MARUTHI SRIDHAR BALAJI BHASKAR
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EDUCATION

Aug 2004	**Ph.D. (Forest Resources)** Mississippi State University, Mississippi State, MS. Dissertation Title: *Monitoring spectral reflectance and internal structure of plants during phytoremediation processes of selected heavy metals.*
Oct 2000	**MSc (Soil Science & Agricultural Chemistry)** Acharya N.G. Ranga Agricultural University, Hyderabad, India. Thesis Tile: *Characterization and classification of soils of karimnagar district for land use planning using GIS techniques.*
Sep 1997	**BSc (Agriculture)** Acharya N.G. Ranga Agricultural University, Hyderabad, India.

PROFESSIONAL EXPERIENCE:

Aug 2025 to Present	**Professor,** Department of Earth and Environment, Florida International University, Miami, FL.
Aug 2020 to July 2025	**Associate Professor,** Department of Earth and Environment, Florida International University, Miami, FL.
Aug 2023 to Present	**Graduate Program Director,** Department of Earth and Environment, Florida International University, Miami, FL.
Sept 2017 to Aug 2020	**Associate Professor,** Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX.
Sept 2018 to June 2019	**Fulbright Scholar** -Sub-Saharan Africa, Department of Geomatics and Land Management, Makerere University, Kampala, Uganda.
Sept 2011 to Aug 2017	**Assistant Professor,** Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX.
Sept 2014 to Aug 2020	**Director,** Environmental Toxicology Program, Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX.

June 2013 to Aug 2016 **Visiting Summer Faculty,** Oak Ridge National Lab (ORNL), Oak Ridge, TN.

July 2009 to Sept 2011 **Research Scientist**, Department of Geology, Bowling Green State University, Bowling Green, OH.

July 2004 to June 2009 **Postdoctoral faculty**, Department of Geology, Bowling Green State University, Bowling Green, OH.

Research accomplishments:

- Precision agriculture for soil and water conservation in South Florida.
- Monitoring the land use and land cover changes and environmental contamination trends in the urban watersheds of Houston-Galveston Region.
- Mapping and monitoring the water quality of the Galveston Bay, Texas and Lake Victoria in East Africa.
- Quantify and monitor the landscape level changes on the mercury concentrations at watershed scale.
- Develop geospatial database to map mercury concentration in soil, sediment, water and fish in Tennessee watersheds.
- Quantify the physical and chemical changes of soils in the Lake Erie drainage basin as a result of sewage sludge, dairy and poultry manure applications.
- Monitoring the chemical concentrations in soils and plants through traditional chemical analysis and to map the areas of high chemical concentrations using the satellite imagery.
- Mapping and measuring the algal blooms and other water quality parameters in Lake Erie through traditional analytical methods and also through remote sensing and GIS techniques.
- Mapping the distribution and effects of the Salt cedar (*Tamarix ramosissima*) an invasive plant species along the riparian areas of the Lower Colorado region.

Jan 2001to July 2004 **Graduate Research Associate**, Diagnostic Instrumentation and Analysis Laboratory, Mississippi State University, MS.

Research accomplishments:

- Conducted green house studies using mustard, barley and fern plants for phytoremediation and restoration of the toxic metal contaminated soils.
- Application of remote sensing and spectral reflectance to monitor the heavy metal stress in plants
- Analyzed the As, Cd, Cr, Cs, Sr and Zn accumulation in soils and plants through traditional chemical analysis and microscopy.

July 1999 to Oct 2000 **Seed Production Officer**, Monsanto, India.

Responsibilities:

- To provide leadership for corn and soybean seed production.
- Supervise, evaluate and develop technical ability of field assistants.
- Manage the production research in green house and field environments, conducting the field trials for method and result demonstrations.

Sep 1997 to July 1999 **Graduate Research Associate**, College of Agriculture, Rajendranagar, Hyderabad, India.

RESEARCH EXPERTISE

- Agricultural and Environmental monitoring using Remote Sensing and GIS.
- Land Use and Land Cover change, Global Environmental change detection.
- Imaging Spectrometer and Hyperspectral data acquisition and analysis.
- Monitoring the effects of Heavy metal and Nutrient Pollution on Soil, Plant and Atmosphere.
- Soil Contamination, Remediation and Restoration.

TEACHING EXPERIENCE

Courses taught at Department of Earth and Environment, Florida International University, Miami, FL.

***Courses Developed**

***GLY 5754: Applied Remote Sensing in Earth Sciences** - Graduate level

***GLY 3754: Remote Sensing in the Earth Sciences -** Undergraduate level

***EVR5044: Advanced GIS and Environmental Data Analysis** - Graduate level

***GIS4119: Building Geodatabases and Geoprocessing Tools for Earth and Environmental Data** - Undergraduate level

***EVR5505: Advanced Precision Agriculture and Environmental Sustainability** - Graduate level

***EVR4504: Precision Agriculture and Environmental Sustainability** – Undergraduate level

***EVR1001: Introduction to Environmental Science** - Undergraduate level

Courses taught at Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX.

***Courses Developed**

***GEOL 141: Introduction to Earth**- Undergraduate level

***ES 704: Aquatic Resources and Pollution** - Graduate level

***ES 703: Environmental Science**- Graduate level

***ES 718: Remote Sensing and Image Interpretation** - Graduate level

***ES 720: GIS (Geographic Information Systems) for Environmental science** - Graduate level

***ES 730: Introduction to Remote Sensing and Image Processing** - Graduate level

***ES 919: Environmental Remote Sensing** - Graduate level

***ES 906: Environmental Geology** - Graduate level

***ES 903: General Ecology**- Graduate level

Courses taught at Department of Geology, Bowling Green State University, Bowling Green, OH.

GEOL 680: Biological Remote Sensing-Graduate level

GEOL 440/540: Geological Remote Sensing-Undergraduate/Graduate level

PATENTS

1. **Maruthi Sridhar** BB, Vincent RK. 2014. Method and system for detecting phosphorus in soil from reflected light reflected light. US Patent No. 8,655,601.
2. **Maruthi Sridhar** BB, Vincent RK. 2013. Method and system for detecting copper in soil from reflected light. US Patent No. 8,426,211.
3. **Maruthi Sridhar** BB, Vincent RK. 2013. Method and system for detecting sulfur in soil from reflected light. US Patent No. 8,367,420.
4. Vincent RK, **Maruthi Sridhar BB.** 2011. Methods and apparatus for detecting organic materials and objects from multispectral reflected light. US Patent No. 0024,632 / US Patent No. 8,030,615 / US Patent No. 8,058,617.
5. Vincent RK, **Maruthi Sridhar BB.** 2010. Methods and apparatus for detecting organic materials and objects from multispectral reflected light. US Patent No. 7,767,966.

RESEARCH GRANTS FUNDED ($8.80 Million since 2010, $3.43 Million as PI)
($5.47 Million since 2020 at FIU, $2.67 Million as PI)

1. **Maruthi Sridhar BB. (Co-PI).** Incubating Farms for the Underserved Through Education and Engagement (InFUSEE). 2024-2027, $740,220, USDA-OPPE (Funded).
2. **Maruthi Sridhar BB. (Co-PI).** Comprehensive Experimental Learnings to Promote Climate Resilient Agriculture for Underrepresented Minority Students. 2024-2028, $1,200,000, USDA-HSI (Funded).
3. **Maruthi Sridhar BB. (PI).** Unlock the Power of SHRS Germplasm Collection to Revolutionize Soil Preservation and Enhance Microbiome Support. 2025-2029, $24,480, USDA-ARS-SHRS-NACA (Funded).
4. **Maruthi Sridhar BB. (PI) – Faculty Mentor.** Green Roof Plant Selection for Climate-Resilient Urban Ecosystems in South Florida. 2024. $25,000, Volo Foundation (Funded). Graduate Students Involved: van Oyege, Moses Kiwanuka, Jordan Prats, Priyanka Belbase.
5. **Maruthi Sridhar BB. (PI).** Evaluation of Climate Resilient Urban Agricultural Conservation Practices to Improve Soil Health. 2024-2026. $500,000, USDA-NRCS-FL (Funded).
6. **Maruthi Sridhar BB. (PI).** Comprehensive Agriculture Research Experiential (CARE) Learning Through Precision Agriculture And Conservation Science (PACS). 2023-2027, $399,999, USDA-HSI (Funded).
7. **Maruthi Sridhar BB. (Co-PI).** Building Capacity in Microbiome Innovation for Plant Health, Soil Fertility and Environmental Sustainability. 2023-2027, $1,00.000, USDA-HSI (Funded).
8. **Maruthi Sridhar BB. (PI).** Education and Training Workshop to Promote Urban Agriculture for Food Security and Community Building. 2023-2024. $111,000, USDA-FAS-Cochran Fellowship Program (Funded).

