# NEFELI M. BOMPOTI, Ph.D.

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#### **RESEARCH INTERESTS**

- Environmental Justice
- Environmental Policy
- Environmental Stressors and Societal
  Impacts
- Sustainable Land Reuse
- Environmental Systems Analysis
- Sustainable and Healthy Communities
- Gentrification and Displacement

- Reactive transport & geochemical modeling
- Environmental Geochemistry
- Solid-solution Interactions
- Surface Complexation Modeling
- Data-driven approaches in geochemical systems
- Predictive analytics for contaminated soil and groundwater data

#### EDUCATION

University of Connecticut, Ph.D., Environmental Engineering, 2017 National Technical University of Athens, MSc., Water Resources Science and Technology, 2014 National Technical University of Athens, Diploma, Civil Engineering (5-year program), 2012

#### ACADEMIC APPOINTMENTS

Department of Civil and Environmental Engineering, University of Massachusetts Dartmouth, North Dartmouth, MA

Assistant Professor, Sep 2023-present

#### Department of Civil and Environmental Engineering, University of Connecticut, Storrs, CT

Assistant Research Professor, Aug 2018-Aug 2023 Program Manager, EPA Technical Assistance for Brownfields (TAB) Region 1, Oct 2021-June 2023 Program Manager, Connecticut Brownfields Initiative (CBI), Jan 2018-Oct 2021 Postdoctoral Associate, Jan-Aug 2018 Adjunct Professor, Jan-May 2018

#### **AWARDS AND ACHIEVEMENTS**

Nominated for 2022 ACS Kavli Foundation Emerging Leader in Chemistry Award, Division of Geochemistry 2021 UConn's Provost Award for Community Engagement for Environmental Corps (faculty team award) Nominated for Minerals 2021 Young Investigator Award C.R. Klewin, Inc. Excellence in Teaching Award, AY 2018-2019 Soil Chemistry Division Student Award for Oral Presentation (3rd place), SSSA meeting, Fall 2017 UConn Doctoral Student Travel Award, Fall 2017 Goldschmidt Student Travel Grant (US NSF funded), Summer 2017 UConn Doctoral Dissertation Fellowship, Spring 2017 FEI Center of Excellence in Microscopy fellowship, AY 2016-2017 UConn Environmental Engineering Pre-Doctoral Fellowship, Spring 2016 Gerondelis Foundation Inc. scholarship for graduate studies in the US, AY 2015-2016 Thomaideio Award for poster presentation (National Technical University of Athens), Fall 2013

#### **TEACHING EXPERIENCE**

#### University of University of Massachusetts Dartmouth

Polluted Sites: Introduction to Environmental Impact Assessment, Fall 2023

#### **University of Connecticut**

Brownfields Redevelopment Practicum (Instructor), Spring 2021-2022 Brownfields Redevelopment (Co-Instructor), Fall 2018-2022 Brownfields Redevelopment Practicum (Co-Instructor), Spring 2019-2020 Geoenvironmental Engineering (Instructor), Spring 2019 Soil Mechanics (Instructor), Fall 2018 Computer-Aided Site Design (Instructor), Spring 2018-2019 Senior Design Advisor (2 CEE student teams, both recipients of departmental awards), AY 2018-2019 Geoenvironmental Engineering (Teaching Assistant), Spring 2017 Soil Mechanics (Teaching Assistant), Fall 2015-2017

#### **Student Advisees**

#### **University of Connecticut**

Nicholas Coelho (Master's student, Environmental Engineering – Major Advisor) Rachel Albino York (Master's student, Environmental Engineering – Major Advisor) Hayley Clos (Ph.D. student, Environmental Engineering – Associate Advisor) Jackie Sidman (Master's student, Environmental Engineering – Major Advisor) Ogochukwu Okeke (Ph.D. student, Environmental Engineering – Associate Advisor) Tasneem Ahmadullah (Ph.D. student, Environmental Engineering – Associate Advisor) Randi Mendes (Ph.D. student, Environmental Engineering – Associate Advisor) Victoria Duffy (Undergraduate student, Environmental Science) Smriti Hamal (Undergraduate student, Environmental Engineering) Nicholas Coelho (Undergraduate student, Environmental Science) Lauren Pawlowski (Honors Thesis Advisee, Environmental Science) Alex Robotham (Undergraduate student, Environmental Engineering) Zoe Demitrack (Undergraduate student, Environmental Engineering) Leana Santos (Undergraduate student, Civil Engineering) Harrison Mangines (Undergraduate student, Environmental Engineering) William Adsit (Undergraduate student, Environmental Engineering)

# **RESEARCH, EDUCATIONAL & TECHNICAL ASSISTANCE PROJECTS**

#### University of Massachusetts Dartmouth

US EPA Research, Technical Assistance, and Related Outreach on Minimizing Displacement Resulting from Brownfields Assessment, Cleanup and Reuse (PI), Oct 2023 (estim.)-September 2027.

