krishnaswamy Jayachandran, **Sanku Dattamudi**, Saoli Chanda, Mahadev Bhat, and Leonard Scinto. 2025. Application of cyanobacteria as biofertilizer for okra production in Florida. Final project report. Submitted to the USDA Southern SARE. 84 pp
25. **Sanku Dattamudi**, Saoli Chanda, Krishnaswamy Jayachandran, Mahadev Bhat, and Leonard Scinto. 2022. Application of cyanobacteria as biofertilizer for okra production in Florida. Annual report. Submitted to the USDA Southern SARE. 32 pp.
26. John S. Kominoski, Evelyn Gaiser, Leonard Scinto, Joel Trexler, Saoli Chanda, Sean Charles, **Sanku Dattamudi**, Diana Johnson, Michael Kline, Shishir Sarker, Franco Tobias, Mary Zeller. Assessing Near-Field and Landscape Scale Ecological Effects of the Modified Water Deliveries and Comprehensive Everglades Restoration Plan Projects in Northeast Shark River Slough (NESS), Everglades National Park. *Technical Report,* Task agreement # P14AC01639, 78 pp
27. Mike Ross, Jack Meeder, Leonard J. Scinto, Jay Sah, Susana Stoffella, Himadri Biswas, Sean Charles and **Sanku Dattamudi**. 2018. Ecosystem dynamics in the White Zone: history, drivers, and restoration implications. *Annual report*, Task agreement # P15AC01625, Submitted to SFNRS (Everglades and Dry Tortugas National Parks), 72 pp
28. Leonard J. Scinto, Evelyn Gaiser, Daniel Gann, Jennifer Richards, Joel Trexler, and **Sanku Dattamudi**. 2017. Assessing near-field and landscape scale ecological effects of the modified water deliveries and comprehensive Everglade's restoration plan projects in Northeast Shark River Slough, everglades National Park. *Technical Report,* Task agreement # P16AC00032, Everglades National Park. 75 pp

D. Non-refereed journal articles (Extension articles/News/Media reports)

29. Saoli Chanda, **Sanku Dattamudi** and Krishnaswamy Jayachandran. Water pollutant could be soil savior. *FIU News*, March, 2024.
30. Saoli Chanda, Sri Madhabushi, **Sanku Dattamudi** and Krishnaswamy Jayachandran. Mentoring the next generation of scientists. *USDA Southern SARE Mentoring news, August, 2023*. https://southern.sare.org/news/mentoring-the-next-generation-of-scientists/
31. **Sanku Dattamudi,** Saoli Chanda, Krishnaswamy Jayachandran, Mahadev Bhat and Leonard Scinto. Exploring algal bloom as biofertilizer in vegetable production. *USDA Southern SARE news, August, 2023.* https://southern.sare.org/news/exploring-algal-blooms-as-biofertilizer-in-vegetable-production/
32. **Dattamudi et al.** What kind of particles are released from harvesting and burning sugarcane? *CSA News. October, 2020*. Access online: *https://acsess.onlinelibrary.wiley.com/doi/epdf/10.1002/csan.20299*

33. Ariel Freidenreich, Brittany Harris, **Sanku Dattamudi**, and Krishnaswamy Jayachandran. A little fire did a lot of good for microbes in FIU's Nature Preserve. *FIU News. September, 2020.*
34. **Sanku Dattamudi,** Jim Wang, and Syam Dodla. Sugarcane production practices influence greenhouse gas emissions. *CSA News. October, 2019*
35. Claudia Garcia, **Sanku Dattamudi,** Saoli Chanda, and Krishnaswamy Jayachandran. Oh, snap: Bacteria, fungus combo can help crops fight salty conditions. *FIU News. December, 2019.*
36. Ariel Freidenreich, **Sanku Dattamudi**, Yuncong Li, and Krishnaswamy Jayachandran. Star fruit could be the new "STAR" of Florida Agriculture. *SSSA News. December, 2019.*

E. Conference poster/Abstract/Oral presentations in National/International meetings

E1. Teaching and mentoring conferences

1. **Sanku Dattamudi**, Shad D. Nelson, Erik Zamora, Amberly Zaragoza, Saoli Chanda, and Steven Chumbley. Developing career pathways for agricultural students through soil judging. NACTA conference, 2026, Starkville, MS, USA.
2. Saoli Chanda, **Sanku Dattamudi**, and Krishnaswamy Jayachandran. Early undergraduate research through the USDA YES program in soil science. NACTA conference, 2026, Starkville, MS, USA.