9. **Maruthi Sridhar BB. (PI).** Training and Education for Agricultural Management (TEAM) to promote Soil Health and Crop Productivity in South Africa. 2023-2025. $50,000. USDA-FAS-Scientific Cooperative Research Program (SCRP) (Funded).
10. **Maruthi Sridhar BB. (PI).** Integrated Capacity Building Project to Promote Student Success and Leadership in Sustainable And Precision Agriculture. 2023-2026, $150,000, USDA-NLGCA Grant (Funded).
11. **Maruthi Sridhar BB. (PI).** Demonstration of Crop Rotation and Cover Crop Influence on Urban Agriculture (UA) Farms through Sensor and Geospatial Technologies. 2023-2026, $817,330, USDA-NRCS-CIG Grant (Funded).
12. **Maruthi Sridhar BB. (PI).** Spatial and temporal dynamics of blue carbon ecosystems of South Florida. 2022-2023, $25,000, NASA-FL-Space Grant (Funded).
13. **Maruthi Sridhar BB. (Co-PI).** Building Research, Education, And Leadership for Agriculture and Related Career (bREAL - ARC). 2022-2026, $1,00,000, USDA-HSI (Funded).
14. **Maruthi Sridhar BB. (PI).** Evaluation of High Tunnel Systems on Dragon Fruit Production in South Florida. 2022-2023, $75,000, USDA-NRCS-FL (Funded).
15. **Maruthi Sridhar BB. (Co-PI).** Experiential and Experimental Training for Multicultural Undergraduate Scholars in Agroecology and Natural Resource Sciences at Florida International University. 2022-2026, $600,000, USDA-HSI (Funded).
16. **Maruthi Sridhar BB. (PI).** Excellence in Research: Analyzing the impact of landscape changes on the watershed dynamics of a flood-prone urban region. 2018-2024, $500,000, NSF-EIR-GSS. (Funded - NSF Grant).
17. **Maruthi Sridhar BB. (Co-PI).** Characterization, dynamics and biological impact of indoor airborne dust exposure. 2018-2023, $999,786, NSF-RISE. (Funded - NSF Grant).
18. **Maruthi Sridhar BB. (PI).** Infusion of Geospatial Informatics to Enhance an Undergraduate Biological Science Program. 2016-2020, $399,999, NSF-TIP. (Funded - NSF Grant).
19. **Maruthi Sridhar BB. (PI).** Impact of landscape and environmental changes on the water quality of Galveston Bay, TX. 2016-2017, $20,000, Texas Space Grant, NASA Space Grant Consortium. (Funded).
20. **Maruthi Sridhar BB. (PI).** Spatial and temporal modeling of mercury fate and dynamics in East Tennessee watersheds. 2014-2018, $39,996, Supplemental Grant, NSF-HBCU-UP. (Funded - NSF Grant).
21. **Maruthi Sridhar BB. (PI).** Spatial and temporal modeling of mercury fate and dynamics in East Tennessee watersheds. 2014-2018, $199,999, NSF-HBCU-UP. (Funded - NSF Grant).
22. **Maruthi Sridhar BB. (PI).** Landscape level patterns of mercury contamination and bioaccumulation in East Fork Poplar Creek (EFPC) watershed, 2014-2015, $ 15,000. (Funded - DOE Grant)

23. **Maruthi Sridhar BB. (PI).** Use of a geospatial database and model to map mercury distribution and transport in the East Fork Poplar Creek watershed, Oak Ridge, Tennessee, 2013-2014, $ 15,000. (Funded - DOE Grant)
24. **Maruthi Sridhar BB. (PI).** Monitoring agricultural sewage sludge, 2012-2013, $10,860. (Funded – USDA subcontract through University of Toledo) Sub Award No. 10390057-TSU
25. Vincent RK, **Maruthi Sridhar BB**. Calibration and validation of remote sensing data for the Lower Colorado River Region, 2007-2011, $56,000. (Funded – USBR subcontract through Central State University)
26. Vincent RK, **Maruthi Sridhar BB.** Monitoring agricultural sewage sludge, 2010- 2013, $468,000. (Funded – USDA subcontract through University of Toledo)
27. Vincent RK, **Maruthi Sridhar BB.** Monitoring agricultural sewage sludge, 2009- 2012, $101,765. (Funded – USDA subcontract through University of Toledo)

SKILLS

Instrumental:

***Soil and Plant Chemical Analysis*:** Inductively coupled plasma Optical Emission Spectroscopy (ICP-OES), Microwave Digestion, Atomic Absorption Spectroscopy (AAS), Calorimetry.

***Microscopy*:** Scanning Electron Microscope (SEM), Transmission Electron Microscope (TEM), Light Microscope (LM), Environmental Scanning Electron Microscope (ESEM) EDS-X-ray, Microtome.

Remote Sensing: ASD Spectroradiometer (350-2500 nm), FTIR Spectroradiometer (2-16 μm)

Computer:

***Geospatial Packages*:** ER Mapper, ERDAS, ENVI, Arc GIS.

***Statistical Packages*:** SAS, Minitab, SPSS

PROFESSIONAL HONORS: FELLOWSHIPS AND AWARDS

Fellowships

2023	E. Kika De La Garza Fellowship *from U.S. Department of Agriculture (USDA)*
2014	*Department of Energy (DOE) Visiting Faculty Fellowship for Oak Ridge National Lab, Oak Ridge, TN.*
2013	*Department of Energy (DOE) Visiting Faculty Fellowship for Oak Ridge National Lab, Oak Ridge, TN.*

Awards

2025	*Fulbright Specialist Award*. Award to conduct "Integrating knowledge and skills for water management" with the Environmental Research Centre, Khazar University in Azerbaijan.
2024	*CASE Faculty Research Award.* Recognition for Research Excellence by the Office of College of Arts, Sciences & Education, Florida International University (FIU), Miami, FL.

2023 *Top Scholar Award.* Recognition for Research and Creative Activities in the Category of Established Faculty with Significant Grant (STEM) by the Office of Provost, Florida International University (FIU), Miami, FL.

2018 *Fulbright Scholar Award*. Awarded Fulbright Core US scholar award to conduct research and teaching in Kampala, Uganda.

2018 *Award of Honor*. Awarded first place in faculty oral presentation by the Office of Research, Texas Southern University in Research Week, 2018.

2016 *Award of Honor*. Awarded second place in faculty oral presentation by the Office of Research, Texas Southern University in Research Week, 2016.

2015 *Distinguished Research and Scholarly Activity Award*. Awarded for Outstanding Research and Scholarly Accomplishments in College of Science, Engineering and Technology (COSET) at Texas Southern University (TSU), Houston, TX.

2015 *Award of Appreciation*. Awarded for being the Keynote Speaker at the TSU Research Week- 2015, March 31- April 2, Houston, TX.

2014 *Award of Special Recognition*. Awarded for the poster presentation in 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.

2012 *Award of Honor*. Awarded third place in faculty oral presentation by the Office of Research, Texas Southern University in Research Week, 2012.

2004 *American Association of Scientists of Indian Origin Graduate student recognition Award*. Awarded for outstanding academic and research performance in Environmental and Soil Science.

2004 *Mississippi State University Office of Research's Graduate Student Research Award*. Awarded for Research Excellence.

2004 *Mississippi State University Office of Graduate Studies Graduate Student Recognition Award*. Awarded for Outstanding academic and research performance.

2003 *Society of Wood Science and Technology Best Student Poster Award*. Awarded First place in 46th annual meeting of Society of Wood Science and Technology at Bellevue, WA.

2003 *Battelle Best Graduate Student Research Paper Award*. Awarded First Place in the 7th International Symposium of In Situ and On-site Bioremediation, Orlando, FL.

2003 *Mississippi State University Graduate Student Travel Support Grant*. Awarded to attend Soil Society of America Annual Meetings, Denver, CO. November 2-6, 2003. $ 500

2003 *Battelle Research Institute Graduate Student Travel Support Grant*. Awarded to attend The 7th International Symposium of In Situ and On-site Bioremediation, Orlando, FL. June 2-5, 2003. $ 2000

2001-2004 *Mississippi State University Graduate Research Assistantship*.

1997-2000 *A.N.G.R. Agricultural University, India, Graduate Research Assistantship*.

PUBLICATIONS AND PRESENTATIONS

Publication Summary
Published (169): Book Chapters (5), Refereed Journal Articles (50), Conference Abstracts (114).

BOOK CHAPTERS

1. **Maruthi Sridhar BB**, Han FX, Su Y. 2022. Monitoring the process of phytoremediation of heavy metals using spectral reflectance and remote sensing. In Phytoremediation Technology for the Removal of Heavy Metals and Other Contaminants from Soil and Water, Vineet Kumar, Maulin Shah, Sushil Kumar Shahi (Eds)., ISBN: 9780323857635, Elsevier Inc., Amsterdam, Netherlands.
2. **Maruthi Sridhar BB**, Han FX, Su Y. 2017. Effects of Heavy Metal Accumulation on Plant Internal Structure and Physiological Adaptation. In Phytoremediation of Environmental Pollutants, Ram Chandra (Ed)., ISBN: 9781138062603, CRC-Press, Taylor and Francis group, NY.
3. **Maruthi Sridhar BB**, Han FX, Vincent RK. 2014. Remote sensing of nutrient concentrations of soils and crops in biosolid amended soils. In Applied Manure and Nutrient Chemistry for Sustainable Agriculture and Environment, He Z and Zhang H. (Eds.)., ISBN: 9789401788076, Springer Press, NY.
4. Nagler P, **Maruthi Sridhar BB**, Olsson AD, Glenn E. 2011. Hyperspectral remote sensing tools for quantifying plant litter and invasive species in arid ecosystems. In Hyperspectral Remote Sensing of Vegetation, Thenkabail, P.S., J.G. Lyon, A. Huete. (Eds.), ISBN: 9781439845370, CRC-Press, Taylor and Francis group, NY.
5. **Maruthi Sridhar BB**, Vincent RK. 2010. Mapping and estimation of chemical concentrations in surface soils using LANDSAT TM satellite imagery. In Satellite Communications, Nazzareno Diodato (Ed.), ISBN: 978-953-307-135-0, Sciyo, Available from: http://www.intechopen.com/articles/show/title/mapping-and-estimation-of-chemical-concentrations-in-surface-soils-using-landsat-tm-satellite-imager.