Through research, technical assistance and outreach, the Brownfields Revitalization Anti-Displacement Strategies Program (BRADS) will provide research-driven guidance and training in developing and applying equity-centered and economically inclusive anti-displacement strategies. The goal of the program is to equip local leaders and brownfields communities with tools to address displacement and gentrification as part of their redevelopment practices.

#### University of Connecticut

#### US EPA Technical Assistance of Brownfields (TAB) EPA Region 1 (Program Manager & Co-PI), Oct 2021-2026

- Managed US EPA-funded technical assistance program for brownfields redevelopment in New England (EPA Region 1).
- Provided direct technical assistance to brownfields communities including development of technical resources, EPA brownfield grant proposal guidance and review, and interpretation of environmental regulatory requirements.
- Organized the Municipal Assistance Program in coordination with the service-learning course activities. Communicated with local governments, non-profits, and regional planning organizations and provided guidance on funding opportunities and technical subjects.
- Conducted community outreach and organized workshops and webinars on brownfield-related topics.
- Collaborated with an interdisciplinary team to create a continuing education program and community engagement activities.

#### A systems approach to unravel environmental injustice in Connecticut's urban core (PI), Aug 2021-

2022. Employed systems analysis to study the dynamic changes between the environmental, socioeconomic, and infrastructure systems focusing on metropolitan areas in CT.

#### The Connecticut Brownfields Initiative (CBI) (Program Manager & Co-PI), Jan 2018-Oct 2021

- Managed service-based learning and community engagement program for Brownfields Redevelopment in CT. Collaborated with industrial partners, State Agencies, and UConn faculty to create a hands-on, interdisciplinary program.
- Mentored students, consulted more than 40 CT municipalities on brownfield redevelopment projects, and conducted program outreach including talks and webinars.
- Coordinated and taught the service-learning course "Brownfield Corps". Collaborated with the "Environmental Corps" team on a **\$2.25M** NSF-funded project "Redefining Public Engagement at the University of Connecticut: Studying the Impact of an Innovative STEM Service-Learning Model on the University Community."
- Supported EPA Brownfields Assessment Grants for CT communities (~\$4.5M awarded to CT municipalities).

**Embedding decision-making tools in the community: A framework for brownfields revitalization (PI),** Jan-Aug 2020. Developed a decision-making modeling tool to evaluate suggested reuses for brownfields in Connecticut incorporating environmental, socioeconomic, and transit factors.

Assessment of PFAS-impacted soil and groundwater in the State of Connecticut (PI), Aug 2022-2023. Assesses the impact of historic PFAS releases by elucidating their fate and transport in the subsurface. Investigates the retention of PFAS in the vadose zone and estimates the factors that control their leaching to groundwater.

**Enhancing PFAS education, outreach, and communication in the State of Connecticut (PI),** Jul 2022-2024. Develops science communication platform for PFAS-impacted communities in Connecticut. Creates an educational and informational hub on PFAS science, exposure, health effects, preventive measures, and sampling methodologies. Conducts stakeholder engagement.

UConn/NRCS Long Island Sound Coastal Zone Soil Survey Research Collaboration (Co-PI), Nov 2022-2024. Investigates soil parameters in coastal areas in Long Island Sound in collaboration with the local USDA NRCS office.

**Development of in-situ soil characterization method to assess urban soil health (PI),** Feb 2022-Dec 2022. Develops an in-situ, rapid method for soil parameter estimation in urban soils using spectroscopic and soil sensing techniques.

#### **Projects Involved in Graduate Studies**

Collaborative Research: Toward a unified model for ferrihydrite nanoparticles behavior in the environment: a multipronged investigation of surface structure and reactivity (Graduate assistant), 2014-2017

- Designed experimental protocols for batch adsorption experiments, performed flow-through adsorption experiments with ATR FTIR spectroscopy, and developed an experimental set-up for carbonate adsorption on mineral surfaces.
- Advanced surface complexation model for iron oxide reactivity (MUSE algorithm) which led to three significant publications. Dissertation: "Modeling iron oxide reactivity in the environment".

