

CONTACT INFORMATION

Present Occupation: Professor of Environmental Engineering &
Chair, Department of Engineering and Technology
Director, Office of Graduate Studies
Director, C.J. McLin International Center for Water Resources Management
College of Engineering, Science, Technology, and Agriculture
#105 Mc Lin International Center for Water Resources Management
Central State University | 1400 Brush Row Road
Wilberforce, OH 45384. USA

Phone (Office): (937) 376-6260 Fax: (937) 376-6257 E-mail: rkandiah@centralstate.edu

Personal Contact : 2727 Oak Trace, Beavercreek, OH 45431.

Phone (Home): (937) 429-4969 Cell: (937) 829-0128 E-mail: kramanitharan@yahoo.com

ACADEMIC EXECUTIVE SUMMARY

Accomplished environmental/water resources engineering professor and academic executive with leadership in department administration, graduate governance, ABET accreditation, and research and workforce development center direction, and a strong record of externally funded research. Recognized for excellence in teaching, research, and service, with extensive expertise in water resources management, sustainability, and environmental systems, supported by impactful publications, grants, and professional engagement. Fellow of ASCE and EWRI; licensed Professional Engineer (P.E., Ohio); Board-Certified Environmental Engineer (BCEE); Professional Hydrologist (PH); ENVISION Specialist (ENV SP); and Board-Certified Water Resources Engineer (BC.WRE). Research spans climate-resilient hydrology, sustainable infrastructure (ENVISION), the transportation–energy–environment nexus, machine learning, and AI in engineering education, with a sustained commitment to promoting diversity and inclusion in engineering education.

EDUCATION**Post Doctoral Research, Northeastern University, 2004-2006**

Urban Environmental Studies, Boston, MA; Mentor: V.Novotny

Graduate Certificate, Northeastern University, 2006 September

Geographic Information Systems, Boston, MA

Ph.D., Tulane University, 2004 August

Civil Engineering, New Orleans, LA

Dissertation: *Geostatistical Techniques in the Improvement of Spatial Modeling of Contaminated Aquatic Sediments: Evaluation & Applications*; Advisor: L. J. Steinberg

MS, Marquette University, 1998 December

Environmental Engineering, Milwaukee, WI

Thesis: *Modeling of an Activated Sludge Treatment Plant for the Real-Time Control*; Advisor: V.Novotny

M.Sc., Hohai University, 1994 December

Environmental & Water Resources Engineering, Nanjing, China

Thesis: *Systems Analysis of Wastewater Disposal of an Industrial City into a River (A Case Study on Qing An River in Huaiyin City)*; Advisor: C. Ming Zhao

B.Sc., University of Peradeniya, 1990 February

Civil Engineering, Peradeniya, Sri Lanka

LICENSES & CERTIFICATIONS

Professional Engineer registered in Ohio P.E. (License No.: PE.73599) (1/2/2009-Present)
 Professional Hydrologist – Surface Water PH (Certification Number: 18-H-9006) (2018-Present)
 Board Certified Environmental Engineer –Water Supply & Wastewater BCEE (16-10020) (10/4/2018-Present)
 Board Certified Water Resources Engineer BC.WRE (Number: 00797) (12/15/2022-Present)
 ENVISION Sustainability Professional ENV SP (28258) (3/16/2019-Present)
 ENVISION Trainer (March 2022-)
 Completion of ABET – Program Evaluator Candidate (PEVC) Training (2019-)
 Peer Reviewer- Higher Learning Commission (2025-)

PROFESSIONAL AFFILIATIONS

Fellow, Environmental & Water Resources Institute (EWRI) (10/17/2005 - Present)
 Fellow, American Society for Civil Engineers (ASCE) | Dayton Chapter (ID: 000000454603)
 Honorary Member, Tau Chi Alpha (TXA), the Environmental Engineering Honor Society
 Member, American Academy of Water Resources Engineers (AAWRE) (2022-Present)
 Member, Water Environment Federation (WEF) | Ohio Water Environment Association (WEA) (22-25)
 Member, Association of Environmental Engineering and Science Professors (AEESP)
 Member, American Association of University Professors (AAUP) 2008-2024

PROFESSIONAL BACKGROUND

Current Research Areas:

- *AI Applications in Engineering Education* – AI for teaching and learning in environmental and civil engineering
- *Forest Hydrology & Climate Change* – Impacts of climate change on forest hydrology
- *Sustainable Infrastructure & Climate-Smart Small Farms* – Applications of ENVISION and other sustainability principles and frameworks to small towns and farms; Adaptability to climate change
- *Transportation-Energy-Environment-Society Nexus* - Greenhouse gas emissions from transportation; Social Equity and Environmental Justice in Transportation; Noise Mapping
- *Renewable Energy: Environmental Impacts and Social Equity* - Studying the environmental impacts of renewable energy; Evaluation of social equity in renewable energy
- *Equity in Engineering Education*- Equity in environmental and civil engineering education & career
- *The History of Water* – History of Water and Future of Water Resources

AWARDS & RECOGNITIONS

Awards

- 2025. Excellence in Environmental Engineering and Science Education Award, American Academy of Environmental Engineers and Scientists.
- 2019. Distinguished Service Award. Association of Environmental Engineering and Science Professors.
- 2012. Outstanding Faculty Award. WRM Department, College of Science and Engineering, Central State University
- 2012. Award of Faculty Exemplary Work on Research and Scholarly Activities in the Academic Year of 2010-2011, Central State University

- 2010. Faculty Excellence in Teaching Award, Southwestern Ohio Council of Higher Education
- 2010. Outstanding Faculty Award, College of Business and Industry, Central State University
- 2002. Graduate Scholarship & Teaching Assistantship. Tulane University
- 1998. Graduate Scholarship & LBR Research Assistantship. Tulane University
- 1997. Graduate Scholarship & MMSD. Research Assistantship. Marquette University
- 1995. Research Studentship. Hong Kong Polytechnic University
- 1992. Chinese Government Excellence Fellowship. Hohai University

Recognitions

- 2023. In Recognition of becoming Diplomat –Water Resources Engineer at AAWRE Event, Henderson, NV. May 22, 2023
- 2023. In Recognition of becoming a Fellow of the Environmental and Water Resources Institute at the 2023 World Environmental & Water Resources Congress, Henderson, NV. May 22, 2023
- 2022. In Recognition of contributing to winning external grants at CSU. 2022 Research and Scholarly Activities Day, Central State University
- 2021. In Recognition for being the Steering Committee of Education and Research Center (ERC) - UC Cincinnati for the period of 2010-2021.
- 2019, 2020, 2021. In Recognition of representing the ABET as a Program Evaluator. ABET
- 2010. In Recognition of the mentoring CSU Undergraduate Research Journal, Central State University

TEACHING LOAD

Central State University, Wilberforce, OH (2008-to date):

Introduction to Water Resources Management (3 CH), Urban Water Problems (4 CH), Soil and Water Conservation (4 CH), Environmental Professionals Seminar (1 CH), Senior Capstone Design Project I (1 CH), Senior Capstone Design Project II (2 CH), Engineering Hydrology (3 CH), Soil and Water Pollution (3 CH), Solid and Hazardous Waste Management (3 CH), Surveying (3 CH), Air Quality Engineering (3 CH), Fluid Mechanics and Engineering Hydraulics (3 CH), Stream and Lakes (3 CH), Wastewater Treatment Systems (3 CH), Senior Project in WRM (2 CH), Hydrometry (2 CH), First Year Seminar (1 CH), Irrigation and Drainage Engineering (3 CH), Water Models Applications (4 CH), Applied Hydraulics (3 CH)

Northeastern University, Boston, MA (2004):

Environmental Engineering -1 (4 SH), Fluid Mechanics & Hydraulics (4 SH)

Open University, Polgolla, Sri Lanka (1992):

Fluid Mechanics – Level 2

COURSES HELPED IN TEACHING

Graduate Level: (as a Graduate Teaching Assistant) 09/1998 – 04/2004

Tulane University

Environmental Statistics, Water Quality Models, Introduction to Environmental Engineering

Undergraduate Level: (as a full-time Engineering Teaching Assistant) 02/1990-08/1992

University of Peradeniya

Geotechnical Design, Soil Mechanics, Foundation Engineering, Irrigation Engineering, Surveying.

EMPLOYMENT AND PROFESSIONAL RECORD SUMMARY

Central State University, Since 02/2008 – Present

Wilberforce, OH.

Interim Dean, John W. Garland College of Engineering, Science, Technology and Agriculture 03/2026-

- Administering CESTA through the three department chairs
- Expanding the CESTA programs while consolidating the existing programs

Inaugural Director, Office of Graduate Programs 10/2024-03/2026

- Establishes the Office of Graduate Studies at Central State University
- Represents Central State University in the Ohio Chancellor's Council for Graduate Studies
- Directing the development, maintenance and regulation of graduate programs at Central State U.

Director, C.J. McLin International Center for Water Resources Management 01/2022- Present

- Coordinates Workforce Development Force for Drinking Water & Wastewater Certificate courses

Associate Director, C.J. McLin International Center for Water Resources Management 01/2020- 12/2021

- Developing Water Resources and Environmental Engineering continuing education courses
- Managing and expanding nine research and teaching laboratories in the center
- Developing research, educational, and outreach opportunities for the faculty and the students

Chair, Department of Engineering and Technology 07/2024- Present

- Administrating the Environmental Engineering, Manufacturing Engineering, Industrial Technology and Water Resources Management Programs

Chair, Department of Water Resources Management 01/2021- 06/2024

- Administrating the Environmental Engineering and Water Resources Management Programs
- Developing an online Water Resources Management Certification Program
- Feasibility study for a Water Resources and Sustainability graduate program
- Developing articulations for 2+2 programs with community colleges

Program Coordinator, Environmental Engineering and Water Resources Management 04/2018- 12/2020

- Administrating the Environmental Engineering and Water Resources Management Programs
- Successfully led the ABET-Reaccreditation of the Environmental Engineering program

Professor of Environmental Engineering 08/2017 – Present

- Impacts of climate change on forest hydrology
- DIRSIG applications in Remote sensing
- Renewable energy: Environmental impacts and social equity
- Modeling algae bloom in Lake Erie
- Greenhouse gas emission estimations in connected vehicles

Associate Professor of Environmental Engineering 08/2013 – 07/2017

- Impact of hydraulic fracturing on water resources
- Estimating the greenhouse gas emissions from on-road transportation
- Impact of particulate matter in remote sensing
- Engineering education and pedagogy
- ABET accreditation process for Environmental Engineering program that got accredited in 2017

Assistant Professor of Environmental Engineering 02/2008 – 07/2013

- Estimating the emissions from on-road transportation
- Health disparities in Ohio counties
- Applications of artificial neural networks in the estimation of evapotranspiration
- Ranking roads based on mobile source air pollution
- Estimating evapotranspiration in southwestern USA
- Studying the relationships between air quality and socioeconomic indicators in Ohio
- Teaching water resources management and environmental engineering undergraduate courses
- Writing research proposals for bringing grants to the University
- Advising and mentoring Environmental Engineering & Water Resources students
- Actively involved in professional and academic committees

Northeastern University, 04/2004 – 12/2006

Center for Urban Environmental Studies - Department of Civil & Environmental Engineering
Boston, MA.