E2. Research conferences

1. **Sanku Dattamudi**, Saoli Chanda, Susnigdha Sengupta, Mahima Gumadala, Belinda Arnero and Greta Schuster. Effects of cover crops and biochar on vegetable production and soil carbon dynamics in Texas. 2026, Portland, OR, USA
2. Francisco J Trevino, Saoli Chanda, and **Sanku Dattamudi**. Effects of biochar and other organic amendments on vegetable production and soil water holding capacity. 2026, Portland, OR, USA
3. Susnigdha Sengupta, Saoli Chanda, Mahima Gumadala, Belinda Arnero, Benjamin L. Turner, and **Sanku Dattamudi**. Effect of agricultural land use practices on soil water dynamics in dryland farming systems. 2026, Portland, OR, USA
4. Belinda Arnero, Saoli Chanda, Tonoy K. Das, Krishnaswamy Jayachandran, and **Sanku Dattamudi**. Effects of cyanobacteria biofertilizer on vegetable production and soil health in Texas. 2026, Portland, OR, USA
5. Mahima Gumadala, Saoli Chanda, Shad D. Nelson, Greta Schuster, Anthony D Falk, and **Sanku Dattamudi**. Role of secondary metabolites to alleviate salinity stress in seed-primed tomato. 2026, Portland, OR, USA
6. Mahima Gumadala, Saoli Chanda, Shad D. Nelson, Greta Schuster, Anthony D Falk, and **Sanku Dattamudi**. Evaluation of seed priming techniques to improve salinity tolerance and water uptake in tomato under south Texas conditions. 2026, Portland, OR, USA
7. **Sanku Dattamudi**, Saoli Chanda, and Francisco Trevino. Influence of biochar and nutrient inputs on vegetable yield and soil quality. 2026, Louisville, KY, USA
8. Belinda Arnero, **Sanku Dattamudi**, Shad D. Nelson, Consuelo Donato, and Saoli Chanda. Effects of nitrogen source on vegetable production and soil water properties. 2026, Louisville, KY, USA
9. Mahima Gumadala, Saoli Chanda, **Sanku Dattamudi**, and Shad D. Nelson. Assessing seed priming strategies to enhance water uptake in plants exposed to salt stress. Louisville, KY, USA

10. **Sanku Dattamudi**, Saoli Chanda, Francisco Trevino, Erik Zamora, Greta Schuster and Benjamin Turner. Effects of biochar and nutrient sources on vegetable production and soil health improvement. 2025, Salt Lake City, UT, USA
11. Erik Zamora, **Sanku Dattamudi**, JL Foster Malone, Joshua McGinty, Saoli Chanda, Ariel Freidenreich, and Shad D. Nelson. Assessing soil carbon balance in a long-term cotton-sorghum cropping system in South Texas. 2025, Salt Lake City, UT, USA
12. Erik Zamora, **Sanku Dattamudi**, JL Foster Malone, Debankur Sanyal, G Schuster, Joshua McGinty, Saoli Chanda, and Shad D. Nelson. Soil health and sustainability responses to cover crop mixtures and tillage practices in a long-term research field. 2025, Salt Lake City, UT, USA
13. Saoli Chanda, Mahima Gumadala, and **Sanku Dattamudi**. Seed priming: A potential solution to address abiotic stress in plants. 2025, Salt Lake City, UT, USA
14. Amberly L. Zaragoza, Shad Nelson, **Sanku Dattamudi**, and Benjamin Turner. Reducing environmental impacts of slaughterhouse waste: the utilization of cattle paunch on grain sorghum production. 2025, Salt Lake City, UT, USA
15. Jazmin Locke, Saoli Chanda, **Sanku Dattamudi**, and Krishnaswamy Jayachandran. Assessing cyanobacteria-derived biofertilizer effects on okra production and soil fertility compared to other organic nutrient sources. 2025, Salt Lake City, UT, USA
16. Yuxia Huang, Mahendra Bhandari, Sushil Paudyal, Zheng Wei, Jose Baca, Xavier Gonzales, **Sanku Dattamudi**. CODE-AG: A Multidisciplinary Framework for Digital Agriculture Education. 2025, New Orleans, LA, USA
17. Amberly L. Zaragoza, Shad Nelson, **Sanku Dattamudi**, and Benjamin Turner. Variable application rates of slaughterhouse by-product waste on grain sorghum (*Sorghum bicolor*) growth. 2025, Irving, TX, USA
18. Erik Zamora, **Sanku Dattamudi**, JL Foster Malone, Debankur Sanyal, G Schuster, Joshua McGinty and Satya Vurranki. Effect of cover crop mixtures and tillage practices on soil health and agricultural sustainability in a long-term research field. 2024, San Antonio, TX, USA.
19. Amberly Zaragoza, **Sanku Dattamudi**, D Parker, Benjamin L. Turner, Shad Nelson, and Greta Schuster. Composted cattle paunch effects on soil and water management in South Texas. 2024, San Antonio, TX, USA
20. **Sanku Dattamudi**, Saoli Chanda and Krishnaswamy Jayachandran. Comparative analysis of various organic nutrient sources for okra production. 2024, Atlanta, GA, USA.
21. Erik Zamora, **Sanku Dattamudi**, G Schuster, and JL Foster Malone. Effect of cover crop mixtures on soil health and agricultural sustainability in South Texas. 2024, Atlanta, GA
22. VSVG Naresh, Sankar Ramasamy and **Sanku Dattamudi**. Effect of silicon application on physiological parameters and nutrient uptake in rice (*Oryza sativa* L.). 2024, Atlanta, GA
23. **Sanku Dattamudi**, Saoli Chanda, Krishnaswamy Jayachandran, Mahadev Bhat, and Leonard J. Scinto. Efficacy of cyanobacteria biofertilizer for sustainable tomato production. 2023, St. Louis, MO, USA.
24. Erik Zamora, **Sanku Dattamudi**, and JL Foster Malone. Effect of Land Management and Cover Crop Mixtures on Soil Physicochemical Properties in a Long-Term Research Field. 2023, St. Louis, MO, USA
25. Amberly Zaragoza, **Sanku Dattamudi**, D Parker, Benjamin L. Turner, Shad Nelson, and Greta Schuster. Evaluation of Soil Improvement Potential Via Application on Cattle Paunch in South Texas Dryland. 2023, St. Louis, MO, USA