REFEREED JOURNAL PUBLICATIONS

*Graduate Student, #Undergraduate Student, ±High School Student

1. *Kiwanuka M, #Leslie R, Gidudu A, Obubu JP, Melesse A, **Maruthi Sridhar BB**. 2025. Evaluating Eutrophication and Water Clarity in Lake Victoria's Ugandan Coast Using Landsat Data. Sustainability (In Review)
2. *Oyege I, Bhat MG, **Maruthi Sridhar BB**. 2025. Economic Analysis of Vermicompost, Vermicompost Tea, and Azadirachtin Nanopesticides in Sustainable Agriculture System. Agroecology and Sustainable Food Systems (In Review)
3. *Kiwanuka M, *Oyege I, **Maruthi Sridhar BB**. 2025. Spatial and Temporal Dynamics of Water Quality in Lake Okeechobee Using Remote Sensing and its Impact on Environmental Health. Remote Sensing (In Review)
4. *Belbase P, Jayachandran K, **Maruthi Sridhar BB**. 2025 Assessment of Soil and Plant Nutrient Status, Spectral Reflectance, and Growth Performance of Various Dragon Fruit (Pitaya) Species Cultivated under High Tunnel Systems. Soil Systems 9(3), 75. https://doi.org/10.3390/soilsystems9030075

5. Gonzalez PD, Tucker DA, Nageswara-Rao M, Griffith MP, **Balaji Bhaskar MS**, Ross M, Khoddamzadeh AA. 2025. Enhancing Cabbage Palm Resilience to Saltwater Stress through Silicon Applications. Hort Science, 60 (9): 1547-1554. 10.21273/HORTSCI18718-25

6. *Oyege I, **Maruthi Sridhar BB**. 2025. The Role of Vermicompost and Vermicompost Tea in Sustainable Corn Production and Fall Armyworm Suppression. Agriculture, 15(13), 1433; https://doi.org/10.3390/agriculture15131433

7. *Oyege I, **Maruthi Sridhar BB**. 2025. Residual Impacts of Vermicompost-Derived Nutrients on Strawberry-Corn Rotation in South Florida. Environments, 12(5), 171 (In Press) https://doi.org/10.3390/environments12050171 [IF: 3.7]

8. *Oyege I, *Switz A, #Oquendo L, Prasad A, **Balaji Bhaskar MS.** 2025. Green Synthesis of Neem Extract and Neem Oil-Based Azadirachtin Nanopesticides for Fall Armyworm Control and Management. Ecotoxicology and Environmental Safety, 295, 118168 https://doi.org/10.1016/j.ecoenv.2025.118168 [IF: 6.2, Cite Score: 12.1]

9. *Davis FR, **Bhaskar MSB**. 2024. Assessment of Water and Soil Contamination and Land Cover Changes in the Spring Creek Bayou Watershed in Houston, Texas. Environments 2024, 11, 291, https://doi.org/10.3390/environments11120291. [IF: 3.7]

10. #Rey CS. *Oyege I, Shetty KG, Jayachandran K, **Balaji Bhaskar MS**. 2024. Evaluation of Vermicompost, Seaweed, and Algal Fertilizers on Soil Fertility and Plant Production of Sunn Hemp. Soil Systems, 8, 132. https://doi.org/10.3390/soilsystems8040132 [IF: 3.3]

11. *Oyege I, **Balaji Bhaskar MS.** 2024. Evaluation of vermicompost and vermicompost tea application on corn (Zea mays) growth and physiology using optical plant sensors. Journal of Plant Nutrition, 1–19. https://doi.org/10.1080/01904167.2024.2434583 [IF: 2.4]

12. *Oyege I, Sibitenda H, **Maruthi Sridhar BB**. 2024. Deep Learning Applications for Real-Time and Early Detection of Fall Armyworm, African Armyworm, and Maize Stem Borer. Machine Learning with Applications, 18, 100596, ISSN 2666-8270, https://doi.org/10.1016/j.mlwa.2024.100596. [IF: 4.3]

13. #Martin SR, *Oyege I, Shetty KG, Jayachandran K, **Maruthi Sridhar BB**. 2024. Assessing the Salt Tolerance of the Cherry Tomato Under Short-Term Below Ground Saltwater Stress. FIU Undergraduate Research Journal, 2 (1), 137-148. DOI: 10.25148/URJ.020116. https://digitalcommons.fiu.edu/undergraduate-journal/vol2/iss1/14/

14. *Oyege I, Wasswa J, **Maruthi Sridhar BB**, Nkedi-Kizza P, Kasozi1 GN. 2024. Mixed-solvent sorption and moisture-regime-dependent degradation of chlorpyrifos in selected tropical soils. International Journal of Environmental Research: 18:14. https://doi.org/10.1007/s41742-023-00564-4 [IF: 2.8]

15. *Oyege I, **Maruthi Sridhar BB**. 2023. Effects of Vermicompost on Soil and Plant Health and Promoting Sustainable Agriculture. Soil Systems. 2023, 7, 101. https://doi.org/10.3390/soilsystems7040101 [IF: 3.3]

16. *Adedoyin FT, **Maruthi Sridhar BB**, Rosenzweig JA. 2023. Impact of metal exposure on environmentally isolated Serratia marcescens' growth, oxidative-stress resistance, biofilm formation, and proliferation in eukaryotic co-culture models. Ecotoxicology and

Environmental Safety 253:114677. https://doi.org/10.1016/j.ecoenv.2023.114677 [IF: 6.2; Cite Score: 12.1]

17. ±Sridhar N, **Maruthi Sridhar BB**. 2022. Assessment of Spectral Reflectance to Discriminate and Monitor the Mangrove Tree Species in South Florida. International Journal of Advanced Remote Sensing and GIS, 11(1): 3521-3530, https://cloudjl.com/index.php/RemoteSensing/ article/view/57 [IF: 3.0]
18. *Davis FR, **Maruthi Sridhar BB**. 2022. Assessment of water, soil contamination and land cover changes in Sims and Vince Bayou urban watersheds of Houston, Texas. Watershed Ecology and Environment, 4: 73-85. https://doi.org/10.1016/j.wsee.2022.08.002 [IF: 4.6]
19. *Davis FR, *Ali HH, Rosenzweig JA, Vrinceanu D, **Maruthi Sridhar BB**. 2021. Characterization of chemical and bacterial concentrations in floor dust samples in Southeast Texas households. International Journal of Environmental Research and Public Health 18: 12399. https://doi.org/10.3390/ijerph182312399 [IF: 2.16]
20. *Keita D, Shishodia S, **Maruthi Sridhar BB**. 2021. Cytotoxicity analysis of pre- and post-hurricane Harvey soil samples collected from greater Houston bayous. Ecotoxicology and Environmental Safety 223:112600. https://doi.org/10.1016/j.ecoenv.2021.112600 [IF: 6.2, Cite Score: 12.1]
21. *Ali HH, **Maruthi Sridhar BB**, Rosenzweig JA. 2021. Klebsiella spp. isolates from Houston bayous exhibit increased resistance to lead exposure and possess enhanced virulence potential. Science of the Total Environment 789: 147818. https://doi.org/10.1016/j.scitotenv.2021. 147818 0048-9697/ [IF: 8.2]
22. *Adedoyin FT, **Maruthi Sridhar BB**, Rosenzweig JA. 2021. Characterization of bacterial populations in urban and rural Houston watershed soil samples following a flooding event. Frontiers in Environmental Microbiology. 7 (1): 22-34. doi: 10.11648/j.fem.20210701.14 [IF: 4.0]
23. *Ali HH, Rosenzweig JA, Shishodia S, Vrinceanu D, **Maruthi Sridhar BB**. 2021. Assessment of soil and water characteristics and land cover changes along the Tigris River in Baghdad. International Journal of Water Resources and Environmental Engineering 13 (1): 57-63. [IF: 5.96]
24. *Bukunmi-Omidiran T, **Maruthi Sridhar BB**. 2021. Evaluation of spatial and temporal water and soil quality in the Buffalo and Brays Bayou watersheds of Houston, Texas. Remote Sensing Applications: Society and Environment 21: 1-13. 100455. https://doi.org/10.1016/j.rsase.2020.100455. [IF: 3.8]
25. Cashman E, Starry O, **Maruthi Sridhar BB**. 2021. Effects of urbanization on stormwater runoff. https://edx.hydrolearn.org/courses/course-v1:PSU_FIU+001+01/about
26. **Maruthi Sridhar BB**, Johnson J#, Mosuro* A. 2020. Impact of land cover changes on the soil and water quality of Greens Bayou watershed. Water, Air and Soil Pollution, 231 (510): https://doi.org/10.1007/s11270-020-04890-7 [IF: 3.8]
27. **Maruthi Sridhar BB**, Gidudu A. 2020. Effect of landscape changes on the water quality of Murchison Bay. International Journal of Advanced Remote Sensing and GIS. DOI: 10.23953/cloud.ijarsg.474 [IF: 3.0]

28. **Maruthi Sridhar BB**, Rosenzweig J, Shishodia S. 2018. Investigating Sexually Transmitted Disease (STD) ecologies using Geographic Information Systems (GIS). Teaching Issues and Experiments in Ecology, 13 (6): 1-55. http://tiee.esa.org/vol/v13/issues/data_sets/bhaskar/abstract.html

29. Rosenzweig J, **Maruthi Sridhar BB,** Shishodia S. 2018. The impact of using Geographic Information Systems Technology on student's understanding of epidemiology. American Biology Teacher 80 (3): 191-197. [IF: 0.3]