Postdoctoral Associate

- Main Research: *Developing of Risk Propagation Model for Estimating Ecological Responses of Streams to Anthropogenic Watershed Stresses and Stream Modifications*; Advisor: V. Novotny
- Models to link the stream ecology to anthropogenic watershed stresses and stream modifications.
- investigated the effects of the impoundments on the stream ecology using self-organizing maps (SOMs), canonical component analysis, and GIS; worked with Matlab, ArcGIS, ArcSDE & ArcIMS
- Developed supervised neural network models for predicting indices of biotic integrity of fishes and invertebrate community indices for macroinvertebrates from watershed parameters
- Water quality Database administrator; worked with SQL Server 2000 and MS Visio 2002
- Part of writing grant proposals to funding agencies, including EPA, NSF, DoD, and USDA.
- Taught Civil and Environmental Engineering courses and have been guiding graduate students

Tulane University, 08/1998 – 04/2004

Department of Civil & Environmental Engineering
New Orleans, LA

Research Assistant / Teaching Assistant

- Data queried and analyzed National Sediment Inventory, SEDQUAL & EPA's extensive Hudson River contaminated sediment data using MS-Access, FoxPro, and SPSS.
- Developed contaminated sediment models, mapped and made risk assessments using GSLIB, S-Plus SpatialStats, ArcGIS-Geostatistical Analyst, and ArcView-FIELDS.
- Evaluated the applicability of different deterministic and geostatistical interpolation methods in assessing heavy metal and PCB contaminations in U.S. waterbodies.
- Conducted Lower Mississippi nutrient timeseries analysis (ARIMA models, VAR models, ARCH/GARCH models, and Bootstrapping) with WINRATS and S-PLUS.

Marquette University, 01/1997 – 07/1998

Department of Civil & Environmental Engineering
Milwaukee, WI

Research Assistant

- Wastewater flow timeseries modeling using MATLAB-Signal Processing Toolbox for the Milwaukee Metropolitan Sewerage Department Wastewater treatment plant.
- Improved the secondary clarifier modeling with the introduction of the sigmoid function.
- Developed a mechanistic activated sludge process model using MATLAB-Simulink.

Hong Kong Polytechnic University, 05/1995 – 12/1996

Department of Civil & Structural Engineering
Hung Hom, Hong Kong

Research Assistant/Doctoral Candidate

- Main Research: *Kalman filtering Applications in Non-Gaussian Environment in River water Quality Modeling and Forecasting*; Advisor: C. W. Li
- Developed Fortran77 written ARIMA and neural network models for ocean wave timeseries for Royal Hong Kong Civil Engineering Department.

Hohai University, 09/1992 – 12/1994

Department of Water Resources and Environmental Engineering,
Nanjing, China

Master Candidate.

- Conducted studies on water quality issues in Qing An River, developed numerical models and found cost-effective solutions to the problem.
- Implemented water quality principles and optimization techniques with the help of FORTRAN77.

Open University of Sri Lanka, 1992

Department of Engineering Technology
Polgolla, Sri Lanka

Visiting Lecturer

- Teaching Fluid mechanics – Level 2

University of Peradeniya, 02/1990 – 08/1992

Department of Civil & Structural Engineering
Peradeniya, Sri Lanka

Instructor | Engineering Teaching Assistant Grade I

- Administered Water Supply, Irrigation and Geotechnical design classes, and Soil laboratory classes, and arranged student field trips for undergraduate Civil Engineering students.

Urban Development Department, 1989

Trincomalee, Sri Lanka

Engineering Trainee

Department of Irrigation, 1988

Trincomalee, Sri Lanka

Engineering Assistant

Road Development Authority, Trincomalee, Sri Lanka, 1987

University of Peradeniya, Production Engineering Workshop, Peradeniya, Sri Lanka, 1985 - 1986

Department of Highways, Mullaitivu, Sri Lanka, 1984

Engineering Intern

- Watershed modeling, flood frequency analysis, scour analysis & water treatment design.

SPECIFIC RESEARCH ACTIVITIES

- AI Applications in Teaching Environmental Engineering and Sustainability (2024-Present)
- Impacts of Climate on Minority farmers (2022-Present)
- Climate change on forest hydrology (2021-Present)
- Environmental Impacts of renewable energy (2021-Present)
- Lake Erie Algae Bloom Modeling (2016-2018)
- Impact of Particulate matter in Remote sensing (2015-2018)
- Impacts of Hydraulic fracturing on Water Resources (2013-2021)
- Estimating the greenhouse gas emissions from on-road transportation (2012-Present)
- Modeling eutrophication (2011)
- Health disparities in Ohio counties (2011-2012)
- Applications of artificial neural networks in the estimation of evapotranspiration (2009-2010)
- Estimating water budget in semi-arid regions. (2008-2010)
- Ranking roads based on mobile source air pollution (2009-2010)
- Studying the relationships between air quality and socioeconomic indicators (2009)
- Effects of impoundments on watershed ecology (2004-2006)

- Modeling, mapping, and assessment of contaminated benthic sediments (1998-2004)
- Assessment of nutrients in the lower Mississippi river (2000-2002)
- Modeling activated sludge wastewater treatment plant for real-time control (1997-1998)
- Modeling ocean waves using artificial neural networks (1995-1996)

BOOK

1. Samuel L. Laki, KrishnaKumar V. Nedunuri, and **Ramanitharan Kandiah**. 2019. Introduction to Water Resources. Kendall Hunt. Second Edition. ISBN: 978-1-5249-4908-2. 339 Pages.

PEER REVIEW JOURNALS

1. Chatterjee, S., **Kandiah, R.**, Watts, D., Sritharan, S., Osterberg, J. 2023. Estimating Completely Remote Sensing-Based Evapotranspiration for Salt Cedar (*Tamarix ramosissima*), in the Southwestern United States, Using Machine Learning Algorithms. *Remote Sens.* 2023, 15, 5021. <https://doi.org/10.3390/rs15205021>
2. Lee Blaney, Judith A. Perlinger, Shannon L. Bartelt-Hunt, **Ramanitharan Kandiah**, and Joel J. Ducoste. 2017. Another Grand Challenge – Diversity in Environmental Engineering and Science. *Environmental Engineering Science*. <https://doi.org/10.1089/ees.2017.0337>
3. Lee Blaney, **Ramanitharan Kandiah**, Joel Ducoste, Judith Perlinger, and Shannon Bartelt-Hunt. 2016. Trends in the population and demographics of U.S. environmental engineering students and faculty from 2005 to 2013. *Environmental Engineering Science*. Jul 2016, 33(8): 578-590.
4. Xiaofang Wei, Subramania I. Sritharan, **Ramanitharan Kandiah**, and John Osterberg. 2012. Allometric equations for the aboveground *Tamarix* biomass estimate in the Lower Colorado River Basin. *Desert Plants*. Dec. 2012.

BOOK CHAPTER

1. **K. Ramanitharan**, L. J. Steinberg and G. Piringer. 2005. Chapter 37: Geostatistical Modeling and Mapping of Sediment Contaminant Concentrations; *Contaminated Soils, Sediments and Water: Science in the Real World Volume 9*. Eds. E.J. Calabrese, P. T. Kostecki and J. Dragun; Springer, New York; pp. 565-583. ISBN 978-0-387-23036-8.

BOOK EDITED

1. Veera Gnaneswar Gude, Venkataramana Gadhamshetty, and **Kandiah Ramanitharan**. 2020. Sustainable Water: Resources, Management and Challenges. (Editors) Nova Science Publishers, Hauppauge, NY; ISBN 978-1-53617-335-2.

CONFERENCE PROCEEDINGS

1. **Ramanitharan Kandiah**. 2026. Using AI Tools in Undergraduate Environmental Engineering Research and Teaching. *ASEE 133rd Annual Conference and Exposition*. Charlotte, NC. June 21–24, 2026 (Draft accepted)
2. Leanne Petry, Kenya Crosson, Margaret Pinnell, Melissa Karlin, **Ramanitharan Kandiah**, KrishnaKumar Nedunuri, Kaitlin Hill, and Corinne Mowrey. 2025. [Work in Progress] Lessons Learned from a Collaborative NSF REU Program Thematically Centered on STEM Research for Social Change and Its Impact Through Community Engaged Learning. *ASEE 132nd Annual Conference and Exposition*. Montreal, Quebec, Canada. June 22–25, 2025
3. **Ramanitharan Kandiah** and KrishnaKumar Nedunuri. 2023. Enhancing Environmental Engineering Curriculum for the Transportation Industry. *ASEE 130th Annual Conference and Exposition*. Baltimore, MD. June 25–28, 2023
4. Ning Zhang, Xiaofang Wei, **Ramanitharan Kandiah**, Subramania I Sritharan, and KrishnaKumar Nedunuri. 2022. Impact of hydraulic fracturing induced landscaping change on regional surface water