#### Investigating soil surfaces utilizing electron microscopy (Graduate fellow), 2016-2017

Characterized pure mineral phases and mineral assemblages using scanning and transmission electron microscopy techniques (SEM & TEM). **Award: \$10K.** 

#### Waste and Soil Characterization (Graduate assistant)

"Characterization of Cr - contaminated samples", CB&I and AECOM, 2015 Characterized chromium-contaminated soil samples using X-Ray Fluorescence (XRF), X-Ray Diffraction (XRD), and microscopy techniques.

"Statistical Analysis of soil and solid waste data (TAL Metals and XRF)", CB&I, 2015 Performed multivariate statistical analysis on geochemical data to investigate relationships among soil elements and facilitate solid waste characterization.

#### National Technical University of Athens, Greece

**LIFE/CHARM:** *"Chromium in Asopos Groundwater System"* (Graduate assistant), 2013-2014 Conducted multivariate statistical analysis (factor analysis, PCA) on soil and groundwater data obtained from chromium-contaminated sites. Thesis: "Investigation of geochemical characteristics in soil and groundwater with chromate presence".

## FUNDED PROPOSALS (Total amount of funding: \$2.3M, PI Share: \$900K) AS PRINCIPAL INVESTIGATOR (PI)

- 1. US EPA Research, Technical Assistance, and Related Outreach on Minimizing Displacement Resulting from Brownfields Assessment, Cleanup and Reuse. Nefeli Bompoti (PI), Lauren Hebrele (Co-PI), and Kelly Kinahan (Co-PI). \$500K.
- 2. UConn CEE Research Support (2022). "Rapid assessment of urban soil health using in situ soil testing." Nefeli Bompoti (PI), Baikun Li (Co-PI), and Marisa Chrysochoou (Co-PI). \$20K.
- **3.** Connecticut Institute of Water Resources USGS 104b program (2021). "Assessment of PFASimpacted soil and groundwater in the State of Connecticut." Nefeli Bompoti (PI), Zoi Dokou (Co-PI), Chris Perkins (Co-PI), Anthony Provatas (Co-PI), and Marisa Chrysochoou (Co-PI). **\$25K.**
- **4. Connecticut Department of Public Health (2021).** *"Enhancing PFAS education, outreach, and communication in the State of Connecticut"*. Nefeli Bompoti (PI). **\$180K.**
- Sustainable Global Cities Initiative Faculty Research Grants Competition (2021). "A systems approach to unravel environmental injustice in Connecticut's urban core". Nefeli Bompoti (PI). 10K.

**6. CEE Research Initiative (2020).** *"Embedding decision-making tools in the community: A framework for brownfields revitalization".* Nefeli Bompoti (PI) and Nick Lownes (Co-PI). **\$16K.** 

# AS CO-PRINCIPAL INVESTIGATOR (CO-PI)

- 7. USDA/Natural Resources Conservation Service (2022). "UConn/NRCS Long Island Sound Coastal Zone Soil Survey Research Collaboration". William Quimet (PI) and Nefeli Bompoti (Co-PI). \$410K.
- 8. US EPA Technical Assistance to Brownfields Communities (TAB) (2020). Maria Chrysochoou (PI), Nefeli Bompoti (Co-PI), Rupal Parekh (Co-PI), Sara Wakai (Co-PI), David Dickson (Co-PI). \$1M.
- **9.** CT Department of Economic and Community Development (2018-2021). "*The Connecticut Brownfields Initiative*". Maria Chrysochoou (PI) and Nefeli Bompoti (Co-PI). **\$151K.**

#### **OTHER (through UConn Foundation)**

**10.** Community Foundation of Eastern CT (2020). "Promoting brownfield redevelopment in Eastern Connecticut". **\$15K**. (towards Connecticut Brownfields Initiative).

#### MANUSCRIPTS UNDER REVIEW

(\*denotes mentee)

1. Bompoti N., \*Coelho N., \*Pawlowski L., Is inclusive more elusive? An impact assessment analysis on designating environmental justice communities in the US, *under review in Journal of Environmental Impact Assessment Review*.

