ARJUN K. VENKATESAN
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RESEARCH SUMMARY

- Physical-chemical treatment of contaminants of emerging concern
- Occurrence and fate of contaminants of emerging concern
- Environmental and public health monitoring
- Mass spectrometry

EDUCATION

*Ph.D. Environmental Engineering***,** Arizona State University (ASU). *Dec'13*
- Advisor: Dr. Rolf U. Halden
- Dissertation: Contaminants of emerging concern in U.S. sewage sludges and forecasting of associated ecological and human health risks using sewage epidemiology approaches

M.S. Environmental Engineering, University of Nevada, Las Vegas (UNLV). *May '09*
- Advisor: Dr. Jacimaria R. Batista
- Thesis: Investigation of feasibility and potential mechanisms for the bioregeneration of perchlorate laden gel-type anion exchange resin

B.Tech. Chemical Engineering, Anna University, Chennai, India. *May '07*

PROFESSIONAL APPOINTMENTS AND EXPERIENCES

Associate Professor
Department of Civil & Environmental Engineering, New Jersey Institute of Technology
Sep'23- Present

Research Associate Professor
School of Marine and Atmospheric Sciences, Stony Brook University
Nov'20-Aug'23

Associate Director
New York State Center for Clean Water Technology (CCWT)
Oct'18-Aug'23
- Responsible for the development and implementation of all drinking water initiatives of the Center
- Provide leadership, personnel administration, facilities management, grantsmanship, and strategic planning for all drinking water related activities

Technical Director for CCWT Laboratory
- For the NYS DOH Environmental Laboratory Approval Program (ELAP)-certified PFAS testing facility at Stony Brook University

Adjunct Professor
Department of Civil Engineering, Stony Brook University
Aug'17-Oct'20

Research Scientist
New York State Center for Clean Water Technology
Aug'17- Dec'19
- Initiated a pilot program to test and evaluate advanced/alternative water treatment technologies to remove contaminants of emerging concern (1,4-dioxane, perfluoro chemicals)
- The goal of this program is to develop and commercialize affordable, high performance water quality protection and restoration technologies that are suitable for widespread deployment
- Research in the identification and monitoring of byproducts during advanced oxidation process treatment systems (bench and pilot-scale)

Associate Research Scientist

Nanosystems Engineering Research Center for Nanotechnology-Enabled Water Treatment, ASU
Sep'16-Aug'17

- Research on the occurrence, fate and toxicity of engineered nanoparticles
- Other projects: Treatment of bromide contaminated waters using silver-amended coagulation technique; characterization of organic phosphorus in the environment to inform on P-recovery and remediation of contaminated water

Assistant Research Scientist

Center for Environmental Health Engineering, The Biodesign Institute, ASU
June'16-Aug'16

- Project lead and management of wastewater-based epidemiology approaches to monitor public health and contaminant flows in communities
- Developed methods to detect human biomarkers of chemical/toxicant exposures using mass spectrometry and other complementing techniques (ELISA)
- Worked with U.S. communities and wastewater utilities to conduct sampling, communicate results and to establish collaborations

Postdoctoral Research Associate

Center for Environmental Health Engineering, The Biodesign Institute, ASU
Dec'13-May'16

- Management and coordination of a nationwide wastewater treatment plant survey to identify and prioritize chemical and biological agents of concern
- Researched the occurrence of emerging contaminants in processed municipal sewage sludge (biosolids management and disposal risks)
- Work involved proposal writing, mentoring graduate students and interns, project coordination and management, method development, data analysis and manuscript preparation for publication

Graduate Research Associate

School of Sustainable Engineering and the Built Environment, ASU
Aug'10-Dec'13

- Monitored the occurrence and fate of emerging contaminants in wastewater treatment plants and environment
- Research involved sample preparation and method development for contaminant analyses using gas and liquid chromatography tandem mass spectrometry

Department of Civil and Environmental Engineering, UNLV
Jan'10 – July'10

- Investigated potential contaminant sources near drinking water wells in Nevada in collaboration with Nevada Division of Environmental Protection (NDEP)
- Performed extensive GIS (geographic information system) survey of contaminant sources near drinking water wells and prepared report for NDEP

Aug '09 – Dec'09

- Developed system dynamics model to forecast salinity load to the Colorado River due to urbanization within the Las Vegas Valley
- Modeled energy conservation and salinity reduction in the Las Vegas Valley through direct and indirect potable water reuse

May '08 – April '09 (M.S. Thesis)

- Researched the bioregeneration of ion-exchange resins contaminated with perchlorate and nitrate
- Performed bench-top experiments to test the feasibility of bioregeneration of ion-exchange resins in a fluidized bed reactor
- Conducted batch tests to investigate the mechanism of bioregeneration process

FUNDED GRANT PROPOSALS

1. Pesticides and their human metabolites in New Jersey wastewaters - $200,000
   PI: **Venkatesan** (100%)
   Sponsor: New Jersey Department of Environmental Protection
   Period: Awarded (contract pending)

2. Innovative Pre-treatment for Enhanced PFAS remediation with Granular Activated Carbon - $50,000
   PI: **Venkatesan** (100%)
   Sponsor: National Science Foundation (NSF) (I-Corps)
   Period: April, 2025 – March, 2026

3. Assessing the Leachability of PFAS From Synagro/RemBind Products - $50,000
   PI: **Venkatesan** (100%)
   Sponsor: EDCORP Project Solutions Pty ltd
   Period: Feb, 2025 – Jan, 2026

4. Collaborative Research: RAPID: Assessing the impact of firefighting foam spill on spatiotemporal distribution of PFAS in Brunswick Maine - $200,000
   Co-PI: **Venkatesan** (50%), PI: Apul
   Sponsor: NSF
   Period: Jan, 2024 - Jan, 2026

5. Application of hydrophobic ion pairing to capture poorly adsorbed PFAS by granular activated carbon $249,989
   PI: **Venkatesan** (70%); Co-PI: Apul (30%)
   Sponsor: Strategic Environmental Research and Development Program (SERDP)
   Period: Awarded (contract poending)

6. Enhanced coagulation for the removal of per- and polyfluoroalkyl substances (PFAS) using cationic hydrophobic ion pairing agents - $249,939
   PI: **Venkatesan** (75%); Co-PI: Pennock (25%)
   Sponsor: U.S. Bureau of Reclamation
   Period: Sep, 2024 to Aug, 2026

7. ERASE-PFAS: Understanding the surface-active properties of PFAS for enhanced removal by bubbling-assisted water treatment processes - $400,657
   PI: **Venkatesan** (70%), Co-PI: Hsiao (30%)
   Sponsor: NSF
   Period: Aug, 2021 - Jul, 2025

8. Enhancing the removal of hydrophilic per- and polyfluoroalkyl substances by Granular Activated Carbon using hydrophobic ion-pairing as pre-treatment - $199,601
   PI: **Venkatesan** (100%)
   U.S. Bureau of Reclamation
   Period: Sep, 2023 – Sep, 2025

9. Extraction and removal of PFAS from contaminated water and soil using air-bubbles - $257,457
   PI: **Venkatesan** (100%)

Spnsor: SERDP
Period: Jan, 2022 – Jan, 2025

10. Bioavailability, bioaccumulation, and toxicity of PFASs in benthic biota exposed to contaminated marine sediments - $1,444,462
    PI: McDonough; Co-PIs: **Venkatesan** (10%); Gobler, Volkenborn, McElroy
    Sponsor: SERDP (U.S. DoD)
    Period: Jan' 22 – Jan' 26

11. Per- and Polyfluoroalkyl Substances Release from Spent Granular Activated Carbons in Solid Waste Management Facilities - $150,000
    PI: Apul (UMaine); Co-PI: **Venkatesan** (40%), Saleh (UT Austin)
    Sponsor: Environmental Research and Education Foundation
    Period: Jan'23 to Jan'25