- quality in eastern Ohio, *Proceedings of the American Society of Engineering Education, Environmental Engineering Paper*, June 26-29, 2022. Minneapolis Convention Center, 1301 Second Ave S, Minneapolis, MN 55403 <https://peer.asee.org/40817>
5. **Ramanitharan Kandiah**, KrishnaKumar Nedunuri, and Edison Perdomo. 2019. Work in Progress: First Year Seminar Course, a Stepping-stone Course to Strengthen the Engineering Programs in a Minority Institution. 126th ASEE Annual Conference Exposition. Paper ID #25884. Tampa, FL. June 16–19, 2019
 6. **Ramanitharan Kandiah**, KrishnaKumar Nedunuri, and Edison Perdomo. 2018. USE4WRM: Recruitment and Retention for Environmental Engineering and Water Resources Management Programs. 125th ASEE Annual Conference & Exposition. Salt Lake City, UT. June 25–28, 2018 <https://tinyurl.com/y8a4s99n>
 7. **Ramanitharan Kandiah**, Krishna Kumar Nedunuri, and Ning Zhang 2017. Incorporating Ethics and Professionalism into Environmental Engineering Curriculum. 124th ASEE Annual Conference & Exposition. Columbus, OH. June 25–28, 2017 <http://tinyurl.com/y7ph5fyp>
 8. **Ramanitharan Kandiah**, Subramania Sritharan and Ndao Gorgui. 2017. Recruitment and Retention: Summer Transportation Institute for Secondary School. 124th ASEE Annual Conference & Exposition. Columbus, OH. June 25–28, 2017 <http://tinyurl.com/yb53qzxw>
 9. **Ramanitharan Kandiah** and Krishnakumar Nedunuri. 2016. *Teaching Urban Water Problems: Curriculum Design to Assessment*. 2016 ASEE-NCS Conference. Mount Pleasant, MI. March 18–19, 2016. <http://tinyurl.com/gmas7ce>
 10. **Ramanitharan Kandiah**. 2015. *Connect2U* Approach to Teaching Introduction to Water Resources Management as a General Education Course. *Making Value for Society*. The 122nd ASEE Annual Conference & Exposition. Seattle, WA. June 14–17, 2015 <http://tinyurl.com/connect2u>
 11. **Ramanitharan Kandiah**, Xiaofang Wei, Subramania I. Sritharan, Doyle Watts, Christopher Neale, John Osterberg, and Sumantra Chatterjee. 2012. Ground-based Riparian Evapotranspiration Measurements for Remote Sensing Algorithms. *Remote Sensing and Hydrology – IAHS Pub 352*. Eds. Chris Neale. pp. 206-209. ISBN 978-1-907161-27-8
 12. Xiaofang Wei, Subramania I. Sritharan, **Ramani Kandiah**, Keith Farrow and John Osterberg. 2012. Implementation of SEBAL Algorithm with Landsat Thematic Mapper 5 in Lower Colorado Basin. *Remote Sensing and Hydrology – IAHS Pub 352*. Eds. Chris Neale. pp. 98-101. ISBN 978-1-907161-27-8
 13. Xiaofang Wei, Subramania I. Sritharan, Andy French, David Eckhardt, Chris Neale, **Ramani Kandiah**, and Andre Morton. 2012. Atmospheric Correction of Landsat TM Data for Evapotranspiration Estimation of the Riparian Vegetation in Lower Colorado River. *Remote Sensing and Hydrology – IAHS Pub 352*. Eds. Chris Neale. pp. 137-140. ISBN 978-1-907161-27-8
 14. Subramania I. Sritharan, Pramila Khanal, Xiaofang Wei, **Ramanitharan Kandiah**, Mark Hatfield, Christopher Neale, and Johns Osterberg. 2012. Stream-Aquifer Interaction Assessment Using Riparian Evapotranspiration Estimates from Remote Sensing Algorithm. *Remote Sensing and Hydrology – IAHS Pub 352*. Eds. Chris Neale. pp. 231-234. ISBN 978-1-907161-27-8
 15. L. J. Steinberg and **K. Ramanitharan**. 2000. Spatial Modeling of Contaminated Sediments in Puget Sound; *WEFTEC 2000*; Anaheim; pp. 448-460(13).
 16. **K. Ramanitharan** and C. W. Li. 1996. Artificial Neural Network in Time Series Analysis: An Ocean Engineering Experience; *Intelligent Engineering Systems through Artificial Neural Networks Vol. 6*; ASME Press, New York; pp. 781-786. ISBN 0791800512
 17. **K. Ramanitharan** and C. W. Li. 1996. Forecasting Ocean Waves using Neural Network; *Hydroinformatics '96*; Ed. A. Muller. Balkema, Rotterdam; pp. 215-222. ISBN 90 5410 852 5

PEER-REVIEWED CONFERENCE ORAL AND POSTER PRESENTATIONS

1. **Ramanitharan Kandiah**. 2026. HydroThrive: A Web Application for Sustainable Water Management in a Drought-prone Region. *The ARD Research Symposium 2026*, New Orleans, LA. March 28 - 31, 2026
2. **Ramanitharan Kandiah**, Isaiah Charles, and Skylla Ziegler. 2025. Developing a Conceptual Sustainability Plan for University Solid Waste Management Using the ENVISION Framework. *2025 ISI Annual Conference*. Virtual. October 23-24, 2025 (Oral)
3. **Ramanitharan Kandiah**, Edison Perdomo, and Zephon McAndrew. 2025. Examining the Effects of Climate Change on Equity for Socially Disadvantaged Small Farmers in Four Midwestern States. *2025 World Environmental & Water Resources Congress*. Anchorage, AK. May 18-21, 2025 (Oral)
4. **Ramanitharan Kandiah**. 2025. ENVISION as an Educational Resource for Equipping Water Resources and Environmental Engineering Students to Implement Sustainable Practices. *2025 World Environmental & Water Resources Congress*. Anchorage, AK. May 18-21, 2025 (Oral)
5. **Ramanitharan Kandiah** and Danao Davis. 2024. Estimating Ecohydrological Changes at the Vinton Furnace State Forest, Ohio. *2024 World Environmental & Water Resources Congress*. Milwaukee, WI. May 18–22, 2024 (Oral)
6. Edison Perdomo, Deng Cao, **Ramani Kandiah**, and Krishna Kumar Nedunuri. 2024. Equitable and Inclusive Development and Deployment of Connected and Autonomous Transportation. *2023 Global Symposium on Mobility Innovation*. April 4-5, 2023, Washtenaw Community College, Ann Arbor, MI. May 22-23, 2024 (Oral)
7. **Ramanitharan Kandiah**. 2024. A Conceptual Tool for Assessing the Sustainability of Small Farms. *The ARD Research Symposium 2024*, Nashville, TN. April 6 - 9, 2024 (Oral)
8. Blaney, Lee; Arnold, William; Aziz, Tarek; Beckingham, Lauren; Cusick, Roland; Fahrenfeld, Nicole; Fennell, Donna; Gunsch, Claudia; **Kandiah, Ramanitharan**; MacKay, Allison; Montoya, Lupita; Olson, Mira; Rodrigues, Debora; Tehrani, Rouzbeh; Verbyla, Matthew. 2023. Who we are: motivation and results from the new AEESP demographics survey. *2023 AEESP Conference*. Boston, MA. June 19-23, 2023 (Oral)
9. Karl Rockne, Ning Ai, Angela Bielefeldt, Pablo Cornejo, Kerry Howe, **Ramani Kandiah**, Dan Oerther, Rouzbeh Tehrani, Sanjay Tewari, David Vaccari, Benoit Van Aken, Huichun Zhang. 2023. Curriculum Needs to Address the Grand Challenges and Opportunities in Environmental Engineering and Science in the 21st Century. *2023 AEESP Conference*. Boston, MA. June 19-23, 2023 (Oral)
10. **Ramanitharan Kandiah**, Jayshan Lundy, and Subramania Sritharan. 2023. Long-term Changes in Hydrology at Wayne Forest at Appalachian Foothills in Southeast Ohio. *2023 World Environmental & Water Resources Congress*. Henderson, NV. May 21–24, 2023
11. **Ramanitharan Kandiah**, Jasmine Newsom, and Edison Perdomo. 2023. Impact of COVID-19 on the Solid Waste Management of a University. *2023 World Environmental & Water Resources Congress*. Henderson, NV. May 21–24, 2023
12. Gilbert Robinson, **R. Kandiah**, K. V. Nedunuri, X. Wei, N. Zhang, and E. Higgins. 2022. Estimating The Hydrological Impacts of Oil and Gas Activities in Irish Creek Watershed. *ARD Research Symposium 2022:1890 Research: The 1890 Research and Innovation Agenda: Pathways to Build Back Better*. Atlanta. G.A. April 2– April 5, 2022 (Oral) [Awarded Third Place](#) Presentation under Natural Resources
13. Jayshan Lundy, Gilbert Robinson, and **Ramanitharan Kandiah**. 2022. Changing Appalachian Forest Watershed Hydrology: A Preliminary Case Study in Ohio. *ARD Research Symposium 2022:1890 Research: The 1890 Research and Innovation Agenda: Pathways to Build Back Better*. Atlanta. G.A. April 2– April 5, 2022 (Oral)

14. **Ramanitharan Kandiah**. 2021. Incorporating Sustainability in an Undergraduate Environmental Engineering Curriculum. *2021 International Conference on Sustainable Infrastructure*. Virtual Event. Dec 6–10, 2021 (Oral)
15. **Ramanitharan Kandiah**. 2021. A Framework to Assess the Impacts of Renewable Energy Technologies (FAIRET). *2021 World Environmental & Water Resources Congress*. Milwaukee, WI. (Virtual) May 23–26, 2021 (Oral)
16. Krishna Kumar V. Nedunuri, **Ramanitharan Kandiah**, Xiaofang Wei, Ning Zhang, Subramania I. Sritharan. 2021. Assessing the Hydrological Impacts from the Fragmentation of Forested watersheds experiencing significant Oil and Gas (O&G) Exploration. *2021 World Environmental & Water Resources Congress*. Milwaukee, WI. (Virtual) May 23–26, 2021 (Oral)
17. **Ramanitharan Kandiah**, Gilbert Robinson, Krishna Kumar Nedunuri, and Subramania Sritharan. 2019. Hydrology-Environment-Cost Index for Hydraulic Fracturing: A Competitive study in Ohio, California, and Texas. *2019 World Environmental & Water Resources Congress*. Pittsburgh, PA. May 19–23, 2019 (Oral)
18. **Ramanitharan Kandiah** and Subramania Sritharan. 2019. Detecting Evapotranspiration Changes in California between 2006 and 2015 Using Self-Organizing Maps. *2019 World Environmental & Water Resources Congress*. Pittsburgh, PA. May 19–23, 2019 (Poster)
19. Gilbert Robinson, **Ramanitharan Kandiah**, Krishna Kumar Nedunuri, Ning Zhang, Xiaofang Wei, and Subramania Sritharan. 2019. Estimating the Hydrological Impacts of Oil and Gas Activities in Leesville Lake Watershed, Ohio. *ARD Research Symposium 2019:1890 Research: Making Critical Contributions to Rural Prosperity and Challenges in Food and Agriculture*. Jacksonville, FL. March 30– April 3, 2019 (Oral)
20. Ning Zhang, Krishna Kumar Nedunuri, **Ramanitharan Kandiah**, and Xiaofang Wei. 2018. Unconventional Hydraulic Fracturing Impacts on Surface Water Quality in Northeast Ohio, *American Water Resources Association 2018 Annual Conference*. Baltimore, MD. November 4-8, 2018. (Poster)
21. **Ramanitharan Kandiah** and Trenton Barnes. 2018. Assessing the Impacts of Hydraulic Fracturing on Water Resources: Indices and Issues. *2018 World Environmental & Water Resources Congress*. Minneapolis, MN. June 3–7, 2018 (Oral)
22. **Ramanitharan Kandiah**, Xiaofang Wei, Krishna Kumar Nedunuri, and Subramania Sritharan. 2018. Decadal Changes in the Water Quantity and Quality in Tuscarawas Watershed, Ohio. *2018 World Environmental & Water Resources Congress*. Minneapolis, MN. June 3–7, 2018 (Poster)
23. **Ramanitharan Kandiah**. 2018. Technical Writing and Communication Skills: Water Resources Management and Environmental Engineering Experiences. *ASEE-NCS Conference*. Akron, OH. March 23-24, 2018 (Oral)
24. **R. Kandiah**, K. Nedunuri, and A. Frost. 2017. Estimating the Water Impact of Hydraulic Fracturing on Agriculture. *ARD Research Symposium 2017:1890 Research: Meeting the 21st Century Challenges through Innovation*. Atlanta, GA. April 1-4, 2017 (Oral)
25. K. Nedunuri, **R. Kandiah**, M. Kalcic, and N. Aloysius. 2017. The impacts of changes in future Maumee watershed phosphorus loads on water quality in the Maumee Bay of the Western Lake Erie Basin using validated lake models. *ARD Research Symposium 2017:1890 Research: Meeting the 21st Century Challenges through Innovation*. Atlanta, GA. April 1-4, 2017 (Oral)
26. **Ramanitharan Kandiah**, Krishna Kumar Nedunuri, and Benjamin Rives. 2016. Estimation of Greenhouse Gas Releases from Major Highways in Ohio. *20th Technological Advances in Science, Medicine and Engineering Conference (TASME)*. Toronto, Canada. July 2-3, 2016. (Oral)
27. **Ramanitharan Kandiah**, Krishna Kumar Nedunuri, and Michael Smith II. 2016. Estimating the Impact of Hydraulic Fracturing on the Water Resources at the County Scale. *Making Value for Society*. 2016 World Environmental & Water Resources Congress. West Palm Beach, FL. May 22–26, 2016 (Oral)