#### PUBLICATIONS (Google Scholar h-index 9)

- 1. Namayandeh A., Borkiewicz O., **Bompoti N.**, Chrysochoou M., Watson S., Michel M., Effects of Oxyanion Surface Loading on the Rate and Pathway of Ferrihydrite Transformation, *Environmental Science and Technology*, ACS Earth and Space Chemistry, available online.
- 2. Mendes R., **Bompoti N.**, Vadas T., 2023. Colloidal/Bulk Ternary Phase Interactions between ferrihydrite, copper, and organic matter, Chemosphere, 336, 139304.
- 3. \*Clos H., Bompoti N., and Chrysochoou M., Development of an in-situ Soil Screening methodology for soil health of Urban Sites to Inform Sustainable Urban Agriculture, Sustainability, 15, 7924.
- 4. Namayandeh A., Borkiewicz O., **Bompoti N.**, Chrysochoou M., Michel M., 2022. Oxyanion Surface Complexes Control the Kinetics and Pathway of Ferrihydrite Transformation to Goethite and Hematite, *Environ. Sci. Technol. 2022, 56, 22, 15672–15684*.
- Yingzheng F., Wang X, Funk T., Herman B., Bompoti N., Mahmud MD., Rashid I., Chrysochoou, M., Yang M., Vadas T., Lei Y., Li B., 2022. A critical review for real-time continuous soil monitoring: Advantages, Challenges, and Perspectives, Environmental Science and Technology, Environ. Sci. Technol. 2022, 56, 19, 13546–13564.
- 6. Bompoti N., Hernández Y.C., Chrysochoou M., Machesky M., 2022. Interfacial properties of Alferrihydrites: Surface complexation modeling as a probe of surface structure, ACS Earth and Space Chemistry, 6, 7, 1717–1724.
- Arnold C., Barret J., Campbell T., Chrysochoou M., Bompoti N., 2021. The Environment Corps: Combining classroom instruction, service learning and extension outreach to create a new model of community-engaged scholarship at the University of Connecticut, Journal of Higher Education Outreach and Engagement, 25.
- Yue, P., Chen, N., Peak, D., Bompoti, N., Chrysochoou, M., Onnis-Hayden, A., Larese-Casanova, P., 2020. Oxygen atom release during selenium oxyanion adsorption on goethite and hematite. Appl. Geochem. 117, 104605.

- Bompoti, N., Chrysochoou, M., Machesky, M., 2019. A unified surface complexation modeling approach for chromate adsorption to iron oxides, Environmental Science and Technology, 53, 6352– 6361.
- Bompoti, N., Chrysochoou, M., Machesky, M., 2019. Assessment of modeling uncertainties using a multi-start optimization tool for surface complexation equilibrium parameters (MUSE), ACS Earth and Space Chemistry, 3, 473–483.
- 11.Kubicki J.D., Kabengi N., Chrysochoou M., and Bompoti N., 2018. Density functional theory modeling of chromate adsorption onto ferrihydrite nanoparticles, Geochem Trans (2018); 19:8.
- 12.Bompoti, N., Chrysochoou, M., Machesky, M., 2017. Surface structure of ferrihydrite: Insights from modeling surface charge. Chem. Geol., Adsorption of metals by Geomedia III: Fundamentals and implications of metal adsorption 464, 34–45.
- 13.Kabengi, N.J., Chrysochoou, M., Bompoti, N., Kubicki, J.D., 2017. An integrated flow microcalorimetry, infrared spectroscopy and density functional theory approach to the study of chromate complexation on hematite and ferrihydrite. Chem. Geol., Adsorption of metals by geomedia III: Fundamentals and implications of metal adsorption 464, 23–33.
- 14. Chrysochoou M., Theologou E., Bompoti N., Dermatas D., Panagiotakis I., 2016. "Occurrence, Origin and Transformation Processes of Geogenic Chromium in Soils and Sediments". Curr. Pollut. Rep., pp 1–12.
- 15.Bompoti N., Chrysochoou M., and Dermatas D., 2015. "Geochemical Characterization of Greek Ophiolitic Environments Using Statistical Analysis." Environmental Processes 2 (1): 5–21.
- 16.Dermatas D., Mpouras Th., Chrysochoou M., Panagiotakis I., Vatseris Chr., Linardos N., Theologou E., Bompoti N., Xenidis Anth., Papassiopi N., Sakellariou L., 2015. Origin and concentration profile of chromium in a Greek aquifer, Journal of Hazardous Materials (281): 35–46.