30. *Bhandari S, **Maruthi Sridhar BB**, Wilson BL. 2017. Effect of land cover changes on the sediment and water quality characteristics of Brays Bayou watershed. Water Air & Soil Pollution 228 (9): 336-350. https://doi.org/10.1007/s11270-017-3538-7. [IF: 3.8]

31. **Maruthi Sridhar BB**, Witter JD, Wu C, Spongberg AL, Vincent RK. 2014. Effect of biosolid amendments on the metal and nutrient uptake and spectral characteristics of five vegetable plants. Water Air & Soil Pollution 225: 1-14. [IF: 3.8]

32. Wu C, Spongberg AL, Witter JD, **Maruthi Sridhar BB**. 2012. Transfer of wastewater associated pharmaceuticals and personal care products to crop plants from biosolids treated soil. Ecotoxicology and Environmental Safety 85: 104-109. [IF: 6.2, Cite Score: 12.1]

33. **Maruthi Sridhar BB**, Han FX, Diehl SV, Monts DL, Su Y. 2011. Effect of phytoaccumulation of arsenic and chromium on structural and ultrastructural changes of brake fern (*Pteris vittata*). Brazilian Journal of Plant Physiology 23 (4): 285-293. [IF: 0.3]

34. Tangestani MH, Jaffari L, Vincent RK, **Maruthi Sridhar BB**. 2011. Spectral characterization and ASTER-based lithological mapping of an ophiolite complex: A case study from Neyriz ophiolite, SW Iran. Remote Sensing of Environment 115: 2243-2254. [IF: 12.7]

35. **Maruthi Sridhar BB**, Vincent RK, Roberts SJ, Czajkowski K. 2011. Remote sensing of soybean stress as an indicator of chemical concentration of biosolid amended surface soils. International Journal of Applied Earth Observation and Geoinformation 13: 676-681. [IF: 7.6]

36. **Maruthi Sridhar BB**, Vincent RK, Clapaham WB, Osterberg J, Neale CMU, Watts DR, Sritharan SI. 2010. Mapping saltcedar (*Tamarix ramosissima*) and other riparian and agricultural vegetation in the Lower Colorado River region using multi spectral LandsatTM imagery. GeoCarto International 25 (8): 649-662. [IF: 3.3]

37. **Maruthi Sridhar BB**, Vincent RK. 2009. Mapping and estimation of phosphorus and copper concentrations in fly ash spill area using LANDSAT TM Images. Photogrammetric Engineering and Remote Sensing 75 (9): 1030-1033. [IF: 3.1]

38. **Maruthi Sridhar BB**, Vincent RK, Witter JD, Spongberg AJ. 2009. Mapping the total phosphorus concentration of surface soils using LANDSAT TM data. Science of the Total Environment 47: 2894-2899. [IF: 8.2]

39. Su Y, Han FX, **Maruthi Sridhar BB,** Monts DL. 2008. Phytoextraction and accumulation of mercury in three plant species : Indian mustard (*Brassica juncea*), Beard grass (*Polypogon monspeliensis*), Chinese brake ferns (*Pteris vittata)*. International Journal of Phytoremediation 10: 547-560. [IF: 3.4]

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48. Su Y, Han FX, **Maruthi Sridhar BB,** Monts DL. 2005. Phytotoxicity and phyto accumulation of trivalent and hexavalent chromium in Brake fern. Environmental Toxicology and Chemistry 24 (8): 2019-2026. [IF: 4.2]
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PUBLISHED CONFERENCE PROCEEDINGS

1. **Maruthi Sridhar BB**. 2017. Impact of land use on Hurricane Harvey flooding in Houston-Galveston region. SENRA (Section on Environmental and Natural Resources Administration) News Letter, 12: 3-6.
2. Su Y, **Maruthi Sridhar BB**, Han FX, Monts DL, Diehl SV. 2008. Effect of bioaccumulation of Cs and Sr natural isotopes on foliar structure and plant spectral

reflectance of Indian mustard (*Brassica juncea*). Proceedings of the Waste Management Symposium, Phoenix, AZ.

3. Monts DL, Su Y, Han FX, **Maruthi Sridhar BB,** Waggoner CA, Plodinec MJ. 2005. Investigation of the efficiency of mercury uptake by selected plant species. Proceedings of the 10th International Conference on Environmental Remediation and Radioactive Waste Management, Glasgow, Scotland.
4. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Monitoring structural changes in plants during phytoremediation of Cr and As contaminated soils. Proceedings of Southeastern Microscopic Society Conference, Columbia, SC.
5. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL. 2003. Monitoring the internal structure of barley plants subjected to metal phytoremediation. Proceedings of the 7th International Symposium on In situ and on-site bioremediation, Battelle, 2003, Orlando, FL.
6. Su Y, **Maruthi Sridhar BB,** Monts DL. 2002. Monitoring the process of phytoremediation of Zn and Cd by barley (*Hordeum vulgare*) using visible and near-infrared diffuse reflectance spectrometry. Proceedings of the 9th Biennial International Conference on Nuclear and Hazardous Waste Management, Spectrum, 2002, Reno, NV.

PUBLISHED CONFERENCE ABSTRACTS AND PRESENTATIONS

*Graduate Student; # Undergraduate Student; ±High School Student

1. *Kiwanuka M, Leslie R, **Maruthi Sridhar BB**, 2024. Developing Satellite Remote Sensing Models for Water Quality Monitoring on Lake Victoria Region of Uganda. AGU Fall Meetings, December 9-13, Washington, DC.
2. *Belbase P, **Maruthi Sridhar BB**, 2024. Investigating the Relationship between Soil Macro Nutrient Concentrations obtained by XRF and ICP-MS in Dragon Fruit Plants. AGU Fall Meetings, December 9-13, Washington, DC.
3. *Sridhar N, **Maruthi Sridhar BB**, 2024. Evaluation of Sargassum Seaweed as Biofertilizer for Moringa (*Moringa oleifera*) Plant Production. AGU Fall Meetings, December 9-13, Washington, DC.
4. **Maruthi Sridhar BB,** Nageswara Rao M, Sukhwinder Singh, Shetty K, Jayachandran K, Singh S. 2024. Characterizing and Mapping the Soil Spatial Variability of USDA-Subtropical Horticulture Research Station, Miami, FL. SSSA Annual Meetings, November 10-13, San Antonio, TX.
5. *Oyege I, Switz A, Anamika Prasad, **Maruthi Sridhar BB.** 2024. Green synthesis of Nanoencapsulated Azadirachtin for Fall Armyworm (Spodoptera frugiperda) control and management in corn. SSSA Annual Meetings, November 10-13, San Antonio, TX.
6. **Maruthi Sridhar BB,** Jayachandran J, Khoddamzadeh A, Bhat M, Shetty K. 2024. Comprehensive Agriculture Research Experiential (CARE) Learning Through Precision Agriculture And Conservation Science (PACS). 19th Annual American Association of Hispanics in Higher Education (AAHHE) Conference, St. Louis, MO.
7. **Maruthi Sridhar BB,** Rosenzweig J, Shishodia S. 2023. Evaluation of Land cover dynamics, soil, and water characteristics in the Urban Watersheds of Southeast Texas. AGU Fall Meetings, December 11-15, San Francisco, CA.

8. ±Sridhar N, **Maruthi Sridhar BB**, 2023. Evaluation of Land cover changes in Valley of Flowers National Park using Satellite Imagery. AGU Fall Meetings, December 12-16, San Francisco, CA.
9. *Kiwanuka M, Carbonell R, Bustos A, Gutierrez K, **Maruthi Sridhar BB**, 2023. Spatial and Temporal Dynamics of Water Quality in Lake Okeechobee and its Impact on Environmental Health. International Ocean Colour Science Meeting, November 14-17, St. Petersburg, FL.
10. **Maruthi Sridhar BB**, Gidudu A, Letaru L, Kiwanuka M, 2023. Mapping the water quality characteristics of Lake Victoria using satellite imagery. International Ocean Colour Science Meeting, November 14-17, St. Petersburg, FL.
11. #Martin S, **Maruthi Sridhar BB**, Shetty K, Jayachandran K, Oyege I. 2023. Assessing the Salt Tolerance of Cherry Tomato Varieties Under Short-Term below Ground Saltwater Stress. SSSA Annual Meetings, October 29- November 1, St. Louis, MO.
12. *Oyege I, **Maruthi Sridhar BB**. 2023. Residual Effects of Vermicompost Derived Soil Nutrients on Growth and Physiology of Subsequent Strawberry Rotation after Corn. SSSA Annual Meetings, October 29- November 1, St. Louis, MO.
13. *Belbase P, **Maruthi Sridhar BB**, Jayachandran K, Bhat M. 2023. Comparative Evaluation of Dragon Fruit Performance in High Tunnel and Field Environments in South Florida. SSSA Annual Meetings, October 29- November 1, St. Louis, MO.
14. **Maruthi Sridhar BB**, Oyege I, Prats J, Yuvaraj D, Jayachandran K. 2023. Precision Conservation Agriculture Mapping and Monitoring for the Organic Farming Systems in South Florida. SSSA Annual Meetings, October 29- November 1, St. Louis, MO.
15. **Maruthi Sridhar BB**, *Belbase P, *Oyege I, *Prats J, Jayachandran K, Bhat M. 2022. Evaluation of High Tunnel Systems on Dragon Fruit Production in South Florida. AGU Fall Meetings, December 12-16, Chicago, IL.
16. *Oyege I, **Maruthi Sridhar BB**. 2022. Effect of vermicompost and vermicompost tea on sweetcorn physiology and Fall Armyworm (*Spodoptera frugiperda*) infestation. AGU Fall Meetings, December 12-16, Chicago, IL.
17. **Maruthi Sridhar BB**, *Bukunmi-Omidiran T. 2022. Evaluation of Land cover changes on the soil and water quality in the Cypress creek, Dickinson and Mustang bayou watersheds of Houston, Texas. AGU Fall Meetings, December 12-16, Chicago, IL.
18. **Maruthi Sridhar BB**, Rosenzweig J, Shishodia S. 2022. Assessing the soil and water quality and land cover changes in the Halls bayou watershed of Houston, Texas. SSSA Annual Meetings, November 6-9, Baltimore, MD.
19. **Maruthi Sridhar BB**, *Bukunmi-Omidiran T. 2021. Environmental contamination and Land cover Changes in the Buffalo and Brays Bayou watersheds of Houston, Texas. AGU Fall Meetings, December 13-17, New Orleans, LA.
20. *Davis FR, **Maruthi Sridhar BB**. 2021. Assessment of soil, water contamination and land cover changes in the Sims Bayou watershed of Houston, Texas. AGU Fall Meetings, December 13-17, New Orleans, LA.