12. Programming to Address Contaminants of Emerging Concern in Drinking Water – Perfluoroalkyl Substances (PFAS) $3,000,000
    PI: Gobler; Co-PI: **Venkatesan** (50%)
    Sponsor: NYS Department of Health
    Period: Aug'19 to Jul'24

13. Measurement of PFAS isotherm on regenerated granular activated carbon at environmentally relevant concentrations - $69,698 (contract) & $70,000+ (analytical service)
    PI: **Venkatesan** (100%)
    Sponsor: Ionic Water Technologies LLC
    Period: Apr'20 to Aug'23

14. Method development and validation for wastewater surveillance of opioids - $30,000
    PI: **Venkatesan** (100%)
    Sponsor: NYS Department of Health
    Period: Aug'22 – May'23

15. Wastewater COVID Sampling at Sewage Treatment Plant (STP) and Pump Stations - $24,700
    PI: Gobler; Co-PI: **Venkatesan** (50%)
    Spnsor: Suffolk County Health Services
    Period: Jan'21 to Oct'23

16. Application of electron beam technology to decompose persistent emerging drinking water contaminants: poly- and perfluoroalkyl substances (PFAS) and 1,4-dioxane - $281,000
    PI: **Venkatesan** (85%); Co-PIs: Cooper (Fermilab), Sullivan (BNL), Paquette (BNL), Mills (U.S. EPA)
    Sponsor: U.S. Department of Energy
    Period: Sep'19 to Sep'21

17. Programming to Address Contaminants of Emerging Concern in Drinking Water – 1,4-Dioxane - $1,500,000
    PI: Gobler; Co-PI: **Venkatesan** (50%)
    Sponsor: NYS Environmental Facilities Corporation
    Period: Apr'17 to Jun' 20

18. Nanotoxicology Screening of Next Generation Ceria-Based CMP Abrasives - $40,000

PI: Westerhoff (ASU), Key Personnel: **Venkatesan** (secured 2nd phase funding: $10,000)
Sponsor: Versum Materials (Industry Funding)
Period: Jan'17 to Sep'17

TEACHING AND TRAINING

As Primary Instructor

Department of Civil & Environmental Engineering, NJIT

Spring 25	ENE 665: Biological Treatment (Enrollment: 9)
	ENE 726: Independent Study II (Enrollment: 1)
	CE 791 – 002: Graduate Seminar (Enrollment: 38)
Fall 24	ENE 360: Water and Wastewater Engineering (Enrollment: 7)
	CE 791 – 001: Graduate Seminar (Enrollment: 37)
	ENE 725: Independent Study I (Enrollment: 1)
	ENE 726: Independent Study II (Enrollment: 2)
Spring 24	ENE 663: Water Chemistry (Enrollment: 8)
	ENE 725: Independent Study I (Enrollment: 2)
Fall 23	ENE 262: Introduction to Environmental Engineering (Enrollment: 27)
	CE 692: Pre-doctoral dissertation (Enrollment: 1)

WSE: Women in Science & Engineering, SBU
Aug'22-Nov'22 WSE 380: Research and Discovery in STEM (Fall 2022; Enrollment: 7)

School of Sustainable Engineering and the Built Environment, ASU
Jan'15-May'15 CEE 361: Introduction to Environmental Engineering (Spring 2015; Enrollment: 71)

Professional Development Course

Virtual Exchange COIL Transformation Lab: U.S.-Norway, American Council on Education (ACE)
Oct'20-Feb'21

- SUNY Stony Brook and Norwegian University of Life Sciences were one of five U.S.-Norway higher education institutional pairs selected by ACE and Diku to participate in an intensive training program.
- Attended three months training to support the adaptation from in-person education and exchange programs into high impact Virtual Exchange/Collaborative Online International Learning (COIL) programming.
- At the end of the training, I developed an online course module on "nanotechnology for the treatment of emerging contaminants" that was used as a lecture for both US and Norwegian students in environmental engineering.

As Teaching Associate

School of Sustainable Engineering and the Built Environment, ASU *Jan'11 – May'11*

- Laboratory instructor for introduction to environmental engineering
- Responsibilities included teaching, grading, and organizing the lab for a class of 57 students
- Lectured on selected topics that include water/wastewater treatment, air quality, waste management etc.

Department of Civil and Environmental Engineering, UNLV *Aug '07 – Dec '08*

- Laboratory instructor for the unit operations in environmental engineering
- Responsibilities included dry runs, calibration of instruments, preparation of chemicals, teaching and grading of laboratory experiments, managing and organizing the laboratory
- Received an evaluation of 4.8/5.0 from students attending the class

Guest Lectures

- CIV 548 Organic Pollutants in Environmental Systems (Fall 2021)

- ENS 101 Prospects for Planet Earth at SBU (Fall 2019)
- ESM 212 Introduction to Environmental Engineering at SBU (Fall 2018)
- CIV 320 Water Supply and Wastewater Treatment Design at SBU (Spring 2018)
- CIV 426/526 Introduction to Environmental Biotechnology at SBU (Fall 2017)
- CEE 570 Sustainable Environmental Biotechnologies at ASU (Fall 2014, 2015)

PEER-REVIEWED PUBLICATIONS (h-index = 30, i-10 index = 43, 3062 citations as of March 2024; * as corresponding author, # graduate/undergraduate student mentee)

1. Li, D.#, Das, R., Zhang, Y., Zheng, S., Oltulu, M., **Venkatesan, A.K.**, Hsiao, B.S. (2025). Alkylamine Modified Dialdehyde Cellulose Nanofibers for PFAS Adsorption. ACS ES&T Water. (*Accepted*)
2. Tang, Y. #, Wang, M., **Venkatesan, A.K.**, Gobler, C.J., Mao, X. Biologically active filtration (BAF) for metabolic 1,4-dioxane removal from contaminated groundwater. (2025). *Journal of Hazardous Materials*, 137827. https://doi.org/10.1016/j.jhazmat.2025.137827
3. Shaffer, K. W. #, Ye, X., Lee, C. S., Shipley, O. N., McDonough, C. A., **Venkatesan, A. K.**, & Gobler, C. J. (2025). Accumulation and trophic transfer of per-and polyfluoroalkyl substances (PFAS) in estuarine organisms determined via stable isotopes. Science of The Total Environment, 967, 178742.
4. Londhe, K. #, & **Venkatesan, A. K.*** (2025). Air Bubbling Assisted Soil Washing to Treat PFAS in High Organic Content Soils. Environments, 12(1), 20.
5. Maroli, A. S., Zhang, Y., Lubiantoro, J. #, & **Venkatesan, A.K.*** (2024). Surfactant-enhanced coagulation and flocculation improves the removal of perfluoroalkyl substances from surface water. Environmental Science: Advances. DOI: 10.1039/D4VA00093E.
6. Lee, C. S., & **Venkatesan, A. K.*** (2024). Cationic surfactant-assisted foam fractionation enhances the removal of short-chain perfluoroalkyl substances from impacted water. Chemosphere, 142614.
7. Londhe, K. # and **Venkatesan, A.K.*** (2024). Effect of chain length, electrolyte composition and aerosolization on the removal of per-and polyfluoroalkyl substances during electrochemical oxidation process. *Environmental Science: Water Research & Technology*. (In Press)
8. Londhe, K. #, Lee, C.S., Grdanovska, S., Smolinski, R., Hamdan, N., McDonough, C., Cooper, C. and **Venkatesan, A.K.*** (2024). Application of electron beam technology to decompose per-and polyfluoroalkyl substances in water. *Environmental Pollution*, 348, p.123770.
9. C-S. Lee, M. Wang, D. Nanjappa, Y-T. Lu, J. Meliker, S. Clouston, C.J. Gobler & **A.K. Venkatesan*** (2023). Monitoring of over-the-counter (OTC) and COVID-19 treatment drugs complement wastewater surveillance of SARS-CoV-2. Journal of Exposure Science & Environmental Epidemiology. (Nature Publication) https://doi.org/10.1038/s41370-023-00613-2
10. Zhang, Y., Thomas, A.#, Apul, O., & **Venkatesan, A. K**.* (2023). Coexisting ions and long chain per-and polyfluoroalkyl substances (PFAS) inhibit the adsorption of short chain PFAS by granular activated carbon. Journal of Hazardous Materials, 132378.
11. Lee, C.S., Londhe, K. #, Grdanovska, S., Kroc, T., Cooper, C., **Venkatesan, A.K.***(2023). Emerging investigator series: Low doses of electron beam irradiation effectively degrade 1,4-dioxane in water within a few seconds. *Environmental Science: Water Research & Technology.* https://doi.org/10.1039/D3EW00111C