26. **Sanku Dattamudi**, Saoli Chanda, and Krishnaswamy Jayachandran. Application of cyanobacteria as biofertilizer for producing okra and improving ecological sustainability in Florida, USA. 2023. Waikoloa Beach, HI, USA.
27. **Sanku Dattamudi**, Saoli Chanda, Krishnaswamy Jayachandran, Leonard J Scinto, and Mahadev Bhat. Application of cyanobacteria as biofertilizer to increase vegetable production and soil health improvement in South Florida. July 27, 2021, Webinar, National Algae Association (NAA) - Virtual
28. Ariel Freidenreich, **Sanku Dattamudi**, Yuncong Li, and Krishnaswamy Jayachandran. 2020. Influence of Tropical Leguminous Cover Crops on Soil Chemical and Biological Properties in a No-till Tropical Fruit Orchard, ASA-CSSA-SSSA, Virtual
29. John Kominoski, Evelyn Gaiser, Saoli Chanda, Sean Charles, Diana Johnson, **Sanku Dattamudi**, Shishir Sarker, Leonard Scinto, Franco Tobias, Joel Trexler, and Mary Zeller. How does freshwater restoration change marsh ecosystem biogeochemistry?: a northeast shark river slough case study, 2019, Coral Springs, FL, USA
30. **Sanku Dattamudi**, Leonard J Scinto, Saoli Chanda, and Diana Johnson. The effect of recent landscape modifications on ecological parameters of wetlands in Southern Florida, 2018, New Orleans, LA, USA
31. **Sanku Dattamudi**, Leonard J Scinto, Saoli Chanda, Diana Johnson and Carlos Pulido. Potential Effects of Hydrologic Loading on Nutrient Content, Microbial Activity, and Other Ecological Parameters in Northeast Shark River Slough (NESS) of Everglades National Park (ENP), 2017, Tampa Bay, FL, USA
32. Saoli Chanda, Leonard J Scinto, **Sanku Dattamudi**, and Diana Johnson. Spatial Distribution in Everglades Nutrient Budgets and Their Effects on Biogeochemical Processes, 2017, Tampa Bay, FL, USA
33. Carlos Pulido, Leonard J Scinto, **Sanku Dattamudi**, and Saoli Chanda. Effects of dry down and re-hydration on sediment phosphorus storage in Stormwater Treatment Area, ENP, 2017, Tampa Bay, FL, USA
34. Alex Crow, **Sanku Dattamudi**, Leonard J Scinto, Saoli Chanda, and Diana Johnson. Evaluation of microbial respiration and enzyme activity downstream in the North-East Shark River Slough, 2017, MMC, Florida International University, Miami, FL, USA
35. **Sanku Dattamudi**, Jim J. Wang, Syam K. Dodla, Howard Viator, Ronald DeLaune, and April Hiscox. Physio-chemical characterization of particles emitted from sugarcane harvesting operations in Louisiana, USA, 2016, Phoenix, AZ, USA
36. **Sanku Datta Mudi**, Jim J. Wang, and Syam Dodla. Micrometeorological analysis of diurnal ammonia emissions from subtropical sugarcane production, 2014, Long Beach, CA, USA
37. **Sanku Datta Mudi**, Jim J. Wang, Syam K. Dodla, and A. Arceneaux. Impact of different nitrogen fertilizers and residue management schemes on ammonia volatilization from sugarcane production in Louisiana, 2013, Tampa Bay, FL, USA
38. **Sanku Datta Mudi**, Jim J. Wang, Syam K. Dodla, N. Tafti, and Howard Viator. Effect of residue management and nitrogen fertilization on emissions of different greenhouse gases from subtropical sugarcane production, 2013, Tampa Bay, FL, USA
39. Shuai Liu, Jim J. Wang, Zhou Tian, Stephen A. Harrison, and **Sanku Datta Mudi**. Effect of different nitrogen fertilization on ammonia and greenhouse gas emissions from a sub-tropical wheat field, 2013, Tampa Bay, FL, USA
40. Zhou Tian, Jim J. Wang, Shuai Liu, Gerald O. Myers, Zengqiang Zhang, and **Sanku Datta Mudi**. Effect of application of coated urea and NBPT urease inhibitor on greenhouse gas emissions in cotton production, 2013, Tampa Bay, FL, USA