# PUBLISHED PROCEEDINGS FULL PAPERS

- 1. **Bompoti N.**, Chrysochoou M. and Machesky M., 2016. Advances in surface complexation modeling for chromium adsorption on iron oxides, *Geo Chicago 2016: Sustainability, Energy, and the Geoenvironment*, Chicago, IL, August 14-18, 2016.
- Chrysochoou M., Bompoti N., Dermatas D. and Theologou E., 2014. Identification of Cr and Ni origin in Greek soils via R-mode factor analysis, paper A408, *Proceedings of the 12th International Conference on Protection and Restoration of the Environment*, Skiathos, Greece, June 29 – July 3 2014.

# **BOOK CHAPTERS**

1. Chrysochoou M. and Bompoti N. Laboratory testing for Chemical Characterization of Solids, Gas and Liquids, Manual of Geoenvironmental Engineering Professional Practice, American Society of Civil Engineers (*under review*).

# **CONFERENCE PRESENTATIONS AND POSTERS (\***denotes mentee)

- 1. Bompoti N. and \*Coelho. N., 2022. Unraveling Environmental Justice in New England. Revitalizing New England: Brownfields Summit 2022, Devens, MA, May 18-19. (oral presentation)
- 2. **Bompoti N.** and Chrysochoou M., 2022. With the application in mind: Transferable interfacial phenomena from molecular to complex systems. American Chemical Society Spring 2022, San Diego, CA, March 20-24. (oral presentation)
- 3. **Bompoti N.** and Chrysochoou M., 2021. Nexus to cross-scale interfacial phenomena: A surface complexation scaling-up approach for complex surfaces. American Chemical Society Fall 2021, Atlanta, GA, August 22-26. (oral presentation)

- 4. Ahmadullah T., **Bompoti N.** and Chrysochoou M., 2021. Thermodynamic and kinetic modeling of cementitious reactions in lime-treated clays. *Goldschmidt 21*, Virtual, July 4-9. (oral presentation)
- 5. **Bompoti N.**, Chrysochoou M. and Machesky M., 2021. Interfacial phenomena of Al-substituted ferrihydrite. *Goldschmidt 21*, Virtual, July 4-9. (oral presentation)
- \*Mangines H., Bompoti N. and Chrysochoou M., 2019. Chromate adsorption on iron oxide rich soils: Experiments and Modeling. 2019 AEESP Research and Education Conference, Arizona State University, May 14–16. (poster)
- \*Mangines H., Du Y., Bompoti N. and Chrysochoou M., 2018. Chromate adsorption on iron rich soils: Experiments and modeling. *New England Graduate Student Water Symposium*, University of Massachusetts, September 7-9. (oral presentation)
- 8. \*Adsit W., **Bompoti N.** and Chrysochoou M., 2018. Modeling of U (VI) of adsorption on iron oxides. *New England Graduate Student Water Symposium*, University of Massachusetts, September 7-9. (oral presentation)
- Bompoti N., Chrysochoou M. and Machesky M., 2018. Towards a unified thermodynamic database: U (VI) and Cr (VI) adsorption on iron oxides. *Goldschmidt 2018*, Boston, MA, August 12 -17. (oral presentation)
- Bompoti N., Chrysochoou M. and Machesky M., 2018. Iron oxide solution interface: Insights from Surface Complexation Modeling. 255<sup>th</sup>American Chemical Society National Meeting & Exposition, New Orleans, March 18-22. (oral presentation)
- 11. Chrysochoou M., **Bompoti N.**, and Machesky M., 2018. The MUSE: A MUlti Start optimization algorithm for surface complexation Equilibrium parameters in complex systems. *Symposium in Honor of James A Davis, 255<sup>th</sup> American Chemical Society National Meeting & Exposition*, New Orleans, March 18-22. (oral presentation)
- 12. Bompoti N., Chrysochoou M. and Machesky M., 2017. Advances on reactive transport modeling: Modeling adsorption of heavy metals on iron oxides using an innovative surface complexation model. SETAC North America 38th Annual Meeting, Minneapolis, MN, Nov 12-16. (oral presentation)
- 13. Bompoti N., Chrysochoou M. and Machesky M., 2017. Predicting Chromate Adsorption on Iron Oxides: A surface complexation modeling study. 2017 ASA, CSSA, and SSSA Annual Meeting in Tampa, FL, Oct. 22-25. (oral presentation)
- 14. Chrysochoou M., **Bompoti N.**, and Machesky M., 2017. The MUSE: A MUlti –start optimization algorithm for Surface complexation Equilibrium parameters. *Goldschmidt 2017*, Paris, France, August 13 -18. (oral presentation)
- 15. **Bompoti N.**, Chrysochoou M. and Machesky M., 2017. The MUSE application: A Unified Surface Complexation Modeling approach for chromate binding to iron oxides. *Goldschmidt 2017*, Paris, France, August 13 -18. (oral presentation)
- 16. **Bompoti N.**, Chrysochoou M. and Machesky M., 2016. Surface complexation modeling of chromate adsorption on iron oxides. *Air & Waste Management Association's New England Section: Climate Change: Risks, Rewards and Resiliency" Conference 2016*, Framingham, Massachusetts, October 27. (oral presentation)
- 17. **Bompoti N.**, Chrysochoou M., Machesky M., 2016. Advances in surface complexation modeling for chromium adsorption on iron oxide. *Geo-Chicago 2016: Sustainability, Energy, and the Geoenvironment- Advances in Heavy Metal Treatment*, Chicago, USA, August 14-18. (poster)
- Bompoti N., Chrysochoou M., and Machesky M., 2016. Surface complexation modelling of chromate adsorption on iron oxides, 251<sup>st</sup> American Chemical Society National Meeting & Exposition, San Diego, March 13-17. (oral presentation)
- 19. Chrysochoou M., **Bompoti N.**, and Machesky M., 2016. Carbonate adsorption on ferrihydrite: a semiquantitative IR study, 251<sup>st</sup> American Chemical Society National Meeting & Exposition, San Diego, March 13-17. (oral presentation)