12. D. Li, C.S. Lee, Y. Zhang, R. Das, F. Akter, **A. K. Venkatesan**[*], B.S. Hsiao[*] (2023). Efficient removal of short-chain and long-chain PFAS by cationic nanocellulose. *Journal of Materials Chemistry A*, DOI: 10.1039/d3ta01851b.
13. Lee, C. S., Wang, M., Clyde, P. M.[#], Mao, X., Brownawell, B. J., & **Venkatesan, A. K.*** (2023). 1, 4-Dioxane removal in nitrifying sand filters treating domestic wastewater: Influence of water matrix and microbial inhibitors. *Chemosphere*, 138304.
14. Tang, Y.[#], Wang, M., Lee, C. S., **Venkatesan, A. K**., & Mao, X. (2023). Characterization of 1, 4-dioxane degrading microbial community enriched from uncontaminated soil. *Applied Microbiology and Biotechnology*, 1-15.
15. A. Doherty, C.S. Lee, Q. Meng, Y. Sakano, A.E. Noble, K.A. Grant, A. Esposito, C.J. Gobler, **A.K. Venkatesan*.** Contribution of household and personal care products to 1,4-dioxane contamination of drinking water. *Current Opinion in Environmental Science & Health*. (In Press).
16. K. Londhe[#], C.S. Lee, C.A. McDonough, **Venkatesan, A.K.*** (2022). The Need for Testing Isomer Profiles of Perfluoroalkyl Substances to Evaluate Treatment Processes. *Environmental Science & Technology*, https://doi.org/10.1021/acs.est.2c05518.
17. **A.K. Venkatesan*,** Lee C-S., Gobler, C.J. Hydroxyl-radical based advanced oxidation processes can increase perfluoroalkyl substances beyond drinking water standards: Results from a pilot study. *Science of The Total Environment* 157577.
18. Young., C.S., Lee C-S., **Venkatesan A.K.**, Sylvers, P., Gobler, C.J. The invasive red seaweed, Dasysiphonia japonica, forms harmful algal blooms: Mortality in early life stage fish and bivalves and identification of putative toxins' has been accepted for public. *Harmful Algae* 118, 102294.
19. Steele, J., Meng, X., **Venkatesan, A.K.**, Halden, R. U. (2022). Systematic meta-analysis of organic contaminants in sewage sludge from the United States and China. *Science of The Total Environment* 153423.
20. Li, D.[#], Londhe, K.[#], Chi, K., Lee, C.S., **Venkatesan, A.K.*,** Hsiao, B.S*. Functionalized Bio-adsorbents for Removal of Perfluoroalkyl Substances: A Perspective (2022). *AWWA Water Science* (In Press).
21. Tang, Y.[#], Lee, C. S., Walker, H., Gobler, C., Apul, O., **Venkatesan, A. K.***, & Mao, X.* (2021). Effect of residual H2O2 on the removal of advanced oxidation byproducts by two types of granular activated carbon. *Journal of Environmental Chemical Engineering*, 106838.
22. Clyde, P. M.[#], Lee, C. S., Price, R. E., **Venkatesan, A. K.***, & Brownawell, B. J. (2021). Occurrence and Removal of PPCPs from On-site Wastewater Using Nitrogen Removing Biofilters. *Water Research*, 117743.
23. Sonmez, B., Zhang, Y., Reuther, J., Saleh, N., **Venkatesan, A.K.**, Apul, O.G. Thermal Regeneration of Spent Granular Activated Carbon Presents an Opportunity to Break the Forever PFAS Cycle. Environmental Science and Technology, 55 (9): 5608-5619.
24. Londhe, K.[#], Lee, C.S., Zhang, Y., Grdanovska, S., Kroc, T., Cooper, C., **Venkatesan, A.K.*.** Energy Evaluation of Electron Beam Treatment of Perfluoroalkyl Substances in Water: A Critical Review. ACS Environmental Science & Technology: Engineering, 1(5), 827-841.
25. C.-S. Lee, C. Asato, M. Wang, X.Mao, C. J. Gobler, **A.K. Venkatesan***. Removal of 1,4-dioxane during on-site wastewater treatment using nitrogen removing biofilters. *Science of The Total Environment*, 771, 144806.
26. C. J. Gobler, S. Waugh, C. Asato, P. M. Clyde, S. C. Nyer, M. Graffam, B. Brownawell, **A. K. Venkatesan**, J. A. Goleski, R. E. Price, X. Mao, F. M. Russo, G. Heufelder, H. W. Walker. (2021). Removing 80-90% of nitrogen 1 and organic contaminants with three distinct passive, lignocellulose-based on-site septic systems receiving municipal and residential wastewater. *Ecological Engineering*, 161, 106157.