41. Syam Dodla, Jim Wang, Changyoon Jeong, **Sanku Datta Mudi**, Ronald DeLaune, Sonny Viator, April Hiscox, Ronald Sheffield, and Thomas Hymel. Effect of nitrogen fertilization, harvesting, residue management practices on greenhouse gas, ammonia, and particulate matter emissions in sugarcane production, 2011, San Antanio, TX, USA
42. **Sanku Datta Mudi**, Prasanta Kalita, and Bikkar Singh Sidhu. Quantifying biological properties of wastewater and understanding watershed scale N transport, 2009, CSSRI, Karnal, India

F. Presentations (abstract/oral/poster) at Local Conferences

43. **Sanku Dattamudi**, Saoli Chanda, Krishnaswamy Jayachandran, and Belinda Arnero. Algae based biofertilizer for sustainable crop production and soil health improvement. 2026, Corpus Christi, TX
44. Belinda Arnero, Shad D. Nelson, Consuelo Donato, Saoli Chanda, and **Sanku Dattamudi**. Influence of organic and inorganic nutrient sources on radish growth and soil water dynamics. 2026, Mission, TX.
45. Mahima Gumadala, **Sanku Dattamudi**, and Saoli Chanda. A pre-sowing strategy for salinity-prone drylands: evaluating seed priming effects on tomato growth. 2026, Mission, TX.
46. Dakota R. Moberg, Ashley M. Tanner, Evan P. Tanner, and **Sanku Dattamudi**. Weather whiplash reshapes soil microbial communities in the Edwards Plateau. 2026, Galveston, TX.
47. Dakota R. Moberg, Ashley M. Tanner, Evan P. Tanner, **Sanku Dattamudi**, and Anthony Falk. Disentangling the ecological roles of Ashe juniper (*Juniperus ashei*) through an ecosystem multifunctionality framework. 2025, Alpine, TX.
48. Joe Anthony Delagarza, Elena Gonzales, Zechariah Randall, Guillermo Flores, Joseph Ontiveros, Steven Mcllawain, Morgan Bishop, Arianna Arevalo, Susan Hall, Veronica Benitez, Herbert Magobwe, **Sanku Dattamudi**, and Benjamin Turner. Exploring ecosystem indicator responses to long-term management of loamy agricultural soils in South Texas. 2025, Alpine, TX.
49. Nadia D Dworaczyk, Faeqa Mohsin, Deepal Loura, Muthu V. Bagavathiannan, and **Sanku Dattamudi**. Weed management strategies in Organic Cotton production: An experiential learning in summer for an undergraduate student at College Station, TX. 2025, Mission, TX.
50. Amberly L. Zaragoza, Shad Nelson, **Sanku Dattamudi**, and Benjamin Turner. Growth performance of grain sorghum and the impact on soil due to various cattle paunch fertilizer rates. 2025. Kingsville, TX.
51. Amberly L. Zaragoza, Shad Nelson, **Sanku Dattamudi**, and Benjamin Turner. Impact of slaughterhouse waste application on the growth and yield of grain sorghum in a greenhouse environment. 2025. Kingsville, TX.
52. Amberly L. Zaragoza, Shad Nelson, **Sanku Dattamudi**, and Benjamin Turner. Assessing the benefits of cattle paunch in grain sorghum cultivation: a greenhouse study. 2025. Kingsville, TX.
53. Amberly L. Zaragoza, Shad Nelson, **Sanku Dattamudi**, and Benjamin Turner. *Sorghum bicolor* growth response to various rates of cattle paunch: a greenhouse study. 2025, Mission, TX.
54. Erik Zamora, Satya Vurranki, JL Foster Malone, and **Sanku Dattamudi**. Developing a Soil Carbon Balance in a Long-term row crop production system in South Texas. 2025, Mission, TX.
55. Amberly L. Zaragoza, Shad Nelson, **Sanku Dattamudi**, and Benjamin Turner. Possible growth improvement in grain sorghum through application of slaughterhouse waste. 2025, College Station, TX.