21. *Davis FR, **Maruthi Sridhar BB**. 2021. Assessment of soil contamination and land cover changes in the Vince Bayou watershed of Houston, Texas. 2021 International Conference on Environment and Society: Watershed Processes in the Face of Dynamic Landscapes and Climate Change, November 22-23, Florida International University, Miami, FL.
22. **Maruthi Sridhar BB**. 2021. Assessment of land cover changes, soil and water quality of Greens Bayou watershed, SSSA annual meetings, November 7-10, Salt Lake City, UT.
23. **Maruthi Sridhar BB,** Rosenzweig J, Shishodia S, Vrinceanu D. 2020. Summer Undergraduate Research Experience (SURE) program in Environmental and Interdisciplinary Sciences (EIS). HBCU-UP/CREST PI/PD Meeting, Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 5-6, Washington, DC.
24. *Abdullah-Smoot D, Shishodia S, **Maruthi Sridhar BB**. 2020. Seasonal cytotoxic effects of urban watersheds. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 6-8, Washington, DC.
25. *Adedoyin F, Rosenzweig J, **Maruthi Sridhar BB**. 2020. Determination of bacterial loads from Houston watershed soil samples. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 6-8, Washington, DC.
26. *Galvin S, Rosenzweig J, **Maruthi Sridhar BB**. 2020. Analysis of bacteria in Houston watersheds in the aftermath of Hurricane Harvey. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 6-8, Washington, DC.
27. #Wiltz E, **Maruthi Sridhar BB**. 2020. Analyzing and comparing the mercury concentration in soil and water samples of using Inductively Coupled Plasma Mass Spectrometry (ICPMS) and Direct Mercury Analyzer (DMA). Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 6-8, Washington, DC.
28. **Maruthi Sridhar BB,** Gidudu A**.** 2019. Assessing the landscape ecological changes of Murchison Bay, Lake Victoria using satellite imagery. AGU Fall Meetings, December 9-13, San Francisco, CA.
29. *Bukinmi-Omidiran T, **Maruthi Sridhar BB**. 2019. Geo-spatial analysis of chemical characteristics of the Brays Bayou watershed, Harris county, Texas. National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Conference, Nov 20-2, St. Louis, MO.
30. #Mack L, **Maruthi Sridhar BB**. 2019. Assessing the cytotoxicity of the soil and water samples from Buffalo Bayou on human gut cells. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
31. #Johnson T, Johnson J, Bukinmi-Omidiran T, **Maruthi Sridhar BB**. 2019. Monitoring pre- and post-Harvey nutrient and metal concentrations in Greens Bayou. Emerging

Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.

32. *Bukinmi-Omidiran T, **Maruthi Sridhar BB**. 2019. Impact of Hurricane Harvey on soil and water characteristics of Buffalo and Brays Bayou watersheds. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
33. *Ali H, Rosenzweig J, **Maruthi Sridhar BB**. 2019. Biological and chemical characterization of the Tigris River. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC
34. #Sey E, Rosenzweig J, **Maruthi Sridhar BB**. 2019. Analyzing water quality characteristics of Hunting Bayou and microbial content in Brays Bayou of Harris County, Texas. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
35. *Keita D, Shishodia S, **Maruthi Sridhar BB**. 2019. Cytotoxicity analysis of pre- and post-Hurrican Harvey soil samples collected from greater Houston bayous. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
36. *Abdullah-Smoot D, Shishodia S, **Maruthi Sridhar BB**. 2019. Cytotoxic effects of Harris County watersheds on HT29 colon cells. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
37. **Maruthi Sridhar BB.** 2018. Monitoring and mapping the soil and water quality dynamics of urban watersheds. Research for Sustainable Development and Improving the Livelihood of the Society, Fifth Annual International Research Symposium, May 25-26, Debre Berhan University, Debre Birhan, Ethiopia. (Invited Talk)
38. **Maruthi Sridhar BB.** 2018. Monitoring and mapping the soil and water quality dynamics of urban watersheds in Texas. Bayou Colloquium at University of Houston - Clear Lake, March 19, Clear Lake, Houston, TX. (Invited Talk)
39. **Maruthi Sridhar BB.** 2018. Monitoring and mapping the Hurricane Harvey flooding in Houston, Texas. TSU Research Week, March 26-30, Houston, TX.
40. #Johnson J, **Maruthi Sridhar BB,** Keita D. 2018. Monitoring and mapping the nutrient and metal concentrations in the Green bayou watershed, TX. TSU Research Week, March 26-30, Houston, TX.
41. #Rodriguez A, Galvin S, Keita D, **Maruthi Sridhar BB,** Rosenzweig R. 2018. Evaluation of the soil and water quality of Halls bayou and its cytotoxic effects on human and ecological health. TSU Research Week, March 26-30, Houston, TX.
42. #Johnson J, **Maruthi Sridhar BB,** Keita D. 2018. Monitoring and mapping the nutrient and metal concentrations in the Green bayou watershed, TX. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 22-24, Washington, DC.

43. #Walker N, **Maruthi Sridhar BB,** Keita D. 2018. Spatial distribution of metals and nutrients along Buffalo bayou, TX. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 22-24, Washington, DC.

44. #Rodriguez A, Galvin S, Keita D, **Maruthi Sridhar BB,** Rosenzweig R. 2018. Evaluation of the soil and water quality of Halls bayou and its cytotoxic effects on human and ecological health. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 22-24, Washington, DC.

45. **Maruthi Sridhar BB.** 2017. Monitoring and mapping the Hurricane Harvey flooding in Houston, Texas. AGU Fall Meetings, December 11-15, New Orleans, LA.

46. **Maruthi Sridhar BB,** Rosenzweig J, Shishodia S**.** 2017. Infusion of climate change and geospatial science concepts into environmental and biological science curriculum. AGU Fall Meetings, December 11-15, New Orleans, LA.

47. **Maruthi Sridhar BB.** 2017. Impact of Hurricane Harvey flooding in Texas using geospatial informatics. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.

48. #Rodriguez A, Galvin S, Rosenzweig R, **Maruthi Sridhar BB.** 2017. Halls Bayou Water Quality Evaluation for cytotoxic effects. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.

49. #Johnson J, **Maruthi Sridhar BB.** 2017. Mapping Spatial and Temporal Variations in the Nutrient Content of Greens Bayou, TX. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.

50. #Walker N, **Maruthi Sridhar BB.** 2017. Analysis of Water Quality Characteristics of Buffalo Bayou, TX. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.

51. *Howlider H, **Maruthi Sridhar BB.** 2017. Spatial Distribution of Heavy Metals in Floodplain Soils of Brays Bayou Watershed. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.

52. *Akinsanya A, **Maruthi Sridhar BB.** 2017. Mapping and Monitoring the long-term water quality characteristics in Galveston Bay, Texas. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.

53. **Maruthi Sridhar BB.** 2017. Environmental vulnerability and adaptation to global climate change. Climate change and water quality. Forum on Struggle Against Climate Change: Realties and Social Actions, CUMIPAZ-2017 (Peace Integration Summit -2017), October 16-21, Panama City, Panama. (Invited Talk).

54. **Maruthi Sridhar BB.** 2017. Climate change and water quality. Forum on Struggle Against Climate Change: Realties and Social Actions, Organized by Global Embassy for Activists for Peace at Rice University, March 7, Houston, TX. (Invited Talk)

55. *Sharmila Bhandari, **Maruthi Sridhar BB,** Bobby Wilson**.** 2017. Impact of landscape changes on environmental and water quality characteristics of the Brays Bayou watershed, Texas Academy of Sciences, 120th Annual Meetings, March 3-5, Belton, TX.