27. Lee, C. S., **Venkatesan, A. K.*,** Walker, H. W., & Gobler, C. J. (2020). Impact of groundwater quality and associated byproduct formation during UV/hydrogen peroxide treatment of 1, 4-dioxane. *Water Research*, 173, 115534.
28. Halden, R. U. & **Venkatesan, A. K.*** (2019). Moving toward a waste-free circular economy by example of biosolids. *Current Opinion in Environmental Science & Health,* 14, A1-A3.
29. **Venkatesan, A. K.*** & Halden, R. U. (2019). Using national sewage sludge data for chemical ranking and prioritization. *Current Opinion in Environmental Science & Health,* 14, 10-15.
30. Gushgari, A., **Venkatesan, A. K.**, Chen, J., Steele. J.C., Halden, R.U. (2019). Long-term tracking of opioid consumption in two United States cities using wastewater-based epidemiology approach. *Water Research 161, 171-180.*
31. **Venkatesan, A. K.**, Chen, J., Driver, E., Gushgari, A., Halden, R.U. (2019). Assessing The Potential to Monitor Plant-Based Diet Trends in Communities Using a Wastewater-Based Epidemiology Approach. ACS Books, Symposium Series: "Wastewater Based Epidemiology: Estimating Community Drug Consumption".
32. Chen, J., **Venkatesan, A.K.,** Halden, R.U. (2019). Alcohol and nicotine consumption trends in three U.S. communities determined by wastewater-based epidemiology. *Sci. Total. Environ.* 656, 174-183.
33. **Venkatesan, A. K.***, Rodriguez, B., Marcotte, A., Bi, X., Schoepf, J., Ranville J. F., Herckes P., Westerhoff, P. (2018). Using single particle ICP-MS for monitoring metal-containing particles in tap waters. *Environ. Sci. Water Res. Technol*. 4, 1923-1932. (***Featured as cover article in the journal issue***)
34. Magee, H.Y., Maurer, M.M., Cobos, A., Pycke, B.F., **Venkatesan, A.K.**, Magee, D., Scotch, M., Halden, R.U. (2018). US nationwide reconnaissance of ten infrequently monitored antibiotics in municipal biosolids. *Sci. Total Environ.* 1:643, 460-4677.
35. Gan, W., **Venkatesan, A.K.**, Apul, O., Perreault, F., Yang, X., Westerhoff, P. (2018). Bromide removal from drinking water using silver-amended coagulation. *J Am Water Works Assoc.* 110:6, 13-24. (***Featured as cover article in the journal issue***)
36. **Venkatesan, A. K.*,** Gan, W., Ashani, H., Herckes, P., & Westerhoff, P. (2018). Size exclusion chromatography with online ICP-MS enables molecular weight fractionation of dissolved phosphorus species in water samples. *Water Res.*, *133*, 264-271.
37. **Venkatesan, A. K.***, Reed, R. B., Lee, S., Bi, X., Hanigan, D., Yang, Y., Ranville J. F., Herckes P., Westerhoff, P. (2018). Detection and Sizing of Ti-Containing Particles in Recreational Waters Using Single Particle ICP-MS. *Bull. Environ. Contam. Toxicol*. 100.1: 120-126.
38. Gushgari, A. J., Halden, R.U., **Venkatesan, A.K.** (2017). Occurrence of *N*-nitrosamines in freshwater sediments near U.S. wastewater treatment plants. *J. Haz. Mater.* 323: 109-115.
39. Meng, X, **Venkatesan, A. K**., Ni, Y., Steele. J.C., Wu, L., Bignert, A., Bergman, Å., Halden, R.U. (2016). Organic Contaminants in Chinese Sewage Sludge: A Meta-Analysis of Literature of the Past 30 Years. *Environ. Sci. Technol.*, 50 (11), pp 5454–5466.
40. **Venkatesan, A.K.,** Halden, R.U. (2016). Modeling the pH-mediated Extraction of Ionizable Organic Contaminants to Improve the Quality of Municipal Sewage Sludge Destined for Land Application. *Sci. Total. Environ.* 550, 736-741.
41. **Venkatesan, A.K.**, Hamdan, A.M., Chavez, V.M., Brown, J.D., Halden, R.U. (2016). Mass Balance Model for Sustainable Phosphorus Recovery in a U.S. Wastewater Treatment Plant. *J. Environ. Qual.* 45 (1), 84-89.
42. **Venkatesan, A.K.,** Halden, R.U. (2015). Effective strategies for monitoring and regulating chemical mixtures and contaminants sharing pathways of toxicity. *Int. J. Environ. Res. Public Health*. 12 (9), 10549-10557.
43. Yu, X., Xue, J., Yao, H., Wu, Q., **Venkatesan, A. K.**, Halden, R. U., Kannan, K. (2015). Occurrence and Estrogenic Potency of Eight Bisphenol Analogs in Sewage Sludge from the US EPA Targeted National Sewage Sludge Survey. *J. Hazard. Mater.* In Press.

44. Xue, J., **Venkatesan, A. K.**, Wu, Q., Halden, R. U., & Kannan, K. (2015). Occurrence of bisphenol A diglycidyl ethers (BADGEs) and novolac glycidyl ethers (NOGEs) in archived biosolids from the US EPA's Targeted National Sewage Sludge Survey. *Environ. Sci. Technol.* 49 (11), 6538–6544.
45. Done, H.Y., **Venkatesan, A.K**., Halden. R.U. (2015). Does the Recent Emergence of Aquaculture Create Antibiotic Resistance Threats Different from those Associated with Land Animal Production in Agriculture? *AAPSJ*, 77 (3), 513-524.
46. **Venkatesan, A.K**., Done, H.Y., Halden. R.U. (2015). United States National Sewage Sludge Repository at Arizona State University — a new resource and research tool for environmental scientists, engineers, and epidemiologists. *Environ. Sci. Pollut. Res.* 22, 1577 – 1586.
47. **Venkatesan, A.K.**, and Halden. R.U. (2014). Contribution of Polybrominated Dibenzo-p-dioxins and Dibenzofurans (PBDD/Fs) to the Toxic Equivalency of Dioxin-like Compounds in Archived Biosolids from the U.S. EPA's 2001 National Sewage Sludge Survey. *Environ. Sci. Technol.* 48 (18), 10843–10849.
48. **Venkatesan, A.K.**, and Halden. R.U. (2014). Loss and *in situ* production of perfluoroalkyl chemicals in outdoor biosolids–soil mesocosms. *Environ. Res.* 132, 321–327.
49. **Venkatesan, A.K.**, Pycke, B.F.G., Halden. R.U. (2014). Detection and Occurrence of N‑Nitrosamines in Archived Biosolids from the Targeted National Sewage Sludge Survey of the U.S. Environmental Protection Agency. *Environ. Sci. Technol.* 48 (9), 5085–5092.
50. **Venkatesan, A.K**. and Halden. R.U. (2014). Brominated flame retardants in U.S. biosolids from the EPA national sewage sludge survey and chemical persistence in outdoor soil mesocosms. *Water Res.* 55, 133-142.
51. **Venkatesan, A.K**. and Halden. R.U. (2014). Wastewater treatment plants as chemical observatories to forecast ecological and human health risks of manmade chemicals. *Sci. Rep.* 4, 3731.
52. **Venkatesan, A.K**. and Halden. R.U. (2013). National inventory of perfluoroalkyl substances in archived U.S. biosolids from the 2001 EPA National Sewage Sludge Survey. *J. Hazard. Mater.* 252-253, 413-418.
53. **Venkatesan, A.K.** and Halden. R.U. (2013). National inventory of alkylphenol ethoxylate compounds in U.S. sewage sludges and chemical fate in outdoor soil mesocosms. *Environ. Pollut.* 174, 189-193.
54. **Venkatesan, A.K.**, Pycke, B.F.G., Barber, L.B., Lee, K.E., Halden, R.U. (2012). Occurrence of triclosan, triclocarban, and its lesser chlorinated congeners in Minnesota freshwater sediments collected near wastewater treatment plants. *J. Hazard. Mater.*, 229-230, 29-35.
55. **Venkatesan, A.K.**, Ahmad, S., Johnson,W., and Batista, J.R. (2011). Salinity reduction and energy conservation in direct and indirect potable water reuse. *Desalination,* 272, 120–127
56. **Venkatesan, A.K.**, Ahmad, S., Johnson,W., and Batista, J.R. (2011). Systems dynamic model to forecast salinity load to the Colorado River due to urbanization within the Las Vegas Valley. *Sci. Total. Environ.* 409(13), 2616-2625.
57. **Venkatesan, A.K.**, and Batista, J.R. (2011). Investigation of the factors affecting the bioregeneration process for perchlorate-laden gel-type anion-exchange resin. *Bioremediat.J.*, 15(1), 1–11.
58. **Venkatesan, A.K.**, Sharbatmaleki, M., and Batista, J.R. (2010). Bioregeneration of perchlorate-laden gel-type anion-exchange resin in a fluidized bed reactor. *J. Hazard. Mater*., 177, 730–737.