28. **Ramanitharan Kandiah**. 2016. Incorporating Educational and Research Components to Enhance Environmental Engineering Curriculum. *2016 ASEE-NCS Conference*. Mount Pleasant, MI. March 18–19, 2016. (Oral) <http://tinyurl.com/juh8qbu>
29. Ning Zhang, KrishnaKumar Nedunuri, **Ramanitharan Kandiah**, and Xiaofang Wei. 2016. Non-Ideal Behavior Characterization for Hydraulic Fracturing Flowback Fluids *Computers in Chemistry. 251st ACS National Meeting & Exposition*. San Diego, CA. March 13-17, 2016 (Oral)
30. Blaney, L., Shannon, B., **Kandiah, R.**, and Niemeier, D. 2015. Assessing the growth and demographics of environmental engineering from 2005 to 2013. *2015 AEESP Research and Education Conference*, New Haven, CT. June 15, 2015. <http://tinyurl.com/nlqee9u> (Oral)
31. **Ramanitharan Kandiah**, KrishnaKumar Nedunuri, Xiaofang Wei, Ning Zhang, and Michael Smith II. 2015. WII4HF: A conceptual model for computing water impact index for hydraulic fracturing. *Chemistry for Natural Resources. 249th ACS National Meeting & Exposition*. Denver, CO. March 22-26, 2015 (Oral)
32. X. Wei, S.I. Sritharan, **R. Kandiah**, and J. Osterberg. 2012. Applying remote sensing for invasive Tamarix study in the Lower Colorado River Basin. *4th International EcoSummit - Ecological Sustainability Restoring the Planet's Ecosystem Services*. Columbus, OH. September 30- October 5, 2012 (Oral)
33. Xiaofang Wei, Subramania I. Sritharan, **Ramanitharan Kandiah**, and John Osterberg. 2012. Aboveground Biomass Estimation of Salt Cedar in Cibola National Wildlife Refuge. *2012 G.S.A. North-Central Section 46th Annual Meeting*. Dayton, Ohio. April 23 -24, 2012,
34. **Ramanitharan Kandiah**. 2012 Grouping Countries in Ohio Based on Health Disparities. *Fifth Health Disparities Conference*. New Orleans, LA, 2012, March 6-8. (Poster)
35. **Ramanitharan Kandiah**, Xiaofang Wei, Sumantra Chatterjee, Subramania Sritharan, Doyle Watts, and John Osterberg. 2011. Construction of a Complete Daily Evapotranspiration Timeseries at Cibola National Wildlife Refuge, Southwest USA. *AmericaView-2011*. Cleveland, OH. 2011, October 10-12. (Poster)
36. Xiaofang Wei, Subramania I. Sritharan, **Ramanitharan Kandiah**, John Osterberg, William Cook, John Davenport, Keith Farrow, and Terrell Washington. 2011. Modeling Invasive Salt Cedar Using Remote sensing Techniques. *AmericaView-2011*. Cleveland, OH. 2011, October 10-12. (Poster)
37. Subramania I. Sritharan, Xiaofang Wei, **Ramanitharan Kandiah**, Doyle Watts, Robert Vincent, Sridhar Balaji, Christopher Neale, Pete Clapham, Sumantra Chatterjee and John Osterberg. 2011. Integrated Remote Sensing for Regional Evapotranspiration Estimation. *AmericaView-2011*. Cleveland, OH. 2011, October 10-12. (Oral)
38. **Ramanitharan Kandiah**. 2011. Classifying Ohio Counties Based on Highway Traffic-Related Pollution. *7th Annual ASME-Dayton Engineering Sciences Symposium*, Wright State University, Fairborn, OH. October 24, 2011. (Oral)
39. André Morton, John Davenport, and **Ramanitharan Kandiah**. 2010. Comparison of the Traffic Counts in Three Counties in Miami Valley, Ohio. *6th Annual ASME-Dayton Engineering Sciences Symposium*, Wright State University, Fairborn, OH. October 25, 2010. (Oral)
40. Tinina Hale and **Ramanitharan Kandiah**. 2010. Using MOVES to Estimate On-Road Motor Vehicle Emission in the Miami Valley, Ohio. *6th Annual ASME-Dayton Engineering Sciences Symposium*, Wright State University, Fairborn, OH. October 25, 2010. (Oral)
41. **Ramanitharan Kandiah**, Subramania I. Sritharan, Doyle Watts, Christopher Neale, Mark Hatfield, and John Osterberg. 2010. Estimating Missing Daily Evapotranspiration Data Using Artificial Neural Networks. *Alliance University ET Conference*, Desert Research Institute, Las Vegas, NV. August 16 – 18, 2010. (Oral)
42. **Ramanitharan Kandiah** and Subramania I. Sritharan. 2010. Clustering Evapotranspiration Measurement Stations Using Self-Organizing Maps. *Alliance University ET Conference*, Desert Research Institute, Las Vegas, NV. August 16 – 18, 2010. (Oral)

43. S. Fernandes, Y. Liang, S.I. Sritharan, X.Wei, and **R. Kandiah**. 2010. Real-Time Detection of Improvised Explosive Devices using Hyperspectral Image Analysis, *2010 IEEE National Aerospace and Electronics Conference (NAECON 2010)*. (Oral)
44. **K. Ramanitharan** and Wilbert Meade; 2009. A Methodology to Estimate the Annual Average Daily On-Road Mobile Source Pollutant Emissions. *5th Annual ASME-Dayton Engineering Science Symposium*; Dayton, OH. October 26, 2009. (Oral)
45. **Ramanitharan Kandiah**. 2009. Deterministic Interpolation methods in Mapping Contaminated Sediment Concentrations: A Comparative Study. *118th Annual meeting of The Ohio Academy of Science*; Wittenberg University, Springfield, OH. April 17-18, 2009. (Oral)
46. Xiaofang Wei, Subramania I. Sritharan, Andy French, David Eckhardt, Chris Neale and **Ramani Kandiah**. 2009. Atmospheric Correction of Landsat TM Data for Evapotranspiration Estimation of the Riparian Vegetation in Lower Colorado River. *Association of American Geographers, 2009 Annual Meeting*, Las Vegas, NV. March 22-27, 2009. (Oral)
47. **K. Ramanitharan** and Henry. C. Foust; 2006. Correlating Variogram Structures of Distributed Heavy Metals in Contaminated Sediments to Their Transport Mechanisms. *The 16th Annual AEHS West Coast Conference*; 2006, March 13 – 16; San Diego, CA. (Oral)
48. Henry. C. Foust and **K. Ramanitharan**; 2005. Optimal Design for an Ultrafiltration Process at the Hanford Department of Energy Facility; *2005 Spring National Meeting, American Institute of Chemical Engineers*; 2005, April 13; Atlanta, GA. (Oral)
49. **K. Ramanitharan**; 2004. Effects of Data Sampling in Geostatistical Modeling of Sediment Contaminant Concentrations; *20th Annual International Conference on Soils, Sediments and Water*; 2004, October; Amherst, MA. (Poster)
50. **K. Ramanitharan** and L. J. Steinberg; 2003. Modeling and Mapping of Sediment Contaminant Distribution: A Univariate Geostatistical Perspective; *19th Annual International Conference on Soils, Sediments and Water*; 2003, October; Amherst, MA. (Oral)

OTHER PRESENTATIONS (including those that students presented)

1. Jalen Smith, Kimberly Smith, KrishnaKumar Nedunuri and **Ramanitharan Kandiah**. 2024. Transitioning From a Conventional Vehicle Campus to an Electric Vehicle-Friendly Campus. 2023 Global Symposium on Mobility Innovation. May 21-22, 2023, Washtenaw Community College, Ann Arbor, MI. (Poster) ([Undergraduate Poster Competition Winner](#))
2. **Ramanitharan Kandiah**, Danao Davis. 2024. Ecohydrological Changes at Vinton Furnace State Experimental Forest (2000-2020) *The ARD Research Symposium 2024*, Nashville, TN. April 6 - 9, 2024 (Poster)
3. Jalen Smith, Kimberly Smith, **Ramanitharan Kandiah**, KrishnaKumar Nedunuri, Deng Cao. 2023. CAV System Incorporating Air Quality from Traffic Congestion. 2023 Global Symposium on Mobility Innovation. April 4-5, 2023, Washtenaw Community College, Ann Arbor, MI. (Poster) ([Undergraduate Poster Competition Winner](#))
4. **Ramanitharan Kandiah**. 2022. Minorities & H.B.C.U. Participation in Transportation Research. 2022 Global Symposium on Connected and Automated Vehicles & Infrastructure. April 12-13, 2022, University of Michigan, Ann Arbor, MI. (Oral)
5. **Ramanitharan Kandiah**, Gilbert Robinson, KrishnaKumar Nedunuri, Ning Zhang, Xiaofang Wei, and Subramania Sritharan. 2020. Estimating the Hydrological Impacts of Oil and Gas Activities in 2004 Eastern Ohio: A Case Study in Leesville Lake Watershed. *Technological Advances in Science, Medicine, and Engineering Conference (TASME 2020)*. Virtual. August 20-23, 2020 (Oral)
6. **Ramanitharan Kandiah**, and KrishnaKumar Nedunuri. 2020. Incorporating Air Pollution Information into CAV systems. April 9, 2020. Center for Connected and Automated Transportation 2020 Webinar.

