

Objective

To seek opportunities to expand upon my graduate education while building my professional network and planning for a career in academia

Education

- Current, PhD (Environmental Engineering), University of Maryland Baltimore County, Maryland, USA (CGPA 4.00/4.00)
- May 2012, MS (Civil Engineering/Environmental Engineering), Texas A&M University, Texas, USA (CGPA 3.89/4.00)
- May 2008, BTech (Civil Engineering), National Institute of Technology Karnataka, India (CGPA 8.06/10.00)

Work History

- August 2012 – Current, Graduate Research Assistant
Department of Chemical, Biochemical and Environmental Engineering, University of Maryland Baltimore County
I work with Dr. Lee Blaney to study photolytic fate of pharmaceuticals in the environment. I also studying advanced oxidation for treatment of agricultural wastewater contaminated by pharmaceutically active compounds used as feed additives in the poultry industry.
- June 2011 – May 2012, Graduate Assistant (Research)
Civil Engineering Department, Texas A&M University
My project investigated the leaching arsenic and lead from glass beads, which are added to pavement markings to improve their visibility, under supervision of Dr. Bryan Boulanger. The results of my experimental studies are presented in my MS thesis "Heavy Metals in Glass Beads Used in Pavement Markings".
- May 2009 – May 2010, Project Assistant
CSIR – Centre for Mathematical Modeling and Computer Simulation, (C-MMACS), Bangalore, India
I worked in Solid Earth Modeling Program, which includes Earth modeling and Crustal Deformation Studies, GPS Systems was to develop a model to calculate Total Electron Content (TEC) of Ionosphere based on GPS signal dispersion using C programming.
- Jun 2008 – Dec 2008, Project Assistant
Civil Engineering Department, Indian Institute of Science, India
My internship in Dr Sivapullaiah's lab in the geo-environmental engineering division at the Department of Civil Engineering dealt with proposal drafting, literature survey, making presentations, report writing, proofreading, and correction of theses and reports, among other responsibilities.

Awards

- ACS ENVR Division Graduate Student Award, 2015-2016
- 2015-2016 AEESP Student Video Competition, 1st Place
- 3-Minute Thesis Competition, 2016 UMBC Graduate Research Conference, 1st Place

Publications

- Snowberger, S., Adejumo, H., He, K., **Mangalgiri, K. P.**, Hopanna, M., Soares, A. D., & **Blaney, L.** (2016). Direct Photolysis of Fluoroquinolone Antibiotics at 253.7 nm: Specific Reaction Kinetics and Formation of Equally Potent Fluoroquinolone Antibiotics. *Environmental Science & Technology* 50(17), 9533-9542.
- Adak, A.; **Mangalgiri, K.**; Lee, J.; **Blaney, L.** (2015). UV irradiation and UV-H₂O₂ advanced oxidation of the roxarsone and nitarsone organoarsenicals. *Water Research* 70(3), 74-85.
- **Mangalgiri, K.P.**; He, K.; **Blaney, L.** (2015). Emerging contaminants: A potential human health concern for sensitive populations. *PDA Journal of Pharmaceutical Science and Technology* 69(2), 1-4.
- **Mangalgiri, K.**; Adak, A.; **Blaney, L.** (2015). Organoarsenicals in poultry litter: Detection, fate, and toxicity. *Environment International*, 75(2), 68-80.

Kiranmayi Mangalgiri

Ph.D. Candidate

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Select Presentations

- Mangalgiri, K.P.; Blaney, L. Photolytic fate of poultry antibiotics in agricultural wastewater. 252nd American Chemical Society Annual Meeting (Philadelphia, PA), Poster Presentation, August 26, 2014.
- Mangalgiri, K.P.; Adejumo, H.A.; Ocasio, D.; He, K.; Blaney, L. Transformation of fluoroquinolone, tetracycline, and sulfonamide antibiotics at 253.7 nm: Generation of antimicrobially active transformation products. 251st American Chemical Society Annual Meeting (San Diego, CA), March 14, 2016.
- Mangalgiri K.P.; Ocasio, D.; Adak, A.; Blaney, L. Role of dissolved organic matter on UV transformation of antibiotics in agriculture-impacted water supplies. International Water Association Natural Organic Matter 6 Conference (Malmo Sweden), September 10, 2015
- Mangalgiri K.P.; Rogers, N; Dawkins, K.; Ocasio, D.; Blaney, L. Characterizing effects of advanced oxidation on dissolved organic matter in agriculturally-impacted surface water using PARAFAC. International Water Association Natural Organic Matter 6 Conference (Malmo Sweden), Poster Presentation, September 7-10, 2015
- Adak, A.; Mangalgiri, K.P.; Lee, J.; Blaney, L. Transformation of organoarsenicals in water using the UV and UV-H₂O₂ systems. 250th American Chemical Society Annual Meeting (Boston, MA), August 18, 2015.
- Mangalgiri, K., Lee, J., & Blaney, L. (2014, March). Photolysis of organoarsenicals in agricultural waste. 247th American Chemical Society Annual Meeting (Dallas, TX), March 17, 2014.

Departmental/University Service

- President, BioChEGS (Graduate Student Organization), 2015-2016
- President, BioChEGS (Graduate Student Organization), 2014-2015
- Secretary, BioChEGS (Graduate Student Organization), 2013-2014
- Member, Engineers Without Borders-UMBC Chapter, 2012-2013

Teaching Skills

- Teaching Assistant, Fall 2016, Chemical Engineering Lab
- Guest Lecturer, Fall 2016, Environmental Chemistry and Biology

Courses at Graduate Studies

Environmental Engineering Processes I, Environmental Engineering Processes II, Environmental Engineering Processes III, Environmental Soil Science, Engineering Analysis of Treatment Systems, Environmental Management, Ecotoxicology, Environmental Remediation, Groundwater Hydrology, Environmental Biological Processes

Laboratory Skills

High Performance Liquid Chromatography (HPLC), Electrospray Ionization Tandem Mass Spectrometry (ESI-MS/MS), Inductively Coupled Plasma Mass Spectrometry (ICP-MS), UV/VIS Spectrophotometry, Fluorescence Excitation-Emission Matrices (EEM), Solid Phase Extraction (SPE)

Computer Skills

Matlab (PARAFAC toolbox), C, ArcGIS, AutoCAD, Microsoft Office, Unix Shell Scripting

Mentorship

Temitope Ibitoye (BS, Chemical Engineering), Daniel Ocasio (BS, Chemical Engineering), Savannah Steinly (BS, Chemical Engineering), Kendall Dawkins (BS, Chemical Engineering), Graham Rubin (HS intern), Adam Antoszewski (HS intern), Jessica Lee (BS, Chemical Engineering)

References

Dr. Lee Blaney
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University of Maryland Baltimore County,
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Dr. Michael Gonsior
Chesapeake Biological Laboratory, University of
Maryland Centre for Environmental Science
Email: gonsior@umces.edu