Google Citation Report: https://scholar.google.com/citations?user=RMKr2DkAAAAJ&hl=en

PROPOSAL REVIEW ACTIVITIES

1. 2024 National Science Foundation: Environmental Engineering Program - Panelist
2. 2024 Virginia Sea Grant - Panelist
3. 2023 NIEHS-NSF Oceans & Human Health Program - Panelist
4. 2021 National Science Foundation: Division of Chemistry - Reviewer
5. 2019 National Science Foundation: Environmental Engineering Program - Panelist
6. 2019 North Carolina Water Resources Research Institute - Reviewer
7. 2017 Hudson River Foundation - Reviewer

PRESENTATIONS/ EVENTS

Invited Presentations

1. **A.K. Venkatesan**. PFAS: Occurrence, Fate & Treatment. Agilent Technologies, Wilmington, DE, March 4, 2025.
2. **A.K. Venkatesan**. Challenges in the treatment of short-chain PFAS. Center for PFAS and Cancer (CPAC) Joint Virtual Symposium, Georgetown University, March 8, 2024.
3. **A.K. Venkatesan**. Sequestration and destructive treatment of per- and polyfluoroalkyl substances (PFAS). Levich Institute seminar series, City College of New York (CUNY), March 12, 2024.
4. **A.K. Venkatesan**. Occurrence and mitigation of 1,4-dioxane in the Long Island water cycle. Department of Biological Sciences, Seton Hall University, March 21, 2024.
5. **A.K. Venkatesan.** Enhancing PFAS removal through hydrophobic ion pairing in foam fractionation and granular activated carbon systems. DoD Energy and Environment Innovation Symposium, Arlington, VA, Nov 28-Dec 1, 2023.
6. **A.K. Venkatesan.** Occurrence and mitigation of 1,4-dioxane in the Long Island water cycle. 2023 RemTEC & Emerging Contaminants Summit, Westminster, CO, Oct 3-5, 2023.
7. **Venkatesan, A.K.** Optimization and application of EPA analytical methods for assessing PFAS treatment and toxicity. Global PFAS Testing Virtual Symposium – Advances in Testing & Occurrence. Hosted by Separation Science and Agilent Technologies. May 2022.
8. Zhang, Y., Lee, C.S., Apul, O., **Venkatesan, A.K**. Understanding the competitive sorption between short-chain and long-chain PFAS during granular activated carbon treatment. 2022 Maine Sustainability and Water Conference. Augusta, Maine, March 31, 2022.
9. **Venkatesan, A.K.** Overview of Granular Activated Carbon and Ion Exchange Treatment of Short-chain and Long-chain PFAS. New York State Drinking Water Quality Council Meeting, December 22, 2021.
10. **Venkatesan, A.K.** Poly- and Perfluoroalkyl Substances in Water: Challenges and Mitigating Strategies in Detection and Treatment. On-Demand Webcast, Hosted by LC-GC and Agilent Technologies. March 5, 2020.
11. **Venkatesan, A.K.** Perfluorochemicals (PFCs): Background and Available Treatment Technologies. The Friends of Georgica Pond Foundation 2018 Annual Meeting. The Creeks, East Hampton, NY, August 5, 2018.
12. **Venkatesan, A. K.** Science Policy Forum: Long Island Drinking Water Panelist. Science Advocacy of Long Island. Stony Brook University, Stony Brook, NY, November 3, 2017.
13. **Venkatesan, A. K.,** Halden, R. U. Results from the National Sewage Sludge Repository at Arizona State University: Contaminant Prioritization, Human Health Implications and Opportunities for Resource Recovery. Mid-Atlantic Biosolids Association Annual Meeting. Broadcasted Webinar. Wilmington, DE, November 15-16, 2016.
14. **Venkatesan, A. K.,** Chen, J., Steele, J., Halden, R. U. Application of Sewage Epidemiology Approaches to Monitor Environmental and Human Health Risks. 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016.

15. **Venkatesan, A. K.,** Chen, J., Steele, J., Halden, R. U. Recurring U.S. National Wastewater Treatment Plant Survey and the Human Health Observatory at Arizona State University. 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016.
16. **Venkatesan, A. K.,** Halden, R. U. Keeping Track of Environmental Dispersion and Human Exposures to Pharmaceuticals and Personal Care Products Via Sewage Analysis. 20th North American Meeting of the International Society for the Study of Xenobiotics (ISSX), Orlando Bonnet Creek Resort, Orlando, Florida, October 18-22, 2015.
17. **Venkatesan, A. K.,** Halden, R. U. From Sewage Epidemiology to Public Health Protection to Resource Recovery: Results from the National Sewage Sludge Repository at Arizona State University. WEF/IWA Residuals and Biosolids Conference 2015: The Next Generation of Science, Technology, and Management, Walter E. Washington Convention Center, Washington, DC Conference: June 7 - 10, 2015.

International and National Conference Proceedings Papers, Abstracts and Presentations

18. Pandey, B., Lee, C. S., Londhe, K., Maroli, A., & **Venkatesan, A. K**. Extraction and Removal of PFAS from Impacted Water and Soil using Air Bubbles. 2024 SERDP & ESTCP Symposium, Washington DC, December 36, 2024.
19. Yaparatne, S., Zhang, Y., Maghsoudi, F., & **Venkatesan, A. K**. Innovative Pre-treatment for Enhanced PFAS Remediation with Granular Activated Carbon. RemTEC & Emerging Contaminants Summit, Poster presentation, Westminster, Colorado, October 15-17, 2024.
20. Alulema-Pullupaxi, P., Zhang, Y., Saleh, N., **Venkatesan, A.K.**, & Apul, O. Per- and Polyfluoroalkyl Substances (PFAS) Release from Spent Granular Activated Carbon in Landfills. American Chemical Society Conference (ACS Fall 2024), Denver, CO, August, 2024.
21. Pandey, B., Lee, C. S., & **Venkatesan, A. K**. Removal of PFAS from Contaminated Water using Air Bubbles. 2024 National PFAS Conference, Poster presentation, Ann Arbor, Michigan, June 10-12, 2024
22. **A.K. Venkatesan**. Overcoming the challenges in the treatment of short-chain per- and polyfluoroalkyl substances in water. NJ America Water Works Association Annual Conference, Borgata Hotel Casino & Spa, Atlantic City, NJ, March 19-22, 2024.
23. **A.K. Venkatesan**, X. Ye, J. Chen, R.U. Halden. Analytical challenges and alternatives for monitoring opioid consumption in communities using wastewater-based epidemiology. 19th Annual Workshop on Emerging HRMS & LC-MS/MS Applications in Environmental Analysis & Food Safety. Center for Tomorrow, University at Buffalo Buffalo, NY, Sept 24-25, 2023.
24. D. Li, **A.K. Venkatesan**, B.S. Hsiao. Mechanistic study to assess the removal mechanism of PFAS by alkylamine modified cellulose-based bioadsorbent. ACS Fall 2023, San Francisco, California, Aug 13-17, 2023.
25. C.S. Lee, O.N. Shipley, X. Ye, A.J. Gallagher, M.G. Frisk, B.S. Talwar, E.V. Schneider, **A.K. Venkatesan**. Accumulation of per- and polyfluoroalkyl substances (PFAS) by sharks from two contrasting habitats: New York Bight and The Bahamas. Goldschmidt 2023 Conference, Lyon, France, Jul 9-14, 2023
26. Lee, C. S., Londhe, K., Grdanovska, S., Cooper., C. A., & Venkatesan, A. K. Effective degradation of 1,4-dioxane in waters by low doses of electron beam irradiation., AEESP 2023 Conference, Poster presentation, Boston, Massachusetts, June 20-23, 2023.
27. X. Ye, E. Driver, R.U. Halden, A.K. Venkatesan. An updated national survey of per and polyfluoroalkyl substances (PFAS) and their precursors in biosolids. AEESP2023, Boston, Massachusetts, June 20-23, 2023.
28. Y. Tang, M. Wang, A. Venkatesan, X. Mao. Effects of operating parameters and co-contaminant on the efficiency of 1,4-dioxane removal by biological activate filtration process. AEESP Research and Education Conference, 2023, Boston, MA, June 20-23.