7. **Ramanithara Smith, Ramanitharan Kandiah**, KrishnaKumar Nedunuri, Ning Zhang, and Xiaofang Wei. 2019. Preliminary Hydrological Studies Assessing the Changes in Runoff from the Tuscarawas Watershed, Ohio, during the Peak Oil and Gas Production. *Ohio State House Presentation*, Ohio. March 19, 2019.
8. Krishnakumar Nedunuri, Ning Zhang, **Ramanitharan Kandiah**, and Xiaofang Wei. 2016. On the road from challenges to successes: Developing an Integrated curriculum in Geosciences for Oil and Gas Industry. Spring 2016. *Review at National Science Foundation Head Office*.
9. Krishnakumar Nedunuri, Ning Zhang, and **Ramanitharan Kandiah**. 2015. Water Resources Measurements & Estimations. *Fall Meeting of Ohio American Waterworks Association for the Southwest Region*. October 16, 2015. Wilberforce, OH.
10. Xiao Fang Wei and **Ramanitharan Kandiah**. 2015. Target Identification Using Hyperspectral Imaging Technology in High Particulate Environments. *AFRL Research Collaboration Program Review*. University of Dayton-Riverside Campus. September 2015
11. **Ramanitharan Kandiah**. 2014. Climate Impacts on the Environment. *Initiatives by The President of USA on Addressing Climate Change*. Central State University, Wilberforce, OH. October 2014.
12. **Ramani Kandiah** and Amy Magnus. 2013. Development and Application of IR Nanosensors based on SWNT-CuS Nanohybrids for ISR and Remote Sensing. *Minority Leaders Program Sensors Directorate Fall Program Review*. University of Dayton-Riverside Campus. September 2013
13. Anitha Kisanga, **Ramanitharan Kandiah** and Anshiya Ramanitharan. 2012. Identifying Health Disparities in Ohio Using Self-Organizing Maps. *13th Annual Pilot Research Project (PRP.) Symposium of the University of Cincinnati NIOSH Education and Research Center*, October 4-5, 2012. (Poster)
14. **Ramanitharan Kandiah**. 2012. Artificial Neural Network Applications in Engineering & Health Disparities. Research & Scholarly Activities day. Central State University. April 18, 2012. (Oral)
15. Tinina Hale and **Ramanitharan Kandiah**. 2011 Modeling of Noise Created by Road Construction and Maintenance Works on Interstate Route 75 in Dayton, Ohio. *12th Annual Pilot Research Project (PRP.) Symposium of the University of Cincinnati NIOSH Education and Research Center*, October 13-14, 2011. (Poster)
16. **Ramanitharan Kandiah**, Andr  Morton, and John Davenport. 2010. Estimating on-road mobile Source Pollution in Ohio. *Ohio UTC Student Research Conference*, University of Akron, Akron, OH. November 10, 2010. (Oral)
17. **Ramanitharan Kandiah**, John Davenport, and Andr  Morton. 2010. Using Datamining in Classifications of Traffic Counting Locations: A Case Study in Ohio. *Ohio UTC Student Research Conference*, University of Akron, Akron, OH. November 10, 2010. (Oral)
18. Tinina Hale and **Ramanitharan Kandiah**. 2010. *Estimating On-Road Motor Vehicle Emission using MOVES*. *Ohio UTC Student Research Conference*, University of Akron, Akron, OH. November 10, 2010. (Poster)
19. **Ramanitharan Kandiah**. 2009. Artificial Neural Networks: Machines Mimicking Men via Math. *CAS Colloquium Series*. Central State University, Wilberforce, OH. September 14, 2010. (Oral)
20. **Ramanitharan Kandiah** and Andr  Morton. 2009. Estimation of Evapotranspiration from Eddy Covariance Measurement. *USBR Project Mini-Conference*; Central State University, Wilberforce, OH. September 25, 2009. (Oral)
21. Bartina Smith and **Ramanitharan Kandiah**. 2009. Air Quality Monitoring. *Statewide student Research Conference*; Cleveland State University, Cleveland, OH. March 27-29, 2009. (Oral)
22. **Ramanitharan Kandiah** and Andr  Morton. 2008. Preliminary Estimation of Evapotranspiration from Eddy Covariance Data of Southwest USA. *USBR Project Brain Storming Workshop*; Utah State University, Logan, UT. October 8, 2008. (Oral)
23. V. Novotny and **Ramanitharan Kandiah**. 2006. Center for Urban Environmental Research. *Research & Scholarship Expo -2006*. Northeastern University, Boston, MA. March 15, 2006.

24. V. Novotny, E. Manolacos, **K. Ramanitharan**, T. Ehlinger and A. Bartošová. 2005. Development of Propagation Model for Estimating Ecological Response of Stream to Anthropogenic Stresses and Stream Modification. *Joint Progress Review for USEPA STAR Grants*; 2005, November 5; Arlington, VA.
25. **K. Ramanitharan**. 2004. Time Series Analysis of Nutrients on the Lower Mississippi River; *Northeastern University - GEGES Fall Seminar Series Presentation*; 2004, September 29; Boston, MA.

MENTORED STUDENT SCHOLARLY ACHIEVEMENTS, PRESENTATIONS & PUBLICATIONS

1. Jasmine C. Walker. 2023. Environmental Engineer: Jasmine | Engineering Your Future. *PBS Learning Media*. <https://thinktv.pbslearningmedia.org/resource/environmental-engineer-jasmine-video/engineering-your-future/>
2. Adelynn Reeves and **Ramanitharan Kandiah**. 2022. Environmental Impacts of Renewable Energy and Social Equity. *Technological Advances in Science, Medicine, and Engineering Conference (TASME 2022)*. Virtual. August 28-29, 2022 (Oral)
3. Jalen Smith, **Ramanitharan Kandiah**, and Krishna Kumar Nedunuri. 2022. Impacts of External Factors on On-Road Emissions in Montgomery County, Ohio. *Technological Advances in Science, Medicine, and Engineering Conference (TASME 2022)*. Virtual. August 28-29, 2022 (Oral)
4. Daniel Lee, Jasmine Walker, and **Ramanitharan Kandiah**. 2020. Invited Student Paper: Estimating the Contribution of On-road Mobile Vehicles to the Near-Road Air Pollutant Concentrations at a Highway Intersection. *The 99th TRB Annual Meeting*. Walter E. Washington Convention Center, Washington D.C., January 12-16, 2020 (Poster)
5. Jasmine C. Walker, Marcus Jenkins, Daniel Lee, Jochannan Mitchell. 2019. Marauders on a Mission; *EESF/AEESP Student Social Media Competition*. Faculty Advisor: Ramanitharan Kandiah (social media) ([Honorable Mention](#))
6. Trenton Barnes. 2017. Impact Index for Measuring Fracking Impact on Water Resources. *Louis Stokes Midwest Center of Excellence Conference- 2017*. Sheraton Indianapolis Hotel, Keystone Crossing, IN. October 6, 2017 (Poster)
7. Teyana Adams and **Ramanitharan Kandiah**. 2017. Possible Impacts from a 100-year Flood on the Transportation System in Montgomery County, Ohio. *Ohio Transportation Engineering Conference (OTEC) 2017*. October 11, 2017 (Poster)
8. Moses Vines and **Ramanitharan Kandiah**. 2017. Inventory of Priority Pollutant and Greenhouse Gas Emissions from On-Road Vehicles in Franklin County, OH. *Ohio Transportation Engineering Conference (OTEC) 2017*. October 11, 2017 (Poster)
9. Trenton Barnes. 2017. Impact Index for Measuring Fracking Impact on Water Resources. *Ohio LSAMP Alliance Conference- 2017*. Kingsgate Marriott Conference Center, University of Cincinnati. March 31, 2017 (Poster)
10. Tina Hale. 2012. Estimation of Emissions at Engine Idling and the Status of Idling Reduction Alternatives in Ohio. *UAECO 6th Annual Conference*. Columbus, OH. April 2-3, 2012 (Poster)
11. Wilbert E. Meade. 2011. On-road mobile source air pollutant emissions identifying hotspots and ranking roads in the state of Ohio. *Master Thesis*. Miami University, Oxford, OH.
12. Shane Fernandes and Nabil Ali. 2010. Real-Time Detection of Targets Using Hyperspectral Image Analysis. *Central State University Undergraduate Journal*. pp 57-69.
13. André Morton. 2010. Classification of Urban Districts based on Mobile Carbon Monoxide Exposure Using Self-Organizing Maps. *Ohio Transportation Consortium Undergraduate Paper Competition* ([Winner](#))

TECHNICAL REPORTS

1. **Ramanitharan Kandiah**, Edison Perdomo, and Krishna Kumar Nedunuri. 2022. *Undergraduate Scholarships for Education Excellence in Environmental Engineering and Water Resources Management (USE4WRM)*. NSF-S-STEM. Grant 1565049. Final Report
2. Krishna Kumar Nedunuri, Xiaofang Wei, **Ramanitharan Kandiah**, Ning Zhang, and Sharath Krishna. 2022. *Ecosystem Sustainment of the Appalachian Forest Regions under Natural Gas Exploration in Ohio*. NIFA Final Report
3. Krishna Kumar Nedunuri, Ning Zhang, **Ramanitharan Kandiah**, and Xiaofang Wei. 2017. *Integrated Geoscience Curriculum for Workforce Development for Oil and Gas Industry*. NSF-HBCU-TIP. Final Report
4. **Ramanitharan Kandiah** and Krishna Kumar Nedunuri. 2016. *Integrated Approach to Achieving Environmental Sustainability in Transportation; Inventory of Greenhouse Gas Emissions from On-Road Vehicles in Midwestern USA. States*. Final UTC-NEXTRANS sub-project report to the Department of Transportation (Lead: Purdue University).
5. Membership and Demographics Committee of the Association of Environmental Engineering and Science Professors. 2015. *Assessing the Growth and Demographics of Environmental Engineering from 2005 to 2013*: Final Report to the AEESP Board. – contributed as a committee member
6. CADRE Team. 2014. Central State University's Center for Allaying Health Disparities through Research and Education (CADRE). Final Report to NIH – contributed as a research member
7. Subramania I. Sritharan, **Ramanitharan Kandiah**, and Amy L. Magnus; 2013. *Development and Application of IR Nanosensors based on SWNT-CuS Nanohybrids for ISR and Remote Sensing*; Final Report to Sensors 12 for the Contract CENT 13-S567-019-02-C20
8. **Ramanitharan Kandiah**, Sumantra Chatterjee, Subramania Sritharan, Doyle Watts, Christopher Neale, and John Osterberg; 2011. *Ground Based Riparian Evapotranspiration Measurements for Remote Sensing Algorithms*; Final Report to USBR.
9. **Ramanitharan Kandiah**; 2010. *On-Road Mobile Source Pollutant Emissions: Identifying Hotspots and Ranking Roads*; Final Report submitted to the Ohio Transportation Consortium.
10. **Ramanitharan Kandiah**; 2009. *Geostatistical Approach to Detect Hotspots in Contaminated Aquatic Bottom Sediments*. Final Report submitted to Battelle. Subcontract No. 600606-1.
11. **Ramanitharan Kandiah**; 2009. *Establishing Research and Laboratory Facilities in Air Quality Monitoring*. Final Report submitted to Central State University Research Challenge Steering Committee. August 13, 2009.
12. Subramania I. Sritharan and **Ramanitharan Kandiah**; 2008. *Thematic Enhancements for the Summer Transportation Institute*. Final Report submitted to the Ohio transportation Consortium; July 2008.
13. A. Bartošová, **K. Ramanitharan** and V. Novotny; 2005. *Development of a Relational Database for Studying Ecological Response of Streams to Anthropogenic Watershed Stresses and Stream Modifications*; Boston, MA; 2005, July; US EPA/NSF/USDA STAR Watershed Program R83-0885-010.
14. L. J. Steinberg and **K. Ramanitharan**; 2001. *Improved Methods for Spatial Modeling of Contaminated Aquatic Sediments*; New Orleans, LA; 2001, July; LBR-RCS Technical Rpt.
15. V. Novotny, Xin Feng, P. Hajda, A. Gelfan, Rouli Yang, **K. Ramanitharan**, and J.A. Yates; 1998. *Development of An Adaptive Methodology for Online Computerized Modeling and Real-Time Control of Wastewater Treatment Facilities*; Milwaukee, WI; 1998, August; EPA Exploratory Research Rpt R82-0181-010.