56. **Maruthi Sridhar BB,** Segun Adelanke, Shruti Lakkaraju. 2017. Spatial and seasonal patterns of metal contamination at watershed scale. NSF- HBCU-UP/CREST PI/PD Meeting, American Association for the Advancement of Science (AAAS), March 1-2, Washington, DC.
57. **Maruthi Sridhar BB.** 2017. Spatial and temporal variations in pigment and nutrient concentrations in Galveston Bay. AAAS Annual Meetings, February 16-19, Boston, MA.
58. *Wei B, **Maruthi Sridhar BB.** 2016. Spatial and temporal variation of heavy metal in Houston ship channel. TSU Research Week, March 29 -31, Houston, TX.
59. *Bhandari S, **Maruthi Sridhar BB.** 2016. Impact of landscape changes on the environmental quality of Brays and Sims Bayou watershed, TX. TSU Research Week, March 29 -31, Houston, TX.
60. *Lakkaraju S, **Maruthi Sridhar BB.** 2016. Water quality and land cover change analysis in East Tennessee watersheds. TSU Research Week, March 29 -31, Houston, TX.
61. *Howlider H, **Maruthi Sridhar BB.** 2016. Monitoring the soil and sediment mercury contamination in East Fork Poplar Creek (EFPC). TSU Research Week, March 29 -31, Houston, TX.
62. **Maruthi Sridhar BB,** Peterson M, Bevelhimer M. 2016. Modeling mercury flow dynamics and bioaccumulation along East Fork Poplar Creek (EFPC). TSU Research Week, March 29 -31, Houston, TX.
63. #Torres A, Maruthi Sridhar BB. 2016. Bioaccumulation of Environmental Contaminates in Bear Creek, Tennessee. NSF- HBCU-UP/CREST PI/PD Meeting, American Association for the Advancement of Science (AAAS), Feb 25-27, Washington, DC.
64. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2016. Modeling mercury flow dynamics and bioaccumulation along East Fork Poplar Creek (EFPC). NSF- HBCU-UP/CREST PI/PD Meeting, American Association for the Advancement of Science (AAAS), Feb 24-25, Washington, DC.
65. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2015. Modeling mercury flow dynamics and bioaccumulation along East Fork Poplar Creek (EFPC). Society of Environmental Toxicology and Chemistry (SETAC) North America 36th Annual Meetings, November 1-5, Salt Lake City, UT.
66. #Torres A, Maruthi Sridhar BB. 2015. Bioaccumulation of Environmental Contaminates in Bear Creek, Tennessee. Gulf Coast Undergraduate Research Symposium (GCURS), Rice University, Houston, TX, October 17, 2015.
67. #Johnson R, Maruthi Sridhar BB. 2015. Historical trends of mercury contamination and bioaccumulation in Hinds Creek and White Oak Creek, Tennessee. Undergraduate Research Symposium, Oak Ridge National Lab (ORNL), Oak Ridge, TN, July 29, 2015.
68. #Torres A, Maruthi Sridhar BB. 2015. Bioaccumulation of Environmental Contaminates in Bear Creek, Tennessee. Gulf Coast Undergraduate Research Undergraduate Research Symposium, Oak Ridge National Lab (ORNL), Oak Ridge, TN, July 29, 2015

69. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2015. Mercury contamination and bioaccumulation in East Tennessee watersheds. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015 (Invited Talk).

70. **Maruthi Sridhar BB.** 2015. Landscape level patterns of mercury contamination and bioaccumulation in East Fork Poplar Creek (EFPC) watershed. TSU Research Week, March 31 – April 2, Houston, TX.

71. **Maruthi Sridhar BB,** Peterson M, Bevelhimer M. 2015. Geospatial models to map mercury dynamics at watershed scale. NSF- HBCU-UP/CREST PI/PD Meeting, American Association for the Advancement of Science (AAAS), Feb 18-19, Washington, DC.

72. *Howlider HR, **Maruthi Sridhar BB**. 2015. Analyzing the mercury contamination in soil and sediments of East Fork Poplar Creek (EFPC) in Tennessee. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.

73. *Segun A, **Maruthi Sridhar BB**. 2015. Effects of landscape factors on mercury and methyl mercury contamination and bioaccumulation in Redbreast Sunfish (*Lepomis auritus*) in East Fork Poplar Creek (EFPC) watershed, Tennessee. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.

74. *Lakkaraju S, **Maruthi Sridhar BB**. 2015. Geospatial and statistical analysis of methyl mercury (MeHg) and polychlorinated biphenyl (PCB) distribution in East Tennessee watersheds. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.

75. *Saah G, **Maruthi Sridhar BB**. 2015. Analysis of urban sprawl and its effect on urban environmental characteristics using spectral reflectance and Landsat data in Harris County, Texas. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.

76. *Esmaeili M, **Maruthi Sridhar BB**. 2015. Land use and land cover change in Galveston County, Texas. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.

77. *Alhassan F, **Maruthi Sridhar BB**. 2014. Land cover change analysis of the Buffalo San Jacinto watershed region in Texas, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.

78. *Eltayeb HA, **Maruthi Sridhar BB**. 2014. Land use and land cover changes in the North Galveston Bay watershed region in Texas, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.

79. *Esmaeli M, **Maruthi Sridhar BB**. 2014. Landsat 5 imagery of urban development in Galveston Island, Texas 1986-2011, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.

80. *Heydari S, **Maruthi Sridhar BB**. 2014. Analysis of temporal land cover changes in East Galveston watershed region of Texas, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.

81. *Mosley J, **Maruthi Sridhar BB**. 2014. Land cover change in Greater Lubbock area, Lubbock County, Texas, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.

82. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2014. Geospatial database to map mercury concentration in East Fork Poplar Creek (EFPC) watershed. 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.

83. *Saah G, **Maruthi Sridhar BB**. 2014. Analysis of urban sprawl and its effect on urban environmental characteristics using spectral reflectance and Landsat data, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.

84. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2013. Geospatial database to map mercury concentration in East Fork Poplar Creek (EFPC) watershed. Society of Environmental Toxicology and Chemistry (SETAC) North America 34th Annual Meetings, November 17-21, Nashville, TN.

85. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2013. Geospatial database to map mercury concentration in East Fork Poplar Creek Watershed (EFPC) watershed. ORAU Faculty Poster Session, August 6, Oak Ridge National Lab (ORNL), Oak Ridge, TN.

86. **Maruthi Sridhar BB,** Vincent RK. 2012. Remote sensing of soybean stress as an indicator of chemical concentration of biosolid amended surface soils. SSSA annual meetings, October 21-24, Cincinnati, OH.

87. **Maruthi Sridhar BB,** Vincent RK, Wicks J. 2011. Remote sensing for monitoring water quality. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, November 14-17, Herndon, VA.

88. **Maruthi Sridhar BB,** Vincent RK. 2011. Application of remote sensing to map the soil chemical characteristics. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, November 14-17, Herndon, VA.

89. Vincent RK, Sanderson L, **Maruthi Sridhar BB**. 2011. Landsat TM monitoring of total phosphorous in lakes as related to cyanobacterial blooms. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, November 14-17, Herndon, VA.

90. Sanderson L, Vincent RK, **Maruthi Sridhar BB**. 2011. Use of Landsat TM phycocyanin algorithm to show possibility of similar world view 2 algorithm. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, November 14-17, Herndon, VA.

91. **Maruthi Sridhar BB,** Vincent RK. 2010. Remote sensing of evapotranspiration using Landsat TM data. Remote Sensing and Hydrology 2010 Symposium September 27-30, Jackson Hole, WY.

92. **Maruthi Sridhar BB,** Vincent RK. 2010. Remote sensing of evapotranspiration using Landsat TM data. Second State of the Art Conference on Remote Sensing of Evapotranspiration, August 16-18, Desert Research Institute, Las Vegas, NV.

93. **Maruthi Sridhar BB,** Vincent RK. 2010. Mapping Saltcedar (*Tamarix ramosissima*) and other riparian and agricultural vegetation in the lower Colorado River region using multi

spectral LANDSAT TM imagery. Second State of the Art Conference on Remote Sensing of Evapotranspiration, August 16-18, Desert Research Institure, Las Vegas, NV.

94. **Maruthi Sridhar BB,** Vincent RK. 2010. Mapping and estimation of phosphorus and copper concentrations in fly ash spill area using LANDSAT TM data. TVA-Kingston Fly ash release environmental research symposium, March 11-12, Harriman, TN.
95. **Maruthi Sridhar BB,** Vincent RK. 2009. Mapping the chemical concentrations of soils using LANDSAT TM data. SSSA annual meetings, November 1-5, Pittsburg, PA.
96. **Maruthi Sridhar BB,** Vincent RK, Sritharan SI, Watts DR, Osterberg J. 2009. Mapping the invasive Tamarix plant species using LANDSAT data. Ecological Society of America (ESA) Conference, August 2-7, Albuquerque, NM.
97. **Maruthi Sridhar BB,** Vincent RK. 2009. Spectral reflectance measurements of a Microcystis bloom. International Association for Great Lakes Research's 52nd Annual Conference, May 18-22, Toledo, OH.
98. **Maruthi Sridhar BB,** Vincent RK, Clapham P, Eckhardt D, Neale C, Osterberg J, Watts DR, Sritharan SI. 2008. Mapping the invasive salt cedar plant species (*Tamarix ramosissima*) using spectral reflectance and remote sensing. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, April 28-May 2, Portland, OR.
99. **Maruthi Sridhar BB,** Vincent RK. 2006. Monitoring the application of sewage sludge to agricultural fields using spectral reflectance and remote Sensing. 18th World Congress of Soil Science, July 9-15, 2006, Philadelphia, PA
100. **Maruthi Sridhar BB,** Vincent RK. 2005. Monitoring the application of sewage sludge to agricultural fields using spectral reflectance and remote sensing. 4th Annual BGSU Research Conference, November 3-4, Bowling Green, OH.
101. Seudkamp MD, **Maruthi Sridhar BB,** Vincent RK, Michaels HJ. 2005. Spectral detection of stress in maize (*Zea mays*) sown on sludge-amended soil. 4th Annual BGSU Research Conference, November 3-4, Bowling Green, OH.
102. Han FX, Diehl SV, Monts DL, Su Y. 2004. Effect of high soil concentrations of mercury on growth, physiology and internal structure of plants. SSSA annual meetings, November 1-4, Seattle, WA.
103. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2004. Remote monitoring of structural and physiological changes in fern (*Pteris vittata*) plants during phytoremediation of Cr and As contaminated soils. 2nd Graduate Student Symposium, Mississippi State University, Mississippi State, MS.
104. **Maruthi Sridhar BB**. Han FX, Diehl SV, Monts DL, Su Y. 2004. Discrimination of chromium phytotoxicity to plants using hyperspectral reflectance. SSSA annual meetings, November 1-4, Seattle, WA.
105. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Changes in anatomical characters of plants subjected to heavy metal contamination. SSSA annual meetings, November 2-6, Denver, CO

106. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Monitoring structural changes of fern (*Pteris vittata*) during phytoremediation of Cr and As contaminated soils. 57th Annual Conference of Forest Products Society, Seattle, WA.

107. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL. 2003. Monitoring the internal structure of barley plants subjected to metal phytoremediation. 7th International symposium on insitu and onsite bioremediation, Orlando, FL.

108. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Phytoremediation of Cr and As contaminated soils using brake fern plants. Southern States Environmental Conference, September 23-25, Biloxi, MS

109. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL. 2003. Structural and ultrastructural changes in plants subjected to metal phytoremediation. 7th International symposium on insitu and onsite bioremediation, Orlando, FL.

110. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Monitoring structural changes in plants during phytoremediation of Cr and As contaminated soils. Proceedings of Southeastern Microscopic Society Conference, Columbia, SC.

111. **Maruthi Sridhar BB,** Su Y, Monts DL, Diehl SV. 2002. Monitoring leaf reflectance and internal structure of barley during phytoremediation of heavy metals. SSSA annual meetings, Indianapolis, IN.

112. Su Y, **Maruthi Sridhar BB,** Monts DL. 2002. Monitoring the process of phytoremediation of metal contaminated soil by Near IR Reflectance spectroscopy, ACS Meeting, Orlando, FL.

113. Su Y, **Maruthi Sridhar BB,** Monts DL. 2002. Monitoring the process of phytoremediation of zinc by barley (*Hordeum vulgare*) using visible and near infrared diffuse reflectance spectrometry. The 9th Biennial International conference on nuclear and hazardous waste management, Reno, NV.

114. Su Y, **Maruthi Sridhar BB,** Han FX, Monts DL, Diehl SV. 2002. Monitoring the impact of heavy metals on plant reflectance and internal leaf structure during phytoremediation process. USEPA – Spectral remote sensing of vegetation Conference, Las Vegas, NV.

MENTOR AND ADVSIOR – NSF / NASA/ USDA FUNDED SUMMER INTERNSHIP UNDERGRADUATE STUDENTS

1. Nori Gammons (BS Agr. Engineering- Sophomore; Summer 2024) – USDA-REEU Grant
2. Randy Leslie (BS Civil Engineering- Sophomore; Summer 2024) – USDA-REEU Grant
3. Kimberly Gutierrez (BS Biology- Sophomore; Summer 2023) – USDA-REEU Grant
4. Rafael Carbonell (AA Env. Science – Sophomore; Summer 2023) – NASA Grant
5. Andrea Bustos (BA Geosciences – Sophomore; Summer 2023) – NASA Grant
6. Samarah Martin (BS Environmental Studies- Junior; Fall 2022) – NSF- EIR Grant
7. Gabriella Tavera (BS Biology- Senior; Summer 2020) – NSF- EIR Grant
8. Jessica Okwudi (BS Biology- Senior; Summer 2020) – NSF- EIR Grant
9. Ogeche Anene (BS Biology- Senior; Summer 2020) – NSF- EIR Grant
10. Ebony Wiltz (BS Chemistry-Senior; Summer 2020) – NSF-EIR Grant
11. Torye Smith (BS Biology- Junior; Summer 2019) – NSF-TI Grant
12. Ebony Wiltz (BS Chemistry-Junior; Summer 2019) – NSF-TI Grant

13. Alexander Cruz (BS Transportation-Sophomore; Summer 2019) – NSF-TI Grant
14. Esther Sey (BS Biology- Senior; Summer 2019) – NSF-TI Grant
15. Nikole Hernandez (BS Chemistry-Junior; Summer 2018) – NSF-TI Grant
16. Esther Sey (BS Biology- Junior; Summer 2018) – NSF-TI Grant
17. Leanna Mack (BS Biology- Junior; Summer & Fall 2018) – NSF-TI Grant
18. Thaddeaus Johnson (BS Chemistry-Sophomore; Summer 2018) – NSF-TI Grant
19. Adriana Rodriguez (BS Biology- Senior; Spring & Summer 2018) – NSF-TI Grant
20. Malikiya Roberson (BS Transportation-Sophomore; Summer 2017) – NSF-TI Grant
21. Naomi Walker (BS Civil Engineering-Junior; Summer & Fall 2017) – NSF-TI Grant
22. Jericho Johnson (BS Chemistry-Junior; Summer & Fall 2017) – NSF-TI Grant
23. Ibrahim Adeyemi (BS Biology- Junior; Summer 2017) – NSF-TI Grant
24. Adriana Rodriguez (BS Biology- Junior; Summer 2017) – NSF-TI Grant
25. Chioma Anugwam (BS Biology- Sophomore; Summer 2016) –NSF-RIA Grant
26. Nancy Osazuwa (BS Biology- Sophomore; Summer 2016) – NSF-RIA Grant
27. Reginald Johnson (BS Biology- Junior; Summer 2015) - NSF-RIA Grant
28. Alex Torres (BS Chemistry-Senior; Summer 2015) - NSF-RIA Grant

GRADUATE STUDENTS ADVISED
PhD: Major Advisor (7); Committee member (15)
MS: Major Advisor (6); Committee member (19)

∞**Major Advisor**
Students Graduated

1. ∞Ivan Oyege, (PhD Earth Systems Science, Fulbright Student, Summer 2025). *Dissertation Title: "Evaluating Vermicompost, Remote Sensing, Deep Learning, and Green Nanopesticides for Fall Armyworm Control in Corn Cropping Systems"*
2. ∞Felica Davis *(*PhD Environmental Toxicology, Spring 2022*).* Dissertation Title: "*Assessment of soil, water contamination and land cover changes in the urban and suburban watersheds of Houston, Texas"*
3. ∞Titilope Bukunmi-Omidiran *(*PhD Environmental Toxicology, Spring 2020*).* Dissertation Title: "*Impact of natural and anthropogenic factors on the water and soil quality in urban and rural watersheds of Texas"*
4. ∞Adeola Mosuro (MS Environmental Toxicology, Spring 2020). *Thesis Title: "Monitoring the soil and water contaminationin urban watersheds of Harris County, Texas"*
5. ∞Adesope Akinsanya (MS Environmental Toxicology, Fall 2017). *Thesis Title: "Mapping and monitoring the long-term water quality characteristics in Galveston Bay, Texas"*
6. ∞Habibur Howlider (MS Environmental Toxicology, Fall 2017). *Thesis Title: "Changes in flood plain soil characteristics of Brays and Sims bayou watershed in Texas"*
7. ∞Segun Adelanke (MS Environmental Toxicology, Fall 2016). *Thesis Title: "Geospatial evaluation of landscape factors on the mercury and methyl mercury availability in East Fork Poplar Creek Watershed in Tennessee"*

8. ∞Sharmila Bhandari *(*PhD Environmental Toxicology, Fall 2016*)*. Dissertation Title: "*Impact of landscape changes on the environmental quality of Brays and Sims Bayou Watershed, TX"*
9. ∞Shruti Lakkaraju (MS Environmental Toxicology, Fall 2016). *Thesis Title: "Impact of Environmental and Land cover changes on the water quality characteristics of East Tennessee Watersheds"*
10. ∞Gilbert Saah, (PhD Environmental Toxicology, Fall 2016). *Dissertation Title: "Analysis of urban sprawl and its effect on environmental characteristics using spectral reflectance and Landsat data in Harris County, Texas"*
11. ∞Bo Wei (PhD Environmental Toxicology, Fall 2016). *Dissertation Title: "Geospatial characterization of environmental pollution and its impact on human health in the Houston Ship Channel Region"*
12. ∞Fabrice Fankem Fandom (MS Environmental Toxicology, Fall 2013). *Thesis Title: "Environmental exposures and impact of asthma on pregnancy"*
13. ∞Njekeh Franklin Caspa, (PhD Environmental Toxicology, Spring 2013). *Dissertation Title: "The Impact of environmental stressors on maternal and infant health outcomes"*

Current Students

∞Jordan Prats (PhD Candidate Earth Systems Science, Expected Fall 2025).

∞Kiwanuka Moses (PhD Candidate Earth Systems Science, Expected Spring 2026).

∞Priyanka Belbase (PhD Earth Systems Science, Expected Spring 2026).

∞Kai Lopez (MS Geoscience- Non-Thesis, Expected Summer 2026).

∞Daisy Pineda (PhD Earth Systems Science, Expected Summer 2028).

∞Biplov Oli – Presidential Fellow- (PhD Earth Systems Science, Expected Summer 2028).

∞ Patrick Otema – Fulbright Student (PhD Earth Systems Science, Expected Summer 2028).

∞Divya Sree Govada (PhD Earth Systems Science, Expected Summer 2028).