29. Y. Zhang, Q. Zhu, A.K. Venkatesan. Advanced oxidation/reduction processes for the degradation of perfluoroalkyl substances (PFAS) using Vacuum UV irradiation. AEESP2023, Boston, Massachusetts, June 20-23, 2023.
30. Clyde, P., Smolinski, R., Price, R., **Venkatesan, A.K.**, & Brownawell, B. (2022, November). Evaluating the Effects of Antibiotics on the Biological Transformation of Nitrogen and Pharmaceutical and Personal Care Products Removal From Onsite Wastewater in Nitrifying Sand Columns. In *SETAC North America 43rd Annual Meeting*. SETAC.
31. Y. Tang, M. Wang, C.S. Lee, A.K. Venkatesan, X.Mao. 1,4-Dioxane Removal From Contaminated Groundwater By GAC-based Biological Activated Filters (BAFs). ACS Fall 2022, Chicago, Illinois, Aug 21-25, 2022.
32. K. Londhe, C.S. LEE, O.D. Schneider , A.K. Venkatesan. Degradation of long and short chain PFAS using a bench scale Magneli phase Ti_4O_7 and BDD anode based electrochemical oxidation system. ACS Fall 2022, Chicago, Illinois, Aug 21-25, 2022.
33. D. Li, C.S. Lee, Y. Zhang, R. Das, A.K. Venkatesan and B.S. Hsiao. Development of cationic cellulose nanofibrous adsorbent for per- and polyfluoroalkyl substances (PFAS) remediation. ACS Fall 2022, Chicago, Illinois, Aug 21-25, 2022.
34. B. Wehle, C.S. Lee, B. Demple, **A. K. Venkatesan.** Toxicity Effects of PFAS Mixtures on Hepg2 Cells. ACS Fall 2022, Chicago, Illinois, Aug 21-25, 2022.
35. C.S. Lee, A. Maroli, A. Thomas, A. Wright, H. Zhang, B. Ocko, B. Hsiao, **A.K. Venkatesan**. Extraction and Removal of PFAS from Impacted Water and Soil using Air Bubbles. SERDP & ESTCP PFAS Meeting. Long Beach, California, July 18-21, 2022.
36. **Venkatesan, A.K.,** Lee, C.S., Gobler, C. Pilot-scale evaluation of UV/H2O2, UV/chlorine, UV/TiO2, and O3/H2O2 systems to treat 1,4-dioxane contaminated groundwater across Long Island, NY. ACS Fall 2021, Atlanta, Georgia, Aug 22-26, 2021.
37. Zhang, Y., Lee, C.S., Apul, O., **Venkatesan, A.K.** Competition between short-chain and long-chain per-and polyfluoroalkyl substance (PFAS) during sorptive removal by granular activated carbon. ACS Fall 2021, Atlanta, Georgia, Aug 22-26, 2021.
38. Clyde, P; Smolinski, R; Price, R; **Venkatesan, A.K.**; Brownawell, B. Evaluating the effects of antibiotics on the biological transformation of nitrogen and PPCP removal from onsite wastewater in nitrifying sand columns. 28th Conference on "Geology of Long Island and Metropolitan New York", Virtual, April 10, 2021.
39. Londhe, K., Lee, C.S., Cooper, C., Grdanovska, S., Kalb, P., Paquette, D., Mills, M., **Venkatesan, A.K.** Application of electron beam for the degradation of 1,4-dioxane and perfluoroalkyl substances in drinking water. ACS Spring 2021, Virtual, April 5-16, 2021.
40. Londhe, K., Lee, C.S., Cooper, C., Grdanovska, S., Kalb, P., Paquette, D., Mills, M., **Venkatesan, A.K**. Application of electron beam for the degradation of 1,4-dioxane and perfluoroalkyl substances in drinking water. SERDP & ESTCP Symposium, Virtual, November 30 - December 4, 2020.
41. Sonmez, B., Zhang, Y., Reuther, J., Saleh, N. B., **Venkatesan, A.K**., Apul, O.G. Regeneration of Spent Granular Activated Carbon Presents an Opportunity to Break the Forever PFAS Cycle. SERDP & ESTCP (Virtual) Symposium, November 30 - December 4, 2020.
42. **Venkatesan, A.K.**, Lee, C. S., Gobler, C. Research at the NYS Center for Clean Water Technology to Mitigate 1,4-Dioxane Contamination in the Long Island Water Cycle. NYWEA Virtual Spring Technical Conference, Long Island, NY, June 8-11, 2020.
43. Tang, Y., Lee, C. S., **Venkatesan, A.K.**, Gobler, C., Walker, H., Mao, X. Removal of 1,4-dioxane degradation byproducts and residual H_2O_2 from UV/H_2O_2 treatment using granular activated carbon (GAC) adsorption. NYWEA Annual Meeting & Exhibition, New York City, NY, Feb 3, 2020.
44. Lee, C. S., **Venkatesan, A.K.**, Gobler, C., Walker, H. Impact of groundwater quality parameters on 1,4-dioxane removal and associated byproducts formation during UV/hydrogen peroxide

advanced oxidation process treatment. 258th National ACS Meeting, San Diego, CA, August 25-29, 2019.

45. Tang, Y., Lee, C. S., **Venkatesan, A.K.**, Mao, X., Gobler, C., Walker, H. Evaluation of granular activated carbon performance to remove 1,4-dioxane degradation byproducts and residual H2O2 from UV/H2O2 treatment system. 257th American Chemistry Society National Meeting & Exposition, Orlando, FL, 2019.
46. **Venkatesan, A.K.**, Tang, Y., Mao, X., Gobler, C., Walker, H. Laboratory and pilot-scale testing of alternative water treatment technologies for 1, 4-dioxane-contaminated groundwater in Long Island, NY. 256th ACS National Meeting, Boston, MA, Aug 19-23, 2018.
47. **Venkatesan, A.K.,** Chen, J., Halden, R.U. Analytical challenges and alternatives for monitoring opioid consumption in communities using wastewater-based epidemiology. 256th ACS National Meeting, Boston, MA, Aug 19-23, 2018.
48. Dietrich, L., Atkinson, A., **Venkatesan, A.K.**, Westerhoff, P. Low removal of As (V) and Cr (VI) by POU devices until enabled with selective ion exchange media. 256th ACS National Meeting, Boston, MA, Aug 19-23, 2018.
49. Steele, J., Meng., X., **Venkatesan., A. K.**, Halden, R. U. Comparative analysis of organic contaminants in sewage sludge from the United States and China. 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016.
50. **Venkatesan, A.K.,** Halden, R.U. Modeling the Leachability of pH-dependent Ionizable Organic Contaminants from Municipal Sewage Sludge. 250th ACS National Meeting and Exposition, Boston, MA, August 16-20, 2015.
51. Gushgari, A. J., Halden, R.U., **Venkatesan, A.K.** Occurrence of Carcinogenic N-Nitrosamines in Freshwater Sediments Collected Near Wastewater Treatment Plants. 250th ACS National Meeting and Exposition, Boston, MA, August 16-20, 2015.
52. Done, H.Y., **Venkatesan, A.K.,** Halden, R.U. Occurrence of 9 Antibiotics in Archived Biosolids from the 2006/2007 U.S. EPA Targeted National Sewage Sludge Survey. 250th ACS National Meeting and Exposition, Boston, MA, August 16-20, 2015.
53. Done, H. Y., **Venkatesan, A. K.**, Halden, R. U. Antibiotics as Environmental Contaminants in Aquaculture and Terrestrial Agriculture. SETAC Europe 25th Annual Meeting, Barcelona, Spain, May 3-7, 2015.
54. **Venkatesan, A.K.,** Halden, R.U. Nationwide Occurrence, Release Inventories and Prioritization of Emerging Contaminants in U.S. Sewage Sludges: Results from the National Sewage Sludge Repository of Arizona State University. 248th ACS National Meeting and Exposition, San Francisco, CA, August 10-14, 2014.
55. Halden, R.U., **Venkatesan, A.K.** Waste epidemiology: Taking the chemical pulse of a nation at the sewer by example of the United States. 248th ACS National Meeting and Exposition, San Francisco, CA, August 10-14, 2014.
56. Done, H.Y., **Venkatesan, A.K.,** Halden, R.U. Antibiotics and Aquaculture: Usage, Issues, and Sustainable Food Protein for the Future. 248th ACS National Meeting and Exposition, San Francisco, CA, August 10-14, 2014.
57. **Venkatesan, A.K.**, Pycke, B.F.G., Halden, R.U. Occurrence of carcinogenic N-nitrosamines in nationally representative samples of U.S. sewage sludges. 248th ACS National Meeting and Exposition, San Francisco, CA, August 10-14, 2014.
58. **Venkatesan, A.K.,** Halden, R.U. Using Sewage Metrology/ Epidemiology Approaches to Predict Risks Associated with Contaminants of Emerging Concern in Biosolids. Soil in the City Conference in Chicago Enhancing Urban Soils for Living Landscapes and Healthy Communities, Allerton Hotel, Buckingham Ballroom, Chicago, Illinois, June 29-July 2, 2014**.**
59. **Venkatesan, A.K.**, Halden, R.U. Use of United States National Sewage Sludge Repository to track the flow and fate of emerging chemicals of concern. Watercon, a joint conference and expo. Springfields, Illinois, March 17-20, 2014.