- 20. Chrysochoou M., Kabengi N. **Bompoti N.**, Kubicki J. and Machesky M., 2016. Resolving the fine-scale reactivity of chromate complexation on iron oxide surfaces, *251st American Chemical Society National Meeting & Exposition*, San Diego, CA, March 13-17. (oral presentation)
- 21. **Bompoti N.**, Chrysochoou M. and Machesky M., 2015. Surface complexation modelling of chromate adsorption on ferrihydrite. *New England Graduate Student Water Symposium*, University of Massachusetts, September 5-9. (oral presentation)
- 22. Chrysochoou M., **Bompoti N.**, Theologou E. and Dermatas D., 2014. Identification of Cr and Ni origin in Greek soils via R-mode factor analysis, *12th International Conference: Protection & Restoration of the Environment PRE12*, Skiathos Island, June 29-July 4. (oral presentation)
- Bountas N., Bompoti N., Feloni E., Zeikos L., Markonis Y., Tegos A., Mamassis N. and Koutsoyiannis D., 2013. Temperature variability over Greece: Links between space and time, 5th EGU Leonardo Conference, Facets of Uncertainty, STAHY'13, Kos Island, Greece, October 17-19. (poster)
- Houdalaki E., Basta M., Bompoti N., Bountas N., Dodoula E., Iliopoulou T., Ioannidou S., Kassas K., Nerantzaki S, Papatriantafyllou E., Tettas K., Tsirantonaki D., Papalexiou S.M. and Koutsoyiannis D., 2012. On statistical biases and their common neglect. *EGU General Assembly*, Vienna, Austria, April 22-27. (poster)

# **INVITED TALKS**

- 1. Invited speaker for CT Interagency PFAS Task Force, Updates on PFAS Education, Research, and Outreach in the State of Connecticut, December 8, 2022 (Recording available <u>here</u>).
- 2. Invited speaker for 2022 Vermont Environmental Consortium, Investigation & Remediation Conference, Environmental Justice and Technical Assistance in New England, December 6, 2022.
- Invited speaker for 38th Annual International Conference on Soils, Sediments, Water, and Energy, "Engaging EJ Communities in the Environmental Cleanup Interactive Activity". Parekh R. and Bompoti N., Amherst, MA, October 17-20, 2022.
- 4. Invited speaker for National Brownfields Conference, 2022, "Brownfields University: Leveraging Brownfields Financing". Oklahoma City, OK, August 16-19, 2022.
- Invited speaker for Northeast Sustainable Communities Workshop, 2021. "US EPA initiatives Roundtable, Catalyzing brownfields redevelopment: Technical Assistance to Region 1". Virtual, June 22-23, 2021.
- Research to Practice Video, 2020. Geoenvironmental Engineering Technical Committee of the ASCE Geo-Institute. "A methodology for waste and soil fingerprinting using X-Ray spectroscopy and microscopy techniques". Chrysochoou M and Bompoti N. Available <u>here</u>.
- 7. Invited speaker for Connecticut Conference of Municipalities, Sustainable CT Workshop Series. "Developing *Brownfield Inventories*", Vernon CT, February 7, 2020.