MENTIONED IN MEDIA AND QUOTED IN ARTICLES

1. Dayton Daily News; 2026. *Impact of data centers on regional water supply 'an emerging issue'* February 19, 2026 <https://www.daytondailynews.com/local/impact-of-data-centers-on-regional-water-supply-an-emerging-issue/65FH25SJGVB45CO5NTF66YBPJA/>

2. Institution of Sustainable Infrastructure; 2025. *Envision for Sustainability Education: From Concept to Impact*. March 14, 2025 <https://sustainableinfrastructure.org/envision-for-sustainability-education-from-concept-to-impact/>
3. ASCE; 2023. ASCE honors Kandiah as new fellow. September 23, 2023 <https://www.asce.org/publications-and-news/civil-engineering-source/article/2023/09/27/asce-honors-kandiah-as-new-fellow>
4. Dayton Daily News; 2023. *Local leaders and experts weigh in on region's future*. September 1, 2023 <https://www.centralstate.edu/news/dayton-daily-news-local-leaders-and-experts-weigh-regions-future>
5. Dayton 24/7 Now; 2023. *Dayton-area university gets more than \$1.6M in research funding*. <https://dayton247now.com/news/local/dayton-area-university-gets-more-than-16m-in-research-funding>
6. Dayton Daily News; 2013. *Degree program with success: Environmental Engineering*. September 12, 2013 <https://www.daytondailynews.com/news/degree-program-with-success-environmental-engineering/JwzSGqKvjlbPkDiM0sqstSI/>

THESES AND DISSERTATION

1. **Ramanitharan Kandiah**; 2004. *Geostatistical Techniques in the Improvement of Spatial Modeling of Contaminated Aquatic Sediments: Evaluation & Applications*. Ph.D. Dissertation; Department of Civil & Environmental Engineering, Tulane University, New Orleans, LA; 2004 June.
2. **Ramanitharan Kandiah**; 1998. *Modeling of an Activated Sludge Treatment Plant for the Real-Time Control*. Master's Thesis; Department of Civil & Environmental Engineering, Marquette University, Milwaukee, WI; 1998 August.
3. **Ramanitharan Kandiah**; 1994. *Systems Analysis of Wastewater Disposal of an Industrial City into a River (A Case Study on Qing An River in Huaiyin City)*. Master's Thesis; Department of Water Resources & Environmental Engineering, Hohai University, Nanjing, China; 1994 December.

WORKSHOPS, SEMINARS, PANELS, TRAINING & CONFERENCES ATTENDED

(After 2023, only the events with at least one full day of attendance are included; events with personal presentations are excluded.)

1. AAEEES -PFAS Microcredential Certificate. Certificate PFAS2025-0010. Virtual. December 1, 2025
2. USGBC - Sustainable Smart Cities + AI series. Virtual; May 28 - June 25, 2025
3. HLC Peer Reviewer Certification - Virtual and Chicago, IL; Spring 2025
4. Penn State Extension - Forest Owner Carbon and Climate Education (FOCCE); March 8-29, 2023
5. ISI-Envision Verification Applicants Course. April 13-14, 2023
6. Stinner Summit- 16th Annual Stinner Summit: Designing More Climate Resilient Agroecosystems in Ohio; Glen Helen Nature Preserve, Yellow Springs, OH; November 18, 2022
7. ISI-Institute for Sustainable Infrastructure 2022 Virtual Conference Program. November 15-17, 2022
8. Professional Development Options - Engineering Ethics: Professional Ethics for Engineers. October 19, 2022
9. AAEEES – Converting Organic Waste Into Liquid Gold. September 21, 2022
10. Faculty Online Certification Program –Module C, Central State University, July 22, 2022
11. AAEEES – Environmental Justice at E.P.A. July 20, 2022
12. The Chronicle & Dever Justice LLC. - Strategic-Leadership Program for Department Chairs. June 7-24, 2022
13. Faculty Online Certification Program – Module A, Central State University, June 9, 2022
14. RIT - Digital Imaging and Remote Sensing Image Generation (DIRSIG™) Basic Training. May 16-20, 2022
15. ISI-Envision Train the Trainer Certification. March 21-24, 2022

16. Quality Matters - *Independent Applying the QM Rubric – Virtual (APPQMR) : (Statewide Systems)*. December 9, 2021
17. ASCE - *Avoiding Ethical Pitfalls in Failure Investigations (AWI092419)*. November 14, 2021
18. The Zofnass Program for Sustainable Infrastructure at Harvard University (ZPH) and the Institute for Sustainable Infrastructure (ISI). *ISI and ZPH Conference- Equitable and Sustainable Infrastructure: Delivering Merit and Climate Resilience*. November 17-18, 2021
19. UIDP –*Mitigating Climate Change Workshop*. October 12-13, 2021
20. Smart Water & Waste World – *Smart Water Reclamation & Reuse: Experience from India & USA*. January 12, 2021
21. The Zofnass Program for Sustainable Infrastructure at Harvard University (ZPH) and the Institute for Sustainable Infrastructure (ISI). *ISI and ZPH Conference- Shovel-Worthy Ideas For A Fresh Start*. November 18-19, 2020
22. *2020 National Hydraulic Engineering Conference- Hydraulic Engineering Fundamentals in a Dynamic World*. October 6-8, 2020
23. Center for Infrastructure Transformation & Education - *CIT-E Infrastructure Education in Unprecedented Times Workshop*. August 3-5, 2020
24. Center for Infrastructure Transformation & Education - *CIT-E Model Introductory Infrastructure Course Adaptation Workshop*. June 29-30, 2020
25. AAEES- *Tulare Lake Compost: Attaining Sustainability in a Nonattainment Area*. June 4, 2020
26. AAEES - Water Research Foundation Project Reuse 15-11 (Ozone-Biofiltration Direct Potable Reuse Testing at Gwinnett County). January 16, 2019
27. ABET - *Program Evaluator Candidate (PEVC) Training*. June 5, 2019
28. ABET- *Program Evaluator Pre-Visit Preparation Training*. 2017
29. ABET- PEVC online and in-person Training. ABET. Baltimore, MD. 2017 June
30. *Soil Water Assessment Tool (SWAT) Training – Introductory and Advanced*; Oregon State University, Corvallis, OR. Aug. 14-Aug. 18, 2017
31. *BioEnergy Education in P20 Curricula Workshop*; 2017 ASEE Conference, Columbus, OH. June 28, 2017
32. *Waste to Wheels II: Renewable Natural Gas for Transportation*; Sponsored by Clean Energy Ohio. Central State University, Wilberforce, OH; December 2, 2015.
33. *Teaching with Technology*; Central State University, Wilberforce, OH; Fall 2014 Certificate.
34. *8th Annual Stinner Summit*; Glen Helen Nature Preserve, Yellow Springs, OH; October 10, 2014
35. *Healthy Soils for Healthy Waters Workshop*; Ohio State University; Columbus, OH. September 14-16, 2014.
36. *2014 ABET Symposium and Workshops*; ABET, Pittsburg, PA; April 3-6, 2014.
37. *Assessment Workshop*; Central State University, Wilberforce, OH; September 26-27, 2013.
38. *85th Annual National Technical Association Conference*; Central State University, Wilberforce, OH; September 18-21, 2013.
39. *Water & Innovation: Flowing into the Future*; The 74th Ohio Section, American Water Works Association, Dayton, OH; September 20, 2012
40. *Solving C.O.M.S.O.L. Multiphysics Problems*; AltaSim Technologies, L.L.C., Columbus, OH; June 19-22, 2012
41. *Making Water Connections: Dayton water Technology Innovation Conference*; Dayton, OH; May 22-23, 2012
42. *UCEAO 6th Annual Conference: Securing Ohio's Energy and Economic Future*. The University Clean Energy Alliance of Ohio; Columbus, OH; April 2-3. 2012
43. *Achieving Health Equity through Access, Advocacy, Treatment, and Policy Development*; XULA-NIMHD, New Orleans; March 6-8, 2012

44. *CITI Training Course and Test: Basic Course in the Protection of Human Research Subjects*; CITI; February 5, 2012
45. *Water and Energy Nexus Technology Innovation Forum*; The Wright Brothers Institute (WBI) and the EPA Office of Research and Development National Risk Management Research Laboratory; Dayton, OH; October 5, 2011
46. *Project Level Training for Quantitative PM Hot-Spot Analyses*; USEPA-ODOT, Columbus, OH; July 26 - 28, 2011
47. *MOVES Workshop Webinar*; USEPA; June 14-16, 2011
48. *UCEAO 5th Annual Conference: Building and Sustaining Partnerships*; The University Clean Energy Alliance of Ohio; Columbus, OH; 27 April, 2011
49. IRIS Research Summit, Ohio Department of Transportation, Columbus, OH; November 22, 2010
50. *Moving Ahead 2010: Sustainable Transportation for the 21st Century*; Ohio State University and Clean Fuels Ohio; Ohio Union Conference Center, Columbus, OH; May 2-4, 2010.
51. *Inspecting Construction Projects: An Inspector's Guide to High-Quality Job Performance*; Dayton Section ASCE; Miami Valley Research Park, Kettering, OH; February 25, 2010
52. *Pilot Research Project Training Grant Writing Workshop*; University of Cincinnati Medical Center, Cincinnati, OH; March 22-23, 2010
53. *Computational Engineering for Engineering Educators*; National Computational Science Institute; Ohio Supercomputer Center, Columbus, OH; July 12-17, 2009
54. *Professional Grant Writing Workshop*; Central State University, Wilberforce, OH; March 23-25, 2009
55. *Water Front documentary Screening*; Antioch University; Yellow Spring, OH. November 7, 2008 – Expert panel
56. *Successful Design-Build Project Delivery*; Design-Build Institute of America; New Orleans, LA; May 9-10, 2002
57. *Geostatistics for the 21st Century*; American Statistics Association; Loyola University, Chicago, IL; May 4, 2001
58. *Bayesian Interference and Markov Chain Monte Carlo*; American Statistics Association; University of Chicago, Chicago, IL; June, 2000
59. *Activated Sludge Control and Operations*; Central States Water Environment Association; Madison, WI; April 7, 1998
60. *'93 International Conference & Exposition on Medium – Small Hydro Equipment*; Hangzhou Regional Center (Asia-Pacific) for Small Hydro Power; June 21-25, 1993
61. *Humanosphere as the Primary Factor in Shaping the Future of Mankind*; Institute of Fundamental Studies, Kandy, Sri Lanka; December 6-8, 1990
62. *Social Sciences for Environmental Engineers*; University of Peradeniya, Sri Lanka; September 20, 1990
63. *Environmental Impact on Construction & Industry*; University of Peradeniya, Sri Lanka; September 7, 1990

