NEHA GUPTA

PhD Hydrology

Ph: (513) 477-2660

M.S. Hydrogeology Email: nehagupta@arizona.edu

EDUCATION

PhD, University of Arizona, Hydrology and Atmospheric Sciences, 2016-2022 (Tucson, Arizona) Minor in Natural Resources and the Environment

Project: Hydrological and Biogeochemical Investigation of Semi-Arid Urban Catchments: Assessing Opportunities and Performance of Green Infrastructure; Advisor: Dr. Thomas Meixner

MS, Ohio University, Geological Sciences (Hydrogeology), 2011-2013 (Athens, OH) Project: Development and Characterization of Controlled-Release Permanganate Gel for Groundwater Remediation; Advisor: Dr. Eung Seok Lee

BS, Ohio University, Geological Sciences, Magna Cum Laude, 2007-2011 (Athens, OH).

EXPERIENCE

Assistant Research Professor, University of Arizona, Arizona Institutes for Resilience, Tucson, AZ, Jan 2023 – Present

Program Coordinator, University of Arizona, University Climate Change Coalition (UC3), Arizona Institutes for Resilience, Tucson, AZ, May 2020 – Jan 2023

Graduate Research & Teaching Assistant, University of Arizona, Department of Hydrology & Atmospheric Sciences, Tucson, AZ, August 2016-May 2020

Environmental Scientist, URS (now AECOM), Cincinnati, OH, November 2014 – January 2018 **Scientist,** Iris Environmental, Irvine, CA, June 2013 – November 2014

REFEREED PUBLICATIONS

- Gerlak, A., Baldwin, B., Zuniga-Teran, A., Colella, T., Elder, A., Bryson, M., Gupta, N., Yang, B., Doyle, T., Heflin, S., MacAdam, J., Hanshaw, K., McCoy, A., Wilson, J.K. 2022. A Collaborative Effort to Address Maintenance of Green Infrastructure through a University-Community Partnership. Socio-Ecological Practice Research, https://doi.org/10.1007/s42532-022-00127-5
- Meixner, T., Berkowitz, A.R., Downey, A.E., Pillich, J., LeVea, R., Smith, B.K., Chandler, M., Gupta, N., Rullman, S., Woodroof, A. and Cherrier, J., 2021. Rapid Assessment and Long-Term Monitoring of Green Stormwater Infrastructure with Citizen Scientists. Sustainability, Vol. 13, issue 22, p. 12520.
- Gerlak, A.K., Elder, A., Thomure, T., Shipek, C., Zuniga-Teran, A., Pavao-Zuckerman, M., Gupta, N., Matsler, M., Berger, L., Henry, A.D. and Yang, B., 2021. Green Infrastructure: Lessons in Governance and Collaboration From Tucson. Environment: Science and Policy for Sustainable Development, Vol 63, issue 3, pp.15-24.
- Ibsen, P.C., Borowy, D., Dell, T., Greydanus, H., **Gupta, N.,** Hondula, D.M., Meixner, T., Santelmann, M.V., Shiflett, S.A., Sukop, M.C. and Swan, C.M., 2021. Greater aridity increases the magnitude of urban nighttime vegetation-derived air cooling. Environmental Research Letters, Vol. 16 issue 3, p. 34011.

- Lee, E.S. and **Gupta**, **N.**, 2014. Development and characterization of colloidal silica-based slow- release permanganate gel (SRP-G): Laboratory investigations. Chemosphere, Vol. 109, p. 195-201.
- Lee, E.S., Olson, P.R., **Gupta**, N., Solpuker, U., Schwartz, F.W., and Kim, Y., 2013. Permanganate gel (PG) for groundwater remediation: Compatibility, gelation, and release characteristics. Chemosphere, Vol. 97, p. 140-145.