56. Joe Anthony Delagarza, Morgan Bishop, Arianna Arevalo, Susan Hall, Veronica Benitez, Herbert Magobw, **Sanku Dattamudi**, and Benjamin Turner. Linking Hydrologic Functions to Soil Health Indicators in Loamy Agricultural Soils of South Texas. 2025, Mission, TX.
57. Amberly L. Zaragoza, **Sanku Dattamudi**, David Parker, Benjamin Turner, and Shad Nelson. Soil and water conservation under cattle paunch application to improve soil physiochemical properties in South Texas. 2024. Mayaguez, Puerto Rico.
58. Erik Zamora, **Sanku Dattamudi**, JL Foster Malone, Debankur Sanyal, and Greta Schuster. Analysis of land management practices on soil health and agricultural sustainability in South Texas. 2024, South Padre Island, TX
59. VSVG Naresh, Sankar Ramasamy and **Sanku Dattamudi**. Effect of silicon application on growth and yield parameters of rice (*Oryza sativa* L.). 2024, South Padre Island, TX
60. Erik Zamora, Satya Vurranki, Julianna Leal, **Sanku Dattamudi**, Saoli Chanda, and Krishnaswamy Jayachandran. Efficacy of organic nutrient sources to improve soil water holding capacity (WHC) during radish production. 2024, South Padre Island, TX
61. Yuxia Huang, Mahendra Bhandari, Sushil Paudyal, **Sanku Dattamudi**, Jose Baca, Wei Zhang, and Xavier Gonzales. Cross-Disciplinary Mentoring for Undergraduates: Data Analytics in Agriculture. 2024. College Station, TX.

G. Presentations (abstract/oral/poster) at TAMUK campus

62. Susnigdha Sengupta, Mahima Goud Gumadala, Belinda Arnero, Saoli Chanda and **Sanku Dattamudi**. Effects of Winter Cover Crops and Biochar on Greenhouse Gas Emissions: A Climate-Friendly Farming Approach. Research and Innovation Day, April 2026, Kingsville, TX, USA
63. Mahima Gumadala, Saoli Chanda, **Sanku Dattamudi**, Shad D. Nelson and Greta Schuster. Assessing seed priming strategies to improve plant water uptake and growth in salt stress. Research and Innovation Day, April 2026, Kingsville, TX, USA
64. **Sanku Dattamudi**, Saoli Chanda, Krishnaswamy Jaychandran, and Belinda Arnero. Algae based biofertilizer for sustainable crop production and soil health improvement. Research and Innovation Day, April 2026, Kingsville, TX, USA
65. Zachary Scott**, Faeqa Mohsin, Deepak Loura, Muthu V. Bagavathiannan, and **Sanku Dattamudi**. Weed management programs for organic cotton. Undergraduate Career Experience, Oct, 2025.
66. Francisco Trevino**, Erik Zamora, Mahima Gumadala, Saoli Chanda and **Sanku Dattamudi**. Efficacy of biochar to improve physiological parameters of vegetable crop: experiential summer learning for an undergraduate student. Undergraduate Career Experience, Oct, 2025.
67. Erik Zamora*, **Sanku Dattamudi**, Greta Schuster, Jamie Foster, Joshua McGinty and Debankur Sanyal. Effect of sustainable agriculture practices on soil water properties. CREST Sustainable Water Use (C-SWU), April 2025.
68. Amberly Zaragoza, **Sanku Dattamudi**, Benjamin Turner and Shad Nelson. Assessing the benefits of cattle paunch in grain sorghum cultivation: a greenhouse study. CREST Sustainable Water Use (C-SWU), April, 2025.

Teaching and Mentoring

List of courses teaching/taught

Teaching Certification

1. The Association of College and University Educators (ACUE) certification in Effective Teaching, 2026 (duration: August 2025 to May 2026)
2. Distance Education Certificate for Online Teaching TAMUK, 2025 (duration: 8-weeks in Fall 2025)

A. Texas A&M University – Kingsville (TAMUK), Kingsville, TX

1.	Principles of Soil Science (PLSS 3410) [3-2] (Lecture; MWF 9:00 – 9:50 am) and 3 lab sessions each for two hours	Spring 23, Fall 23, Spring 24, Fall 24, Spring 25, Fall 25, Spring 26, Fall 26
2.	Soil Health and Productivity (PLSS 4329) [2-2] (Lecture; MW 11:00 – 11:50 am) and one lab session for two hours	Fall 23, Fall 24, Fall 25, Fall 26
3.	Advanced Soil Health and Productivity (PLSS 5390) [2-2] Cross listed with PLSS 4329	Fall 23, Fall 24, Fall 25
4.	Agroecology and Sustainable Soil Management (PLSS 5390) [3-0]	Spring 24, Spring 25, Spring 26
5.	Agroecology (PLSS 4390) [3-0] Cross listed with PLSS 5390	Spring 24, Spring 25
6.	Soil Formation and Classification (PLSS 3320) [2-2]	Spring 26