WORKSHOPS, TRAINING, SEMINAR, AND SUMMER INSTITUTES HELD

1. **Coordinator and Co-Instructor**; four two-day workshops: *Principles of Municipal Wastewater Treatment and Resource Recovery*; *Principles of Drinking Water Treatment and Quality*; *Environmental Permitting and Auditing*; *Environmental Health, Safety, and Security*. 2025; Workforce Training and Business Development Center with ICWRM. Central State University, 2025 May - June.
2. **Coordinator and Co-Instructor**; Environmental Health, Safety and Security Workshop; 2023; Workforce Training and Business Development Center with ICWRM. Central State University, Dayton Campus, 2023 July 17-18.
3. **Academic Coordinator**; Diversity in Engineering Scholarship sponsored by USDA; 2018; Six Weeks for Incoming Freshmen. Central State University, Wilberforce, 2018 June - July

4. **Faculty Instructor-Grade 8**; Seed to Bloom Summer Camp sponsored by USDA; 2016, 2017; Two-week summer camp for Grade 8 Students. Central State University, Wilberforce, 2016 & 2017.
5. **Co-Instructor**, Environmental Impact Analysis Training Course No. 169. USACE Huntsville, Alabama. 2015 July 27 -31.
6. **Faculty Coordinator**, WRM Environmental Research Training Program with University of Cincinnati and USEPA; 2015 Aug-Sep., 2011 May
7. **Academic Coordinator & Instructor**, Summer Transportation Institute, sponsored by ODOT & FHWA; 2008-2016; Central State University. Four-week summer camp for High school students
8. **Instructor**, ATK-Pre-Engineering Workshop; 2010; Central State University; Pre-Engineering summer camp for High school STEM Students.
9. **Instructor** at Central State University; OhioView - SATELLITES (Students and Teachers Evaluating Local Landscapes to Interpret the Earth from Space) Summer Teacher Institute; 2008. GPS Tracking techniques for High school science teachers. Central State University; June 23-27 and November 1, 2008
10. **Instructor**, National Nuclear Security Administration (NNSA.) Summer Hyperspectral Institute: June 22 – August 1, 2008; Central State University; Taught Statistics, ArcSDE, and ArcIMS.

INVITED TALKS AND PANEL DISCUSSION

1. Invited Speaker: Using ENVISION as a Guide to Evaluate Sustainability in Civil Engineering Projects. *New Zealand Tamil Engineers Forum; 2025*. Virtual, Auckland, New Zealand; June 18, 2025
2. Invited Speaker: Using ENVISION as a Guide for Civil Engineering Projects. *Technological Advances in Science, Medicine & Engineering 2023*. Hybrid-Toronto, Canada; July 1-2, 2023
3. Panel Member: *2022 Interdisciplinary Research Fall Forum*, Moderator, Jay Martin, Ohio State University, Columbus, OH. November 7-9, 2022.
4. Panel Member: Bioenergy – *ASEE 2018 Conference*. Salt Lake City, UT
5. Panel Member: Energy Innovation and Environmental Impact – *ASEE 2018 Conference*. Salt Lake City, UT
6. Panel Member: Energy and Physics – *ASEE 2017 Conference*. Columbus, OH
7. Panel Member: TASME Conference – *Path to Sustainable Career in Science/ Women in STEM*; 2016 July 2
8. Panel Judge: C.S.U. Social Science Senior Research presentations; 2016 Spring
9. Moderator: ASEE-NCS 2016 Conference (March 18-19, 2016 Central Michigan University, Mt Pleasant, MI); FOCUS Conference (April 8-9, 2016 Central State University, Wilberforce, OH)

RESEARCH AND EDUCATIONAL PROJECTS

Research proposals submitted & pending (Non-Funded proposals are not given in this Curriculum Vitae)

Research and Educational Grants and Contracts Funded (Principal Investigator Capacity)

1. **Principal Investigator** for Central State University in the Principal Investigator for Central State University in the Multi-state project Ecological Resilience and Extreme Weather Events: Impacts on Small Farmers, Landowners and Rural & Urban Communities; NIFA; \$77,233.52; 10/01/2025 - 09/30/2026 (will be extended till - 1/31/2027 with additional funding for FY 26-27)
2. **Principal Investigator** for Central State University in the Principal Investigator for Central State University in the Multi-state project Climate Change: Impacts for Socially Disadvantaged Farmers, Landowners & Communities of Color; NIFA OHOX-CLC1; \$48,697; 08/01/2024-07/31/2025
3. **Principal Investigator** for the Sub-project of Louis Stokes Alliances for Minority Participation (LSAMP)-The Ohio LSAMP Alliance; NSF; \$176,553; Subaward ID-60072143. 8/1/2020-5/12/2025

4. **Principal Investigator;** Undergraduate Scholarships for Education Excellence in Environmental Engineering and Water Resources Management (USE4WRM); NSF-DUE; \$650,000; Award ID-1565049. 5/15/2016-4/30/2022
5. **Principal Investigator** for the sub-project, "Integrated Approach to Achieving Environmental Sustainability in Transportation: Coupling Energy Efficiency Solutions with Reductions in Environmental and Climate Footprints"; NEXTRANS – Integrated and Sustainable Transportation Solutions: From Concepts to Deployment. Department of Transportation; \$200,000; January 2012-December 2016. DTRT12-G-UTC05
6. **Principal Investigator;** On-Road Mobile Source Pollutant Emissions: Identifying Hotspots and Ranking Roads; Department of Transportation (via Ohio Transportation Consortium); \$19,000; March 2009 – October 2010
7. **Principal Investigator;** Establishing Research and Laboratory Facilities in Air Quality Monitoring; Ohio Board of Regents Research Challenge Grant; \$19,000; November 2008 – June 2009
8. **Principal Investigator;** Infrastructures in Present Housing Schemes: Social & Technical Aspects on their Designs & Maintenance (A Case Study on Hantana Housing Scheme), and Appropriate Alternative Adaptable Low-Cost Techniques; Centre for Housing, Planning and Buildings of Ministry of Housing, Planning and Development of Sri Lanka, Colombo, Sri Lanka. Research Grant 1990-92

(Co-Principal Investigator Capacity)

1. **Co-Principal Investigator;** Advance Unmanned Aerial Vehicle Education and Research for Agriculture and Forestry at Central State University; NIFA-CBG; 07/2023-06/2026. \$ 598,814
2. **Co-Principal Director;** Central State University Workforce and Business Development Center. Economic Development Administration. 2022-2025 \$ 4,478,748
9. **Co-Program Investigator;** Generation of Synthetic Hyperspectral Imagery to Support Training of Machine Learning Algorithms; MLRCP; GR124911 10/01/2021- 09/30/2024. \$1,80,000
10. **Co-Program Director;** Improving Silviculture of Oak in Ohio; USDA NIFA McIntyre-Stennis; OHOX2020-1 10/01/2021- 09/30/2026
11. **Co-Program Director;** Ecosystem Services in the Appalachian Forest Regions for the Sustainable Development of Natural Gas Exploration; USDA NIFA McIntyre-Stennis; 2016-2021 \$480,000.
12. **Co-Principal Investigator;** Target Identification Using Hyperspectral Imaging Technology in High Particulate Environments. MLP 1/16/2015-12/31/2016. \$42,060. CONTRACT CENT-14-S7700-02-C2.
13. **Co-Principal Investigator;** Integrated Geoscience Curriculum for Workforce Development for Oil and Gas Industry. NSF-HBCU-TIP. 8/1/2013-5/31/2016.\$400,000.
14. **Co-Principal Investigator;** Development and Application of IR Nanosensors based on SWNT-CuS Nanohybrids for ISR and Remote Sensing. MLP 10/1/2012-11/30/2013. \$100,000. CONTRACT CENT 13-S567-019-02-C20.
15. **Co-Principal Investigator;** Project C: Using Wavelet Analysis for Surveillance Data Fusion and Target Recognition and Project D: Cognitive Influences in Decision-Making for Sensor Applications. Center for Human Performance and Sensor Applications (CHPSA); CONTRACT FA8650-05-D-1912.
16. **Co-Principal Investigator;** Multi-Scale Motion Analysis; Minority Leader Program of U.S. Air Force. (2011-2013) \$50,000
17. **Co-Principal Investigator;** Modeling Infrared Sensing Applications for Surveillance-Predicting Suspect Movement; AFRL/RH; (2009-2010)
18. **Co-Principal Investigator and Ground Truth Investigator;** *Applied Remote Sensing of Evapotranspiration*; United States Bureau of Reclamation; 2008-2011. (04FC811041, Mod. No. 006) \$3,000,000

19. **Co-Principal Investigator**; Development of Risk Propagation Model for Estimating Ecological response of Streams to Anthropogenic Watershed Stresses and Stream Modifications; USEP/NSF/USDA STAR Watershed Program, U.S. Environmental Protection Agency, Washington, DC; 2004-2006. (R83-0885-110) \$747,760

Research and Educational Projects in Other Capacities

1. **Academic Coordinator**; Summer Transportation Institute; NSTI-DOT; 06/2025. Central State University; \$61,028.72
2. **Researcher** for Central State University, The Center for Connected and Automated Transportation (CCAT): Towards a safe, secure, and socially responsible automated vehicle deployment; DOT-UTC. 10/2023-09/2028. Central State University's funding request for five years is \$ 500,000
3. **University Partner** for Central State University. Adaptation and Management for the Ecological and Social Resilience of Southern Tier Forests to Climate Change; Joint Fire Science Program Project Proposal 22-2-02-21 Central State University funding request for three years is \$1,20,000
20. **Faculty Administrative Coordinator** (from 2018): USDA NRCS; Development of Diverse Engineer's project; 2,000,000; 2016-2020 (Award #69-5E34-15-031).
21. **Faculty Researcher**; US DOT Regional 5 University Transportation Center- University of Michigan (Lead); DoT February 2017-2023
22. **Faculty Researcher-Hydrology**; 2016. Optimal Agronomic Practices to Reduce Nutrient Loading in Ohio's Water Bodies; USDA- Evans Allen; OHOXCSU-WQ-1.
23. **Researcher**; How quickly can target phosphorus reductions be met? Robust predictions from multiple watershed and lake models; 2016.Ohio Sea Grant and Dept Of Higher Education; \$ 255,757
24. **Geospatial Researcher**, A Design Proposal: The Center for Cyber Sensors Networks for Human and Environmental Applications, National Science Foundation. September 15, 2012-August 31, 2016
25. **Faculty Researcher**; High-Performance Computing for Composite Manufacturing Process Modeling; Minority Leader Program of U.S. Air Force. (2012-2013) \$45,000
26. **Modeler**; Modeling the Effects Of Nutrient Loading From The Contributing Streams On The Growth Of Cyanobacteria In Lake Erie; National Oceanic and Atmospheric Administration (NOAA)with Bowling Green State University Award. 2011 November-December
27. **Geostatistics Specialist**; Biomass fieldwork and study. NNSA 2011 May
28. **Environmental Scientist**; *Persistent Surveillance*; AFRL; 2009
29. **Scientist**; Technology Transfer Program Support Technical Support Services; Battelle; \$6,464.42; March 2009 – June 2009
30. **Investigator**; *The Center for Allaying Health Disparities through Research and Education (CADRE)* - Geospatial Database Center for Minority Health Disparities; National Institutes of Health (NIH); 2009- 2013
31. **Research Faculty**; *Minority Leaders Program - Remote Sensing Technology Demonstration*; 2008
32. **Research Assistant**; Time Series Analysis of Lower Mississippi River Water Quality; Long Term Estuary Assessment Group of Center for Bioenvironmental Research, Tulane University-Xavier University co-funded by Naval Oceanographic Office/ NOAA; 1999-2002.
33. **Research Assistant**; Improved Methods for Spatial Modeling of Contaminated Aquatic Sediments; Louisiana Board of Reagents Grant; 1998-2001.
34. **Research Assistant**; Development of an Adaptive Methodology for Online Computerized Modeling and Real-Time Control of Wastewater Treatment Facilities - Exploratory Research Grant, U.S. Environmental Protection Agency, Washington, DC, 1997 - 1998. (R82-0181-010)
35. **Research Assistant**; Development of the Real-Time Control System for the Milwaukee Metropolitan Sewerage District Central Control System - Phase III; The Milwaukee Metropolitan Sewerage District Grant; 1997-1998.

