Mandar Bokare

Email: <u>mandarb1@umbc.edu</u>

Education

University of Maryland Baltimore County 2016 - Present PhD student in Environmental Engineering • **Research Area:** Using passive sampling techniques to link fate and transport of PCBs, PAHs and pesticides urban watersheds to their bioaccumulation in aquatic organisms • Advisor: Dr. Upal Ghosh • **GPA:** 4.0 2011 - 2012 University of Manchester MSc Environment and Sustainable Technology • Graduated with Merit standing • Master's dissertation: "Evaluation of pyrochemical reprocessing technology for reprocessing of Generation IV spent nuclear fuel". > National Institute of Technology, Nagpur (India) 2006 - 2010Bachelor of Technology (BTech) in Chemical Engineering • Grade point average: 8.4 / 10

Work History

- University of Maryland Baltimore County Graduate Research Assistant
 - Current research projects
 - Applying passive sampling techniques in air, water and sediment matrices to understand fate and transport of contaminants such as PCBs, PAHs and pesticides in the Anacostia River in Washington DC
 - Conducting PCB monitoring study in Back River in collaboration with Maryland Department of Environment and Baltimore County
 - Working on inter-laboratory study on standardization of passive sampling techniques for measuring freely dissolved concentrations of organic contaminants in sediment porewater
 - Responsibilities
 - Training and mentoring undergraduate research assistants
 - $\circ~$ Operation and maintenance of analytical instruments such as GC-MS, GC-ECD and carbon analyzers

University of Maryland Baltimore County Teaching Assistant, Department of Chemical, Biochemical, and Environmental Engineering

- Responsibilities
 - Guiding undergraduate students in chemical engineering laboratory experiments

2016 - Present

- Maintenance of experimental setups
- National Environmental Engineering Research Institute (NEERI, India) 2013 2016 Project Research Assistant (Level – III)
 - **Research areas:** Materials for carbon dioxide capture, constructed wetland system for treatment of municipal sewage, development of air pollution emissions inventories, Environmental auditing

Publications and conference presentations

> Research publications

• Chand, P., Bokare, M. and Pakade, Y.B. **(2017).** *Methyl acrylate modified apple pomace as promising adsorbent for the removal of divalent metal ion from industrial wastewater.* Environ Sci Pollution Res 24:10454-10465

> Conference presentations

- **Bokare, Mandar;** Lombard, Nathalie; Magee, Samuel; Wilson, Timothy; Ghosh, Upal. *Application of passive sampling for quantification of sources and sinks of PCBs and OCPs in the Anacostia River.* Poster, SETAC North America 39th Annual Meeting, Sacramento, CA. Nov 2018
- **Bokare, Mandar;** Lombard, Nathalie; Magee, Samuel; Ghosh, Upal. *Quantification of the transport of PCBs and OCPs in the Anacostia River*. Poster, Gordon Research Conference (GRC): Environmental Sciences (Water), Holderness, NH. June 2018.
- **Bokare, Mandar;** Lombard, Nathalie; Magee, Samuel; Ghosh, Upal. *Quantification of the transport of PCBs and OCPs in the Anacostia River*. Poster, Gordon Research Seminar (GRS): Environmental Sciences (Water), Holderness, NH. June 2018.
- **Bokare, Mandar;** Lombard, Nathalie; Magee, Samuel; Ghosh, Upal. *Quantification of waterair transfer rates for PCBs and OCPs in the Anacostia River using a passive sampling approach.* Platform Presentation at the SETAC Chesapeake Potomac Regional Chapter Annual Spring Meeting, Fredericksburg, VA. April 2018

Honors and Awards

- Honorable Mention, 2019 Student E-Poster Competition, American Association for Advancement of Science (AAAS), Environment and Ecology category
- 1st place in Geosyntec 2019 Sediments Student Paper Competition.
- 2nd place, Best Student Platform Presentation, SETAC Chesapeake Potomac Regional Chapter Annual Spring Meeting, Fredericksburg, VA. April 2018
- UMBC CUERE Department Award, 2017
- UMBC Chemical Engineering Department Award, 2016

Professional Organizations

• Society of Environmental Toxicology and Chemistry (Chesapeake Potomac Regional Chapter). 2018-Present