# **CONFERENCE & WORKSHOP ORGANIZER**

- 1. Northeast Sustainable Communities Workshop, Brownfields Coalition of the Northeast, Stamford, CT, September 13-14, 2022 (Speakers Committee).
- 2. Revitalizing New England: Brownfields Summit 2022, Devens, MA, May 18-19, 2022 (Co-Organizer).
- 3. Workshop "What you need to know about the Forever Chemicals," Virtual Community Engagement event on PFAS in collaboration with CT DEEP, CT DPH, industrial partners and municipalities, October 7<sup>th</sup>, 2020. Workshop website: <u>https://pfas2020.engr.uconn.edu/</u>(Organizer)

#### WEBINARS

1. UConn TAB Webinar Series. <u>Opportunities for Public-Private Partnership in Brownfield</u> <u>Redevelopment</u>, Apr 26, 2023.

- 2. UConn TAB Webinar Series. "Leveraging EJ Funding to Promote Equitable Development", Mar 1, 2023.
- 3. Panel Discussion on "Overcoming the barrier PFAS Contamination" for Air & Waste Management Association Webinar Series, February 16, 2023.
- 4. National Technical Assistance to Brownfields, "Enhance Your Chance: What You Need to Know to be Competitive in the FY23 EPA MARC Grant Competition Webinar", October 20, 2022.
- 5. UConn TAB Webinar Series. "<u>Planning and Funding Site Investigations</u>", Jun 8, 2022.
- 6. UConn TAB Webinar Series. "<u>Developing Brownfields Inventories</u>", Mar 2, 2022.
- 7. UConn TAB Webinar Series. "Spring 2022 Municipal Assistance Program Services", Dec 8, 2021.
- 4. Connecticut Brownfields Initiative Webinar. "Brownfields Funding Opportunities", Jun 24, 2021.
- 5. Connecticut Brownfields Initiative Webinar. "CBI's Municipal Assistance Program", Jun 23, 2020.
- 6. UConn Clear Webinar Mini-Series. "Path to Brownfields Redevelopment", April 22, 2020.
- Connecticut Brownfields Initiative Webinar. <u>Requesting assessment funds from the Connecticut</u> <u>Brownfield Land Bank, Inc.</u> (Host: Bompoti N., Presenter: Bogen A., Connecticut Brownfield Land Bank President), Oct 16, 2019.
- 8. Connecticut Brownfields Initiative Webinar (through Sustainable CT Series). "<u>Developing Brownfields</u> <u>Inventories</u>", July 10, 2019.
- 9. Connecticut Brownfields Initiative Webinar. "<u>Financing a brownfield: Intro to EPA Grants and CBI's</u> <u>RFP process</u>", Jun 13, 2019.

# EXAMPLE PROJECTS SUPPORTED THROUGH TECHNICAL ASSISTANCE FOR BROWNFIELDS PROGRAM (Fall 2021)

- Technical and grant writing support for 8 EPA brownfields grant proposals for CT municipalities (Town of Vernon, City of New London, Town of Stafford, City of West Haven, City of Norwich, Waterbury Development Corporation (2), St Luke Development Corporation). 6 proposals funded for a total of \$3M.
- 2. Review of EPA brownfields grant proposals for municipalities in New England.
- 3. Brownfields Inventories for the Towns of Athol, MA, Attleboro, MA, Bethany, CT, Winchester, CT.
- 4. Site Reuse Assessments for Brownfields: former Omega Mill in Monson, MA, and Former Gas Plant in Claremont, NH.
- 5. Community Revitalization Plan for the Town of Boscawen, NH.