Committee Member

1. Rosario Vidales, (PhD Earth Systems Science, Summer 2025). *Dissertation Title: "Characterization of red mangrove and the coastal marshes it inhabits in changing south Florida environments"*
2. John Kerigan, (MS Biology, Summer 2025). *Thesis Title: "The effects of temperature and dissolved oxygen on marine sponge filtration in the Florida Keys FL, USA"*
3. Nasim Mohamadiazar, (PhD Civil Engineering, Spring 2025). *Dissertation Title: "integrated flood risk, social equity and environmental justice assessment for the prioritization of bridge construction activities using spatial, data-driven, multi-criteria decision analysis"*

4. Vagheeswari Venkadesh, (PhD Earth Systems Science, Summer 2024). *Dissertation Title: "Development of a novel electrochemical sensor for measuring nutrients in surface runoff for effective nutrient management"*
5. Pedro Gonzalez, (MS Environmental Studies, Summer 2024). *Thesis Title: "Assessing the Effects of Saltwater Intrusion and Silicon Amendment on the Ecophysiological Traits of Cabbage Palm and Trumpet Tree"*
6. Gisselle Gutierrez-Zuniga, (MS Environmental Engineering, Fall 2022). *Thesis Title: "Development of a high-resolution digital elevation model of a pilot study area in basin 6, located near the waste isolation pilot plant (WIPP), New Mexico, USA."*
7. Folasade Adedoyin, (PhD Environmental Toxicology, Spring 2021). *Dissertation Title: "Microbiological assessment of soil samples from Houston area watershed"*
8. Hanan Ali, (PhD Environmental Toxicology, Spring 2021). *Dissertation Title: "Microbiological assessment of water samples in Houston, Texas"*
9. Theodora Jacobs, (MS Environmental Toxicology, Spring 2021). *Thesis Title: "The analysis of the concentration of Arsenic, Cadmium, Lead and Mercury in Cannabis oil using Inductively Coupled Plasma Mass Spectrometry"*
10. Sadith Mosquera, (MS Environmental Toxicology, Spring 2021). *Thesis Title: "Identification, isolation, and characterization of bacteria isolates from Houston, Texas watershed"*
11. Dayana Abdullah-Smoot, (PhD Environmental Toxicology, Fall 2020). *Dissertation Title: "Seasonal cytotoxic effects of urban watersheds in the greater Houston area"*
12. Cynthia Turner, (PhD Environmental Toxicology, Fall 2020). *Dissertation Title: "Assessment of Hepatitis C virus emergent variants and associated predictive factors"*
13. Pavani Gonnabathula, (PhD Environmental Toxicology, Fall 2020). *Dissertation Title: "Assessment of emerging contaminants - Multiple pesticides and hormonal compounds in water: Effects on biomolecules and application on green nanotechnology for remediation"*
14. Djene Keita, (PhD Environmental Toxicology, Spring 2020). *Dissertation Title: "The effect of triclosan on signaling pathways involved in inflammation"*
15. Sarah Sejoro, (MS Environmental Toxicology, Spring 2020). *Thesis Title: "Investigating the effects of environmental heavy metals on tolerance and survival of human gut cells"*
16. Hasin Fahad Jinna, (MS Transportation Planning and Management, Spring 2020). *Thesis Title: "Counter measures for reducing truck congestion at marine terminals"*
17. Sedigheh Heydari, (PhD Environmental Toxicology, Fall 2019). *Dissertation Title: Involvement of PPARγ in alteration of mechanisms of autophagy pathway in Acrolein toxicity"*
18. Amoge Uwalaka, (MS Environmental Toxicology, Spring 2018). *Thesis Title: "Analysis of pond water for heavy metal and pesticide contamination in Harris County, Texas"*
19. Felica Davis, (MS Environmental Toxicology, Spring 2018). *Thesis Title: "Spatial temporal patterns of polycyclic aromatic hydrocarbons contamination in the Houston Ship Channel's Sediment"*

20. Theresa Jibunor (PhD Environmental Toxicology, Fall 2017). *Dissertation Title: "Bombax cieba: A potential source for biodiesel production"*
21. Durelle Jacob, (PhD Environmental Toxicology, Fall 2017). *Dissertation Title: "Animal fat residue and cooking oils: The transesterification and purification of a potential source for biodiesel production"*
22. Matthew Fiala, (PhD Environmental Toxicology, Spring 2017). *Dissertation Title: "Development of transport model for heavy metals from non-exhaust traffic emissions"*
23. Kimyattia Smith, (MS Environmental Toxicology, Spring 2017). *Thesis Title: "Evaluation of local environmental isolates and their response to dust"*
24. Obinna Nlemedim, (MS Environmental Toxicology, Spring 2017). *Thesis Title: "Organic chemical compounds in different brands of different smoke"*
25. Christabel Ebuzoeme (MS Environmental Toxicology, Fall 2016). *Thesis Title: "The photochemical effects of LED lights on various cooking oils"*
26. Qing Li, (PhD Environmental Toxicology, Fall 2016). *Dissertation Title: "Impacts of weaving segment design on environment and public health"*
27. Olufunmilayo A. Owopetu (MS Environmental Toxicology, Spring 2016). *Thesis Title: "Caenorhabditis elegans as a model organism for studying the toxic effects of Bromacil"*
28. Parise Henry (MS Environmental Toxicology, Spring 2016). *Thesis Title: "Caenorhabditis elegans as a model for fatty acid biomarkers of exposure to an arsenic herbicide"*
29. David Ijoni-Animadu (MS Environmental Toxicology, Spring 2016). *Thesis Title: "Investigation of natural antioxidant products from extract of Fenugreek seed"*
30. Djene Keita (MS Environmental Toxicology, Spring 2015). *Thesis Title: "Fate and transport of triclosan in upper bayou, Houston, Texas"*
31. Sandeel Ahmed (MS Biology, Spring 2015). *Thesis Title: "The role of ribonucleases in various Yersiniae stress responses"*
32. Gloria Okome, (PhD Environmental Toxicology, Fall 2013). *Dissertation Title: "Models of fate and transport of pollutants in surface waters"*
33. Chakravarthy Koricherla (MS Chemistry, Fall 2013). *Thesis Title: "Synthesis and characterization of ruthenium complex containing hypoxanthine as equatorial ligand"*
34. Chioma Ihemadu (MS Environmental Toxicology, Fall 2013). *Thesis Title: "Analysis of persistent organic compounds and trace metals in urine samples of young adults"*

Current Students

35. Nilima Islam (PhD Candidate Earth Systems Science, Expected Fall 2025).
36. Kiara Taibi-Briz (MS Environmental Studies, Expected Fall, 2025)
37. Tania Islam (PhD Candidate Earth Systems Science, Expected Summer 2026).
38. Nasim Mohamadiazar (PhD Candidate Civil and Environmental Engineering, Expected Summer 2025).

39. Salman Jamal (PhD Candidate Biomedical Engineering, Expected Summer 2025).
40. Sana Awan (PhD Candidate Earth Systems Science, Expected Summer 2026).
41. Aujeeta Razzaque (PhD Candidate Earth Systems Science, Expected Fall 2026).
42. Carlos Tapia (PhD Candidate Earth Systems Science, Expected Summer 2027).
43. Md. Tanvir Hossain (PhD Earth Systems Science, Expected Summer 2027).

SERVICE TO THE PROFESSION AND COMMUNITY

GUEST EDITOR OF INTERNATIONAL JOURNALS

2024-2025 Guest editor, Frontiers in Plant Science Journal's special issues on 'Advancements in Precision Agriculture and Remote Sensing for Optimizing Fertilizer and Irrigation Management of Specialty Crops'. https://www.frontiersin.org/research-topics/63882/advancements-in-precision-agriculture-and-remote-sensing-for-optimizing-fertilizer-and-irrigation-management-of-specialty-crops

2023-2024 Guest editor, Remote Sensing Journal's special issues on 'Integrating Remote Sensing in Land Surface Monitoring and Agricultural Applications'. https://www.mdpi.com/journal/remotesensing/special_issues/JPS751E06Z

2022-2023 Guest editor, Remote Sensing Journal's special issues on 'The Application of Remote Sensing for Environmental Planning and Management. https://www.mdpi.com/journal/remotesensing/special_issues/environmental_planning_management

INDEPENDENT REVIEWER OF INTERNATIONAL JOURNALS

International Journal of Remote Sensing
Water Air and Soil Pollution
Soil Sediment and Contamination
Soil Science Society of America Journal
Journal of Hazardous Materials
Naturwissenschaften
Journal of Asian Earth Sciences
International Journal of Health Geographics
GeoCarto International
Agronomy Journal
Science of Total Environment
Environmental Pollution
Remote Sensing

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Soil Science Society of America
Crop Science Society of America
American Society of Agronomy
American Society of Photogrammetry and Remote Sensing

American Geophysical Union
American Association for the Advancement of Science

SERVICE TO THE UNIVERSITY

At Florida International University, Miami, FL.

2023 -Present	*Graduate Program Director (GPD), Department of Earth and Environment, Florida International University, Miami, FL.*
2021 -2023	*Member of Human Resource (HR) Committee, Department of Earth and Environment, Florida International University, Miami, FL.*
2020 -Present	*Member of GIS Advisory Committee, FIU GIS Center, Florida International University, Miami, FL.*

At Texas Southern University, Houston, TX.

2014- 2020	*Director of Environmental Toxicology Program, Department of Environmental and Interdisciplinary Sciences (EIS), Texas Southern University, Houston, TX.*
2012- 2018	*Member of the General Education Committee, representing Department of EIS for Geology (GEOL 141) Course at University Level.*
2012- 2020	*Member of the Fellowship Committee, representing Department of EIS at College (COSET) Level.*
2015- 2018	*Member of the Grievance Committee (Faculty, Students), representing Department of EIS at College (COSET) Level.*
2015- 2017 & 2019-2020	*Member of the Suspension and Readmission Committee, representing Department of EIS at College (COSET) Level.*
2012- 2015	*Member of the Assessment Committee, representing Department of EIS at University Level.*