White Papers

1. Assessing the Health Outcomes of Air Quality Actions; to Health Effects Institute; 2011
2. Improving the Detection of Buried Objects with Ground Penetrating Radar Images Using Support Vector Machines; to AFRL; 2010

ACADEMIC AND PROFESSIONAL ACTIVITIESFunctions at the University Senate Level at Central State University

1. Senate Ad Hoc Committee ex-Officio for Graduate Programs Policy; 2024-
2. Senate Committee on Budget; 2023-2026
3. Senate Committee on Certificate Programs; 2024-
4. Senate Ad Hoc Committee on Reviewing Promotion & Tenure Process; 2018
5. Senate Committee on Technology; 2018- 2021
6. Chair, Senate Committee on Faculty Affairs; 2015-2018
7. Senate Committee on Assessment of Teaching & Learning; 2008- 2015
8. Human Subjects Committee/Institutional Review Board; 2012 – 2019
9. Promotion and Tenure Committee; 2013- 2015
10. Senate Executive Committee; 2011-2012, 2019-2022

Functions at the College Level in Central State University

(P&T Ad Hoc Committee Services at the College and Department levels are not included)

1. Technology Advances Management in CBI. (TEAM-CBI) subcommittee; Member 2008-2011
2. Recruitment and Retention in C.B.I. subcommittee; Member; 2009-2011
3. College Committee for Recruitment & Retention, College of Science & Engineering; 2011- Present

Functions at the Department Level at Central State University

1. Faculty, Preparation for ABET accreditation for Environmental Engineering 2014- Present
2. Chair, Wastewater Treatment Faculty Search committee; 2012
3. Webpage Development IT-Water Resources Management Liaison Faculty; 2008 -2009
4. Social Networking Liaison Faculty for the Water Resources Management Department; 2009- Present
5. Faculty Advisor, Water Resources Club; 2009-2011

Functions in Special Committee Assignments at Central State University

1. Member, Mentor Collective Central State University Team; 2024-
2. Chair, CESTA Dean and Landgrant Director Search Committee; 2023
3. Ad-Hoc Committee on First Year Seminar Course Review; 2018
4. Chair, Agricultural Engineering Research Faculty, Central State University; 2016
5. Contract Writing Team; AAUP; 2016
6. Grievance Committee, AAUP; 2015-Present
7. Judicial Committee; 2015- Present
8. Ad Hoc Committee on Grade Appeal (Mathematics), College of Science & Engineering; 2015
9. Ad Hoc Committee on Grade Appeal (Manufacturing), College of Science & Engineering; 2015
10. College P & T Assessment Committee for K. Mc Ghee, College of Business, 2015
11. Selection Committee Member, Owner Agent, Land Grant Selection Committee; 2015
12. Sustainable Agriculture Curriculum Committee; 2014 – 2015
13. Graduate Program Task Force Committee; 2013
14. Senate Ad Hoc Committee on WAC and Gen Ed Assessment; 2013
15. Establishing Surveying Program in CSU; Feasibility Study/ Exploratory Committee Member upon the request of Provost Dr. Glass; 2009
16. University College Advising & Mentoring Implementation Team; Summer 2011

17. NCA Self-Study Working Group #9: Committee to Evaluate the Assessment of Student Learning; 2012- 2013
18. University Committee on International Week; 2011- 2012
19. Undergraduate Research Journal; Member of Advisory Board; 2009 –2012

Functions at the External Professional Societies and Committees

1. WEF - Air Quality and Odor Control Committee; 2022-2025
36. ENVISION-Central State University Administrator; 2022-; Academic Committee, 2024-
37. TRB - Volunteer, AMS10 Research Cluster Environmental Justice and Future Mobility; 2022-25
38. TRB – Friend, AMR50 Standing Committee on Extreme Weather and Climate Change Adaptation; 2022-25
39. TRB – Friend, AMS10 Standing Committee on Air Quality and Greenhouse Gas Mitigation; 2018-25
40. TRB – Friend, AKD50 Standing Committee on Hydrology, Hydraulics, and Stormwater; 2018-25
41. AIH- Diversity, Equity, and Inclusion Committee; 2021-Present
42. ABET – Program Evaluator, Environmental Engineering & Civil Engineering; 2019-
43. AAEEES - Environmental Sustainability Committee Member; 2019-Present; 2025 – Vice Chair
44. ASEE – P12 Representatives Committee; 2023 -
45. ASEE – Central State Representative; 2020-2023
46. ASEE – Minorities in Engineering Division Member; 2018-2019
47. EWRI – History and Heritage Committee; 2023-
48. EWRI - Education Council Member; 2019 - 2022
49. EWRI - Advancing Renewable Energy Technologies Committee Observer; 2022. Member 2023-
50. EWRI – Water Pollution Engineering Committee Member; 2019 –
51. EWRI- Groundwater Council; Technical Director 2024-
52. EWRI – Groundwater Quality Committee Member; 2018 – ; Secretary 2019-2022; Chair 2022-2024
53. EWRI - Environmentally Responsible Energy Production Committee Member; 2018-
54. EWRI - Hydraulic Fracturing Education Committee Member; 2016 – 2018.
55. EWRI – Sustainability Committee Observer; 2016 - 2018
56. AEESP - Education Member; 2022-
57. AEESP - Membership and Demographics Committee Member; 2013- Present; Chair 2017-2018
58. ASCE – Mentor; 2020-
59. ASCE – Dayton Chapter Education Committee Member; 2009 – 2018
60. ERC -Steering Committee, Central State University Representative; 2010- 2021
61. NSPE- National Society of Professional Engineers, National Mentoring Task Force; 2010- 2012

Other Academic and Professional Functions

1. Associate Editor – *The Ohio Journal of Science*, 2024-
2. Editorial Board – *Environmental Quality Management*, Wiley; 2022-
62. TASME Conference – Civil and Environmental Engineering Track Chair; 2021-
63. Mentoring Faculty: OhioView-SATELLITES Inquiry-based Research Project; 2009

DISSERTATION|THESIS REVIEWER OR EXTERNAL PROMOTION|TENURE EVALUATOR

1. Candidate, Promotion, University of Toronto, Scarborough, Canada. 2023 (Dossier Reviewer)
2. Candidate, Doctor of Philosophy, University of Southern Queensland, Australia. 2019 (Reviewer)

THESIS GUIDANCE AND COMMITTEE MEMBER

1. Meade, Wilbert. *Ranking Roads based on On-Road Mobile Source Pollutant Emissions*, Master in Science, Environmental Science, Miami University, Oxford, OH. 2010 (Guidance)

2. Masopust, Petr. *High-Resolution Spatial and Temporal Variability and Patterns of Escherichia coli in the Charles River*, Master of Science in Civil Engineering. Graduate School of Engineering. Northeastern University, Boston, Massachusetts. July 2005. (Committee)
3. Brooks, Jessica Kaye. *Evaluating Single and Multiple Stressors in Watershed Risk Assessment*, Master of Science in Civil Engineering. Graduate School of Engineering. Northeastern University, Boston, Massachusetts. April 2005. (Committee)

UNDERGRADUATE RESEARCH MENTOR

John Davenport, 2009-2010, Air Quality-Traffic	Josephine Johnson, 2015, Air Quality-Aerosol
Wilbert Meade, 2009-2010, Air Quality-Traffic	Trendon Barnes, 2016-, Hydrofracturing
Andr� Morton, 2010, 2009-2010 Air Quality, ET	Aquil Frost, 2016-, Hydrofracturing
Dante Dorsey, 2010, Air Quality-Traffic	Teyana Adams, 2017- Natural Hazards
Mark Hatfield, 2009-2010, ET	Gilbert Robinson, 2018-2022 SWAT Modeling
Keith Farrows, 2011, ET	Daniel Lee, 2019- Air Quality-CAVs
William Cook, 2011, ET	Tamia Coleman, 2019- Renewable Energy
Tinina Hale, 2011-2012, Noise Pollution	Jasmine Newsom, 2020-2023 Solid Waste Mgt.
Trenton Barnes, 2016-, Hydro Fracturing	Jalen Smith, 2021- GHG and CAVs
Moses Vines, 2017-Air Quality-Traffic	Jayshan Lundy, 2021-2023 Forest Hydrology
Darrell Latham, 2018-Air Quality-Traffic	Adelynn Reeves, 2022 – CAVs, Traffic Counts
Daniel Peoples, 2013, ET	Pleas Halsell, 2023 – Air & Water Pollution
Anitha Kisanga, 2012-2013, Health Disparities	Tando Mawasha, 2023– SustainableSmart Farms
Ammon Russell, 2013, Air Quality-GHG	Danao Davis, 2023 – Climate & Forestry
Benjamin Rives, 2014, Air Quality-GHG	Kimberly Smith, 2023- GHG and CAVs
Michael Smith, Jr, 2014-2016, Hydrofracturing	Zephon McAndrew, 2024-Sustainable Farms

COMMUNITY ACTIVITIES (Related to Profession)

1. Advisor, Stinner Project, 2023
2. Co-Director, Water Resources Leaders Forum, Pallankottai, Mannar, Sri Lanka Water Resources Development Project, 2022-
3. Volunteer (Advising), Village of Yellow Springs on Ellis Pond Algae Bloom, 2022
4. Member, Beaver Creek Wetlands Association, Inc. 2014- Education & Project Committees 2023-
5. Volunteer, Dayton-Techfest, ASCE, and Central State University booths, 2010-2012, 2014-2019
6. Judge, Dayton Science Fair 2011, 2012, 2014
7. Advisory Committee Member, Boonshoft Museum of *Discovery–Splash! Water Exhibit*, 2011
8. Judge, Dayton Regional Stem School, Beaver Creek 2010, 2011
9. Environmental Science (ES) Committee; Riverview East Academy, Cincinnati, OH; 2009-2010