B. Florida International University (FIU), Miami, FL

A. Spring semester 2022, 2021, 2020

1. Soil and Ecosystems/Advanced Soil Resources Analysis (EVR 4592) – Teaching assistant

B. Fall semester 2019, 2020, 2021

Agroecology and Ecological Agriculture EVR 4272/AGR 6255 – Teaching assistant

C. University of Nebraska Lincoln (UNL), Lincoln, NE

Fall semester 2018

1. Applied Soil Physics (AGRO 879) – Teaching assistant
2. Soil Management (AGRO 269) – Teaching assistant

Invited speaker/Guest lecture

- Guest lecture – Cyanobacteria biofertilizer: an excellent alternative to chemical fertilizers, EVEN 6345 (Environmental Sustainability and Resilience); March, 2026
- Invited speaker – Soil fertility and forage production at South Texas Nutritional Monitoring Workshop, CKWRI [Oct, 2025]
- Guest lecture – Forage production: soil fertility in Forage production, evaluation and utilization, ANSC 3307 [Sept, 2025]

- Invited speaker – Efficacy of cyanobacteria biofertilizer on crop production and soil health improvement at Minnesota State University, Mankato [March 2025]
- Guest speaker – Career in Soil Science at Visva Bharati University, India [July 2024]
- Guest speaker – Environmental Engineering Department at TAMUK [Feb 2024]
- Invited talk – Cover Crops and Soil Health at Soil Health Workshop by Kleberg-Kenedy SWCD [March 2024]
- Guest lecture – General Plant Science (PLSS 1407) at TAMUK [two classes, Spring 2023]
- Guest speaker – Agriculture around the Globe: US perspective at Visva Bharati University, India [Feb, 2023]
- Invited speaker – 'Introduction to Soil Chemistry' (CHM 1084) at FGCU: Spring 2022 [total number of students: 35 to 40]
- Scientific Reviewer of NAGT Activity Review Camp (20 reviews) for early career faculty, 2018

Coach of the TAMUK Soil Judging Team

- Regional Contests (Region IV affiliated with Tri-society)
  - 3rd place in the team-judging pit hosted by Texas Tech University, Lubbock, TX, 2023
  - 10th individual place (out of 50 contestants) in the regional soil judging contest hosted by Texas A&M University, College Station, TX, 2024
  - 15th and 16th individual places (out of 54 contestants) in the regional soil judging contest hosted by the University of Arkansas, Fayetteville, AR, 2025
- NACTA Contests
  - Participant, NACTA contest hosted by Modesto Junior College, Modesto, CA, 2023

Mentoring and advising students at TAMUK

A. Graduate students – thesis/project (major advisor)

Name of the student	Thesis or project title	Anticipated graduation
1. Erik Zamora	Effects of Land Management Practices and Cover Crop Mixtures on Soil Physiochemical Properties in a Long-Term Research Field	Graduated Aug, 2025
2. Mahima Goud Gumadala	Efficacy of seed hardening methods to mitigate soil salinity stress in agricultural crops in Texas	Summer, 2026
3. Belinda Arnero	Effect of cyanobacteria biofertilizer on vegetable production in problematic soils	Spring, 2027
4. Susnigdha Sengupta	Effect of cover crops, organic amendments and tillage practices on soil water dynamics	Fall, 2027
5. Nikhil Kaparthi	Tentative title: Cover crops and biochar on soil health	
6. Molly Brown	Tentative title: Phytoremediation of saline soils	
7. Mudderaboina Rohana	Title: TBD	

B. Graduate students – thesis/project (co-chair or committee member)

Name of the student	Thesis or project title	Anticipated graduation
1. James Russell*	Surface water system dynamics: A case study in the Lower Rio Grande Valley, Texas	Graduated Dec, 2023
2. Amberly Zaragoza¶	Evaluation of Cattle Paunch on Soil Properties and Forage Production in South Texas	Graduated May, 2025
3. Rahul Boppani¶	Effect of peanut intercropping on the growth and development of pepper (project)	Graduated May, 2023
4. Keerthana Daffodil Bhattu	Hydroponic fodder production system: a project guide for sustainable livestock management	Summer, 2026
4. Dakota R Moberg (PhD student)*	Allelopathic effects of Ashe juniper on Texas madrone and escarpment live oak (tentative)	