NON-REFEREED PUBLICATIONS AND MEDIA

- **Gupta**, N., 2022. May 2022. Hydrological and Biogeochemical Investigation of Semi-Arid Urban Catchments: Assessing Opportunities and Performance of Green Infrastructure. *Doctoral Dissertation. University of Arizona. ProQuest Dissertations Publishing*, 2022. *http://hdl.handle.net/10150/664358*
- **Gupta, N.**, Jacobs, K., Halper, E., Bearup, L., Kennett, B., Wilson, W. (2022). Lower Santa Cruz River Basin Study: Science Summary of Climate and Surface Water Modeling. University of Arizona Center for Climate Adaptation Science and Solutions, Tucson, AZ, USA, 26 pp.
- **Gupta**, **N**. "Chasing Monsoons." *Terrain.org* (blog), 26 May 2021, https://www.terrain.org/2021/a-life-of-science/chasing-monsoons/

CONFERENCE PRESENTATIONS

- **Gupta**, N. 2022. Evaluation of Adaptation Strategies in the Lower Santa Cruz River Basin Study. Arizona Hydrological Society Symposium.
- **Gupta**, N., Meixner, T., Gallo, E., Dziubanksi, D., Korgaonkar, Y., 2019. Comparison of Runoff Response in Tucson, AZ Neighborhoods. American Geophysical Union.
- **Gupta**, N., Meixner, T., Gallo, E., Dziubanksi, D., Korgaonkar, Y., 2019. Hydrological Investigation of Green Infrastructure Network in Tucson Neighborhoods. Arizona Hydrological Society Symposium.
- **Gupta**, N., Meixner, T., Gallo, E., Dziubanksi, D., Canfield, E., Spinti, R., 2018. Runoff increases due to urbanization in a semi-arid city. American Geophysical Union.
- **Gupta**, N., Meixner, T., Gallo, E., Dziubanksi, D., Korgaonkar, Y., 2018. Quantification of Runoff Response in Semi-Arid Urban Catchment. Arizona Hydrological Society Symposium.
- **Gupta**, N. and Lee, E.S., 2012. Development and characterization of controlled-release permanganate gel for groundwater remediation. Geological Society of America Abstracts with Programs, Vol. 44, No. 7.
- **Gupta**, N. and Kidder, D., 2012. Utilization of desalination waste brines as ionic feedstock for carbon sequestration through carbonate mineralization process. Geological Society of America Abstracts with Programs, Vol. 44, No. 7.

AWARDED FUNDING

• Arizona Board of Regents, 2022. Collaborator and Project Manager with late PI Thomas Meixner and current PI Kathy Jacobs with partners Arizona Department of Water Resources and researchers from University of Arizona, Arizona State University, and Northern Arizona University to enhance recharge in Arizona. \$3,717,471.

- University of Arizona Research, Innovation, and Impact (RII) International Research Grant, 2022. Collaborator with PI Adriana Zuniga-Terran, UA partners Greg Barron-Gafford and Kenneth Kokroko, and University of Western Australia researchers to conduct pilot international collaborative project to link ecosystem services, landscape design, and equity. \$50,000.
- University of Arizona Arizona Institutes for Resilience (AIR), 2021. Collaborator with PI Kathy Jacobs and partners City of Tucson and Tucson Climate Coalition to facilitate community workshops to inform City of Tucson Climate Action Plan. \$16,940.
- Lincoln Institute of Land Policy, Babbitt Dissertation Fellowship Award, 2020. \$10,000.
- WateReuse Arizona, Student Scholarship, 2019. \$4,500.

AWARDS AND AFFILIATIONS

- American Geophysical Union, 2011-Present
- Arizona Hydrological Society, 2016-Present
- Southern Arizona Low Impact Development Working Group, 2016-Present
- Arizona Cross-Watershed Network, 2020-Present
- Carson Scholars Program, Institute of the Environment Fellow, University of Arizona, 2019.
- Best Visual Communication (Poster), Department of Hydrology & Atmospheric Sciences, 2019.
- Third Place Award for Best Lightning Talk, University of Arizona Earthweek Plenary Session, 2019.
- Best Student Poster Presentation, Hargis & Associates, Inc., 2017.
- Mary Stoertz Memorial Scholarship, Department of Geological Sciences, 2012.
- First Place Award, Ohio University Student Research and Creativity Exposition, Ohio University, 2011, "Utilization of desalination waste brines as ionic feedstock for carbon sequestration through carbonate mineralization process."
- First Place Award, Ohio University Student Research and Creativity Exposition, Ohio University, 2010, "Sequestration of Carbon Dioxide from Ohio University's Power Plant through Carbon Mineralization. "

SKILLS

- Project development, management and coordination
- Complex team management
- Grant writing
- Meeting facilitation
- Stakeholder & community engagement
- Curriculum development
- Science translation & communication
- Partner recruitment and engagement
- Field investigation & laboratory analysis