#### PROFESSIONAL

- Engineering in Training [Environmental Engineering, CT License # EIT.0012309] (desire for PE license)
- Harvard Business School Online, CORe: Credential of Readiness [Cohort: November 2018]
- Journal of Air and Waste Management Association, Associate Editor (2022-2023)
- Connecticut Brownfields Land Bank, Board of Directors Member (2022-present)
- Brownfields Coalition of the Northeast, Advisory Board Member (2022-2023)
- Member of the American Chemical Society (ACS), European Association of Geochemistry (EAG), and Soil Science Society of America (SSSA), Association of Environmental Engineering and Science Professors (AEESP), American Society of Civil Engineers (ASCE).
- Peer-review journal reviewer: Environmental Science: Nano, Environmental Science: Processes & Impact, Environmental Science and Technology, Bulletin of Environmental Contamination and Toxicology, Critical Reviews in Environmental Science and Technology, Chemosphere, ACS Earth and Space Chemistry, Minerals, and Chemical Geology.
- NSF Reviewer (2021).

• Reviewer for Sustainable CT Town Certification program.

## EXPERTISE

Laboratory skills: X-Ray Fluorescence (XRF), X-Ray Diffraction (XRD), Scanning and Transmission Electron Microscopy (SEM, TEM), Atomic Absorption Spectroscopy (AAS), BET surface area analysis, Fourier Transform Infrared Spectroscopy (FTIR), spectrophotometry, wet chemistry skills. Programming languages: R, Mathematica, Matlab.

**Computer Applications:** SPSS statistics, AutoCAD, Bentley MicroStation & OpenRoads, WaterGEMS.

#### **MEDIA & PUBLICITY**

- Quoted on "Vernon Officials Ready To Move On Daniels Mill Cleanup" <u>https://patch.com/connecticut/vernon/vernon-officials-ready-move-daniels-mill-cleanup</u>
- Quoted on "Top Students from the University of Connecticut and the City College of New York Headline BCONE's 2020 Charlie Bartsch Scholarship Event" https://www.brownfieldcoalitionne.org/widget/bcone-news-updates/10186056
- Connecticut Brownfields Initiative Evolves to Technical Assistance for Brownfields Program <u>https://news.engr.uconn.edu/connecticut-brownfields-initiative-evolves-to-technical-assistance-for-brownfields-program.php</u>
- EPA Selects UConn to Receive \$1 Million in Funding to Deliver Training and Technical Assistance to Brownfield-Impacted Communities in New England <u>https://www.epa.gov/newsreleases/epa-selects-uconn-receive-1-million-funding-deliver-training-and-technical-assistance</u>
- CT Towns Obtain EPA Grant Funds with Help from Connecticut Brownfields Initiative <a href="https://cee.engr.uconn.edu/ct-towns-obtain-epa-grant-funds-with-help-from-connecticut-brownfields-initiative.html?fbclid=lwAR27GkAMdHkn-brownfields-initiative.html?fbclid=lwAR27GkAMdHkn-8nXu105yMVt2uLoowkBPI4sjRFHJQNstfWLWgFGsUZiLWA</a>
- UCONN's Can-Do Spirit: Second Bartsch Scholarship Winners Revealed <u>https://www.brownfieldcoalitionne.org/brownfield-industry-news-updates/7091797</u>
- UConn engineering school, city partner on brownfield remediation <u>http://www.newbritainherald.com/NBH-New+Britain+News/358084/uconn-engineering-school-city-partner-on-brownfield-remediation</u>
- Historic Indian Peace Medal Investigation at the Museum of Connecticut History <u>https://www.linkedin.com/feed/update/urn:li:activity:6572485697436024832/</u>
- UConn report on InterRoyal site gives Plainfield leaders direction
  <u>https://www.norwichbulletin.com/news/20190720/uconn-report-on-interroyal-site-gives-plainfield-leaders-direction</u>
- CBI Community Impact: Stafford gets \$300K grant for brownfield work <u>https://www.journalinquirer.com/towns/stafford/stafford-gets-k-grant-for-brownfield-work/article\_45b47b68-9696-11e9-a5de-478f64f45e1f.html</u>
- Hamden getting help on contaminated site work from UConn students <u>https://www.ctinsider.com/news/nhregister/article/Hamden-getting-help-on-contaminated-site-work-13841211.php</u>
- CBI Community Impact: UConn Partners with Clinton for Brownfields Study https://www.zip06.com/news/20180925/uconn-partners-with-clinton-for-brownfields-study

• CBI Student Competition Fall 2018: <u>https://www.brownfieldcoalitionne.org/news/7091797</u>