* *Committee member;* ¶ *Co-chair*

C. Graduate students – course only (Chair, Co-chair or Committee member)

Name of the student	Anticipated graduation/graduated
1. Ravi Krishna	May, 2023
2. Praveen Kamas	May, 2023
3. Sai Naveen	May, 2023
4. Abdul Razak Khan Patan	May, 2024
5. Sunanda K Andalamala	May, 2024
6. Rohit Kumar Reddy Kalluri	May, 2024
7. Salmohan Reddy Yeruva	May, 2024
8. Leticia Robles	May, 2024
9. Akhil Chowdary Talluri	Aug, 2024
10. Vamsikrishna Gopisetty	Dec, 2024
11. Vivek Reddy Kotha	Dec, 2024
12. Nageswara Rao Vadlamudi	May, 2025
13. Venkata Pavan Kumar Rayala	May, 2025
14. Harikrishna Burla	May, 2025
15. Srikanth Korra	May, 2025
16. Satya Venkata Gopinaresh	May, 2025

D. **Undergraduate students – projects and internships**

Name of the student	Project duration	Funding agency, Project type and Title

1.	Juliana Leal	July 2024 – Sept 2024	USDA Southern SARE YES grant **Project title**: Efficacy of organic nutrient sources to improve soil water holding capacity (WHC) during radish production
2.	Belinda Arnero	Sept 2024 – May 2025	NSF CREST (SWU) **Internship title**: Effects of nitrogen sources on vegetable growth and soil water properties
3.	Nadia Dworaczyk	a) May 2024 – August 2024 b) Sept 2025 – May 2026	a) USDA NIFA OREI b) NSF CREST **Internship title:** Weed management strategies in organic cotton production in High plains of Texas
4.	Paul Tre Kendall	Sept 2024 – Dec 2024	USDA HSI grant **Project title:** Effect of biochar on crop growth and soil health
5.	Zachary Scott	a) May 2025 – August 2025 b) Sept 2025 – May 2026	a) USDA NIFA OREI b) USDA HSI grant **Internship title:** Weed management programs in organic cotton production
6.	Francisco Trevino	a) May – August, 2025 b) Sept 2025 – May 2026	a) USDA Southern SARE YES grant b) NSF CREST **Project title:** Efficacy of biochar to improve physiological parameters of vegetable crop
7.	Amado Moreno	Sept 2025 – Dec 2025	USDA HSI grant **Project title:** Effect of cover crops on soil health
8.	Reilly J Smith	Sept 2025 – Dec 2025	USDA HSI grant **Project title:** Land management on soil water dynamics
9.	Jake B. Johnston	Feb 2026 – May 2026	USDA HSI grant **Project title:** Biochar and soil microbial interactions
10.	Guadalupe Tocci Blanco	Feb 2026 to May 2026	Southern SARE R an E Grant **Project title:** Cyanobacteria biofertilizer on soil properties
11.	Guillermo Flores	Feb 2026 to May 2026	USDA HSI Grant **Project title:** Cover crop and soil water dynamics
12.	Robert A. Garcia	June 2026 – August 2026	
13.	Alexis Guevara	June 2026 – August, 2026	USDA Southern SARE YES grant **Project title**: Evaluation of biochar on soil health in an alkaline soil
15.	Damian Bernal	June 2026 – July 2026	

Honors contract students

1. Alexandra N Mueller; Fall 2025

2. George H Chaney; Fall 2025
3. Nadia Dworaczyk; Spring 2024
4. Rebekah J. Mcpeek; Spring 2025

C. Other juried activities

Editorial board members (by invitation only)

- Frontiers in Agronomy – Agroecological Cropping Systems
- Pollutants [MDPI] – Topical Advisory Panel member
- Acta Scientific Agriculture
- Journal of Advancement in Plant Science
- Journal of Agriculture and Aquaculture

Grant reviewer

- USDA Southern SARE Graduate student grant – 2021, 2022
- USDA Southern SARE On-Farm Research Grants – 2022
- USDA Southern SARE Research and Education Grants – 2025, 2026

Reviewer for scholarly journals – Reviewed more than 45 articles so far

- Soil Science Society of America Journal (SSSAJ)
- Discover Soil
- Sustainability
- Agriculture
- Agriculture, Ecosystems & Environment
- Applied Science
- Current Pollution Reports Journal
- Journal Agronomy
- Frontiers in Microbiology
- Ecological Engineering
- Wetlands
- Agronomy (MDPI)
- International Journal of Environmental Research and Public Health (MDPI)
- Atmospheric Environment
- Journal of Environmental quality
- Science of The Total Environment
- Acta Scientific Agriculture
- Rangeland Ecology and Management
- Land (MDPI)
- Soil Systems (MDPI)
- Water (MDPI)
- Biocell
- Notulae Botanicae Horti Agrobotanici Cluj-Napoca
- Qeios