60. **Venkatesan, A.K.**, Halden, R.U. National Biosolids Repository: A New Research Tool to Identify, Prioritize and Predict Environmental and Human Health Implications of Anthropogenic Chemicals. Arizona Water Association (AZ Water) Workshop, Transforming Research into Practice: Finding Solutions to Arizona Water Challenges, Tempe, Arizona, January 15, 2014.
61. **Venkatesan, A.K.**, Halden, R.U. Mass Flows of Contaminants o Emerging Concern in U.S. Biosolids and Chemical Fate in Outdoor Soil Mesocosms. 15th International Conference of the Pacific Basin Consortium for Environment and Health, Honolulu, Hawaii, September 24-27, 2013.
62. **Venkatesan, A.K.**, Halden, R.U. Use of Wastewater Treatment Process Flows to Predict Environmental Occurrence and Fate of Manmade Chemicals. Arizona Water Association (AZ Water) 86th Annual Conference, Glendale, Arizona, May 1-3, 2013.
63. **Venkatesan, A.K.**, Halden, R.U. The U.S. National Biosolids Repository at the Biodesign Institute at Arizona State University – A New Resource and Research Tool for Environmental Scientists. The 25th Annual Meeting of the Superfund Research Program, Marriot City Center - Raleigh, North Carolina - October 21-24, 2012.
64. **Venkatesan, A.K.**, Halden, R.U. Nationwide Occurrence in Biosolids of Alkylphenol Ethoxylate Compounds and their Fate in Soil Amended with Biosolids**.** AWRA 2012 Summer Speciality Conference, Contaminants of Emerging Concern in Water Resources II: Research, Engineering and Community Action Denver, Colorado, June 25 – 27, 2012.
65. Pycke, B.F.G., Geer, L.A., **Venkatesan, A.K**., Lee, K.E., Barber, L.B., Crabbé, A., Leys, N., Monsieurs, P., Mergeay, M., Vanermen, G., De Wever, H., Verstraete, W., and Halden, R.U. Antimicrobial exposure assessment from the cradle to the grave. International Conference of the Flemish Center of Expertise for Environment and Health. Brussels, Belgium. December 21-22, 2011.
66. Halden, R. U., **Venkatesan, A. K.,** Hansmeier, N. Mixtures of Manmade Hazardous Compounds in the Anthroposphere and in Humans. International Toxicology of Mixtures Conference, Arlington, VA, October 21-23, 2011.
67. **Venkatesan, A. K.**, Pycke, B.F.G, Chao, T.-C., Halden, R. U. Occurrence of Triclosan, Triclocarban, and Their Transformation Products in Sediments Up and Downstream of U.S. Wastewater Treatment Plants. Water Environment Federation: Industrial Wastewater Conference. Bally's Hotel, Atlantic City, New Jersey, May 9-10, 2011.
68. Doudrick, K, **Venkatesan, A.K.,** Hartmann, E.M., Kalinowski, T., Halden, R.U.. Assessment of the Contribution of Triclosan to Dioxin Emissions from Sludge Incineration in the U.S. Using a Mathematical Model. Water Environment Federation: Industrial Wastewater Conference. Bally's Hotel, Atlantic City, New Jersey, May 9-10, 2011.
69. **Venkatesan**, **A. K.,** Ahmad, S., Batista, J.R. and Johnson, W.S. Salinity Contribution to the Colorado River Due to Urban Growth of the Las Vegas Valley, ASCE World Environmental & Water Resources Congress, Providence, Rhode Island, May 16-20, 2010.

INTELLECTUAL PROPERTY CONTRIBUTIONS

Venkatesan, A. K. and R. U. Halden. Methods & Systems for pH Treatment and Extraction of Leachable Contaminants in Municipal Sewage Sludge. US PATENT 15/093,539.

Venkatesan A.K. Methods and systems for the destruction of per- and polyfluoroalkyl substances (PFAS) using chemical etchants. (Provisional)

CERTIFICATION

Engineer-In-Training, EIT/FE

- Nevada Engineer Intern Number – 0T6037. *June, 2009*

EDITORIAL ACTIVITIES

Journal Editorial Board

1. Bulletin of Environmental Contamination and Toxicology
2. Current Opinion in Environmental Science & Health
    a. Co-Edited Special Issue: Biosolids
3. Frontiers in Environmental Chemistry (Advanced Oxidation Processes Section)

Peer Review Activities (Selected)

1. American Association of Pharmaceutical Scientists Journal
2. Archives of Environmental and Occupational Health
3. Analytical Chemistry
4. Chemical Engineering Journal
5. Chemosphere
6. Communications Earth & Environment
7. Ecology and Environmental Science
8. Ecotoxicology & Environmental Safety
9. Environment International
10. Environmental Chemistry
11. Environmental Health
12. Environmental Monitoring and Assessment
13. Environmental Pollution
14. Environmental Research
15. Environmental Science and Pollution Research
16. Environmental Science and Technology
17. Environmental Science and Technology Letters
18. Environmental Science Processes & Impacts
19. Environmental Toxicology and Chemistry
20. Human and Ecological Risk Assessment
21. Journal of Environmental Chemical Engineering
22. Journal of Environmental Management
23. Journal of Environmental Science and Health, Part B
24. Journal of Environmental Sciences
25. Journal of Hazardous Materials
26. Journal of Hazardous Materials Letters
27. Journal of Proteome Research
28. MethodsX
29. Npj Clean Water (Nature Journal)
30. Next Materials
31. Preventing Chronic Disease – CDC
32. Radiation Physics and Chemistry
33. Reviews on Environmental Health
34. Science of the Total Environment
35. Scientific Data
36. Water
37. Water Research

NEWS AND PRESS RELEASES (Selected)

1. The E.P.A. Promotes Toxic Fertilizer. 3M Told It of Risks Years Ago - https://www.nytimes.com/2024/12/27/climate/epa-pfas-fertilizer-3m-forever-chemicals.html
2. Novel Pre-Treatment Process Enhances PFAS Removal from Drinking Water - https://news.njit.edu/novel-pre-treatment-process-enhances-pfas-removal-drinking-water
3. Airplane wastewater testing could help track COVID, other diseases, CDC says: https://www.newsday.com/news/health/coronavirus/wastewater-testing-airplanes-cdc-v7bgbja8
4. Chemical decapitation renders PFAS harmless (August 2022). Royal Society in Chemistry magazine: "Chemistry World": https://www.chemistryworld.com/news/chemical-decapitation-renders-pfas-harmless/4016119.article
5. One of the best tools for predicting COVID-19 outbreaks? Sewage (July 2022). National Geographic article: https://www.nationalgeographic.com/science/article/one-of-the-best-tools-for-predicting-covid-19-outbreaks-sewage