Professional Growth and Activities

a. Membership in professional societies

- Soil Science Society of America (SSSA) [more than 11 years]
    a) Soil Chemistry
    b) Soil Fertility and Plant Nutrition
    c) Soils and Environmental Quality
    d) Nutrient Management & Soil & Plant Analysis
- American Society of Agronomy (ASA) [more than 11 years]
    a) Environmental Quality Section
    b) Organic Management Systems
    c) Nutrients and Environmental Quality
    d) Biochar: Agronomic and Environmental Use
- Crop Science Society of America (CSSA) [more than 11 years]
- Ecological Society of America (ESA) [more than 7 years]
- National Association of Geoscience Teachers (NAGT) [more than 7 years]
- Gamma Sigma Delta (The honor society for Agriculture) [lifetime member since 2012]
- North American Colleges and Teachers of Agriculture (NACTA) [more than 2 years]
- Association of Agricultural Scientists of Indian origin (AASIO) [more than 11 years]

Other Professional Activities

A. Hosting Regional (Region IV) Soil Judging Contest in the Fall 2026

The Regional Soil Judging contest for Region IV is generally happened in October (Fall) each year. Region IV (total seven regions in the US) consists of Universities from Arkansas, Mississippi, Texas, Louisiana and Oklahoma. TAMUK is hosting the Region IV Soil Judging in the Fall 2026. Me, Dr. Schuster and my graduate students are working on preparing the soil pits and other things for the contest this year.

B. Hosted Soil Health tour organized by ASA-CSSA-SSSA (Tri-Society), 2024

The Soil Health Tour (*Soil Health, Cover Cropping and Long-Term Research in South Texas Tour*) during Tri-Society annual conference was co-hosted by TAMUK (more can be found here: https://www.acsmeetings.org/tours/). Me, Dr. Schuster and another colleague at TAMUK led in organizing the tour specifically making six soil pits ready (with the help of local NRCS) for the tour.

Certification/license

- Florida Tomato Food Safety Certification (T-Gap)
- National Environmental Laboratory Accreditation Conference (NELAC) certified
- Online Boating Safety Certification approved by NASBLA
- Basic Aviation Safety (A-100) certificate approved by USDA and USDI
- DBHYDRO training certificate (hydrological, meteorological, hydrogeological, & water quality data)
- CPR and First Aid certification from DAN
- Lab Safety Training certificate at Louisiana State University

Extension and Outreach activities/experiences

- Florida International University Agroecology iCATCH manager, 2019-2021
- GrowFest for Hispanic farmers, Growers and Stakeholders, FIU representative, 2019, 2021
- Organizer/Facilitator of Round Table and Webinar for 'Stronger2gether', 2019
- Physical meetings, phone conferences with Underserved Hispanic Farmers in South Florida, 2019
- Collaboration with South Florida Water Management District (SFWMD) and US Army Corps of Engineers (USACE) for wetland ecology management, Everglades
- Nebraska Corn Stakeholders meeting, 2018
- Farmers Field Day (FFD) active participant, Louisiana State University, 2014, 2015

Leadership and Community service

- President, International Student Association (ISA) of Louisiana State University, 2013-2014
- President, International Cultural Center (ICC) of Louisiana State University, 2013-2014
- Vice-President, Graduate Student Association (GSA) of Louisiana State University, 2013-2014
- Active involvement in 'campus life' of Louisiana State University in 2013-2014 academic year
- Treasurer, Baton Rouge Bengali Association (BRBLA), Louisiana, 2010-2014
- Volunteer of Blood Donation camp, American Red Cross at UIUC Urbana main campus, 2009

Judge/selection committee

- Judge for six poster presentations at TAMUK Research and Innovations day in April, 2026
- Judge for poster (total six) presentations at the Southern ASA conference, Louisville, KY, 2026
- Judge for seven poster presentations at TAMUK Research and Innovations day in April, 2025
- Judge for oral (total nine) in Advances in Nutrient Management Oral III, ASA-CSSA-SSSA annual conference, San Antonio, TX, 2024
- Judge for poster (total seven) at Southern ASA conference, Atlanta, GA, 2024
- Judge for posters (total seven) at Tri-society annual conference, St. Louis, MO, 2023
- Judge of Undergraduate Research FIU symposium, 2022
- Judge of Elementary Science Fair, Miami-Dade College, 2019
- Judge of McNair graduate fellowship program oral presentation competition, 2018
- Judge for Graduate Student Scholarly Presentations at FIU, 2018
- Judge for McNair undergraduate fellowship program poster competition, FIU, 2017
- Selection committee members for 3-minute thesis presentation competition at LSU, 2014
- Judge for the Louisiana section '*Envirothon*' competition of high school students, 2014