6. Stony Brook Students and Faculty Pioneer International Virtual Exchange (Feb 2022). Stony Brook University News: https://news.stonybrook.edu/university/stony-brook-students-and-faculty-pioneer-international-virtual-exchange/
7. CCWT's NSF-Supported Research Will Improve Drinking Water Quality & Environmental Health (July 2021). SBU News: https://news.stonybrook.edu/facultystaff/ccwts-nsf-supported-research-will-improve-drinking-water-quality-environmental-health/
8. Low-cost water filtration could reduce likely human carcinogen. (February 2021). Newsday. https://www.newsday.com/long-island/groundwater-pollution-aquifer-1.50166744
9. Richer citizens taste for alcohol and poorer ones higher rates of prescription drug use revealed by sewage sampling. (October 2019). Royal Society in Chemistry magazine: "Chemistry World": https://www.chemistryworld.com/news/sewage-sampling-reveals-how-rich-and-poor-live/4010406.article.
10. New York moves to regulate a 'likely human carcinogen' in drinking water. (Feb 2019). PBS News Hour Weekend: https://www.pbs.org/newshour/show/new-york-moves-to-regulate-a-likely-human-carcinogen-in-drinking-water.
11. Arnold C. 2016. Pipe dreams: tapping into the health information in our sewers. (May 2016). *Environ Health Perspect* 124:A86–A91; http://dx.doi.org/10.1289/ehp.124-A86
12. Study: Phosphate recovery at wastewater treatment plants could supplement mining operations. (July, 2015). *Florida Specifier*: hard copy newsletter.
13. A model approach for sustainable phosphorus recovery from wastewater. (May 2015). *American Society of Agronomy*: https://www.agronomy.org/science-news/model-approach-sustainable-phosphorus-recovery-wastewater
14. Treated sewage solids contain troubling nitrosamines. (April, 2014). *C&EN (ACS)*: http://cen.acs.org/articles/92/web/2014/04/Treated-Sewage-Solids-Contain-Troubling.html
15. Wastewater treatment offers a view into environmental chemicals' risks (February, 2014). *Environmental Factor (NIEHS)*: http://www.niehs.nih.gov/news/newsletter/2014/2/science-wastewater/index.htm
16. Sludge as new sentinel for human health risks (January, 2014). *ASU News*: https://asunews.asu.edu/20140116-chemicals-sludge-research
17. Antimicrobials from personal care products found in rivers, lakes (August, 2012). *ASU News*: https://asunews.asu.edu/20120816_antimicrobials_riverslakes.

AWARDS AND HONORS

1. Recipient of the 2025 ***40 Under 40 Recognition Program*** from the American Academy of Environmental Engineers and Scientists (2025)
2. Invited by the NYS Department of Health as a PFAS expert to inform the NYS Drinking Water Quality Council regarding PFAS treatment and regulations (December 2021)
3. Served as a panelist at the New York State Water and Wastewater Virtual Legislative Forum organized by New York Section of the American Water Works Association (NYSAWWA), the New York Rural Water Association (NYRWA), and the New York Water Environment Association (NYWEA) (May 2021)
4. Awarded for most number of publications in a PhD dissertation in the School of Sustainable Engineering and the Built Environment, ASU (2013)
5. Awarded second place in the poster competition at the AZ Water Association Research Workshop (2014)
6. Awarded second prize in the student presentation competition at the 15th international conference of the Pacific Basin Consortium for Environment and Health (2013)
7. Awarded the Phoenix/Scottsdale Groundwater Contamination Scholarship for environmental science (2011-12)

8. Awarded first prize in the young professional speaker's challenge at the New Jersey Water Environment Association national conference (2011)
9. Recipient of AZ Water Association annual scholarship in recognition of academic performance and experience in the field of water and wastewater (2011 and 2012)
10. Recipient of James F. Adams/ GPSA Scholarship for academic achievements in master's level (2008-09)
11. Awarded gold medal for first place in physics examination in Central Board of Secondary Education at Bala Vidya Mandir (high school), Chennai, India (2003)
12. Member of Tau Beta Pi engineering honor society and Golden Key international honour society, for students with distinguished scholarship and exemplary character
13. Awarded graduate assistantship by Arizona State University and University of Nevada, Las Vegas

STUDENTS SUPERVISION

Current Graduate Students

1. Santhoshi Chitthaluri (PhD Student), Civil and Environmental Engineering, NJIT – Advisor
2. Bishnu Pandey (PhD student), Civil and Environmental Engineering, NJIT – Advisor
3. Farhaneh Maghsoudi (PhD student), Civil and Environmental Engineering, NJIT – Advisor

Past Graduate Students

1. Justice Woke (M.S. – August 2024), School of Marine and Atmospheric Sciences, SBU – Advisor. "Per-/polyfluoroalkyl Substances (PFAS) Removal from Groundwater Using Anion Exchange Resin: Assessing the Impact of Coexisting Ions and Combined Use with Granular Activated Carbon".
2. Duning Li (Ph.D. – May 2024), Chemistry Department, SBU - co-advisor/external member. "Mechanism Investigation on Perfluoroalkyl Substances Removal by Carbonaceous Adsorbents including Activated Carbon and Nanocelluloses".
3. Kaushik Londhe (Ph.D. – December 2023), Civil and Environmental Engineering, NJIT; "Assessing The Feasibility And Mechanism Of Destructive Removal Of Per- And Polyfluoroalkyl Substances (PFAS) From Water". PhD advisor (Current: Engineer at Geosyntec Consultants)
4. Yuyin Tang (Ph.D. – December 2023), Civil Engineering, SBU; "A systematic study of 1,4-dioxane removal from contaminated groundwater using biological activated carbon (BAC)". SBU – Co-Advisor (Currently a post-doc at SBU)
5. Patricia Clyde (Ph.D. Co-advisee), Marine and Atmospheric Sciences; "Occurrence and Fate of Pharmaceuticals and Personal Care Products in Nitrogen Removing Biofilters" (May 2021). SBU – Co-Advisor (Current: Research Scientist at Gradient Corp)
6. Adam Gushgari (Ph.D. -December 2017), Environmental Engineering, ASU; "Tracking Chemical Indicators of Public Health in the Urban Water Environment" (December 2017) – PhD Committee member (Current: Wastewater National Business Development Manager · Eurofins Environment Testing America)
7. Wehui Gan (Ph.D. Visiting Graduate Student), Environmental Engineering, Sun Yat-sen University, Guangzhou, China; "Bromide and Other Halide Ion Removal From Drinking Waters Using Silver-Amended Coagulation" – Project Advisor at ASU

Postdoctoral Researchers

1. Sudheera Yaparatne (October 2023 – Present)
2. Yi Zhang, SBU (June 2020 – March 2024)
3. Xiayan Ye (January 2022 – October 2023)
4. Amith Maroli (October 2020 – December 2022)

5. Cheng-Shiuan Lee, SBU (Apr 2018 – June 2022) (Current: Faculty in the Research Center for Environmental Changes (RCEC) Academia Sinica, Taipei, Taiwan)

Technicians

1. Barbara Morrow (Feb 2021 – June 2022) (Current: MD student at West Virginia University)
2. Guangmei Liu (March 2020 – August 2020) (Current: PhD student at Boston University)

Undergraduate Researchers

1. Ligaya Manalastas – Chemistry and Environmental Science, NJIT (2024 – Present)
2. Sophie Calish – Civil Engineering, NJIT (2023)
3. Amanda Thomas - Coastal Environmental Studies, SBU (2021 – 2022)
4. Jie Tang - B.S. Chemistry, SBU (2021 – 2022)
5. Jonathan Lubiantoro – B.S. Marine Sciences, SBU (2022)
6. Lisa Dietrich (Research Intern, ASU) (2016-17)
7. Andrea Molina Pineda (COMEXUS Visiting Undergraduate Research Intern) (2015)
8. Miguel Zamorano (Research Intern, ASU) (2015)
9. Alma Banuelos (Research Intern, ASU) (2015)

High School Student Interns

1. Isabella Sha (2022)
2. Abhinav Avvaru (2023)
3. Tanakamon Yimsiri (2023)