

Mumtahina Riza

Graduate Research Assistant

Department of Applied Ecology

North Carolina State University; Raleigh, NC 27695, USA

Email: mriza@ncsu.edu; rizam@knights.ucf.edu Website: <http://www.rizabd.com/>

EDUCATION

University of Central Florida, Orlando, FL **Fall 2023 – Spring 2027**

PhD in Integrative and Conservation Biology, (To be started)

Received Board of Trustees Fellowship for Four Years

Major Advisor: Dr. Lisa G Chambers

Thesis (Tentative): Long-Range Improvement to Food, Agriculture, and Sustainability

North Carolina State University, Raleigh, USA

Fall 2021- Summer 2023

MS in Biology, Anticipated graduation in Summer 2023

CGPA: **3.812** (Up to Spring 2023)

Thesis (ongoing): Risk screening of phosphorus (P) capturing materials for eutrophication mitigation: Environmental impacts and sustainability

Major Advisor: Khara D. Grieger, PhD

Bangladesh University of Professionals (BUP), Bangladesh

March 2021

MSc in Environmental Science and Management

CGPA: **3.86/4.00**

Position: 1st out of 40 students

Thesis: Phytoremediation of heavy metal contaminated soil located around textile industries

Supervisor: Dr. Sirajul Hoque

Bangladesh University of Textiles, Bangladesh

June 2014

BSc in Textile Engineering,

CGPA: **3.77/4.00**

Position: 1st out of 42 students

Prime Minister Gold Medal Awardee

PUBLICATIONS ([Google Scholar](#))

Ehsan, M. N., **Riza, M.**, M., Pervez, Md. N., Khyum, M. M. O., Liang, Y., & Naddeo, V. (2023). Environmental and health impacts of PFAS: Sources, distribution and sustainable management in North Carolina (USA). *Science of The Total Environment*, 878, 163123. <https://doi.org/10.1016/j.scitotenv.2023.163123>

Riza, M., Ehsan, M. N., Pervez, M. N., Khyum, M. M. O., Cai, Y., & Naddeo, V. (2023). Control of eutrophication in aquatic ecosystems by sustainable dredging: Effectiveness, environmental impacts, and implications. *Case Studies in Chemical and Environmental Engineering*, 7, 100297, [doi:10.1016/j.cscee.2023.100297](https://doi.org/10.1016/j.cscee.2023.100297)

Pervez, M. N., Yeo, W. S., Shafiq, F., Jilani, M. M., Sarwar, Z., **Riza, M.**, Lin, L., Xiong, X., Naddeo, V., & Cai, Y. (2023). Sustainable fashion: Design of the experiment assisted machine learning for the environmental-friendly resin finishing of cotton fabric. *Heliyon*, 9(1), e12883. <https://doi.org/10.1016/j.heliyon.2023.e12883>

Riza, M., & Hoque, S. (2021). Phytoremediation of Copper and Zinc Contaminated Soil around Textile Industries using *Bryophyllum pinnatum* Plant. *Journal of Ecological Engineering*, 22(4), 88–97.

<https://doi.org/10.12911/22998993/134035>

Riza, M., Ehsan, M. N., & Hoque, S. (2021). Portrayal of Textile Based Pollutants and its Impact on Soil, Plants and Fisheries. *Nature Environment and Pollution Technology*, 20(3). <https://doi.org/10.46488/NEPT.2021.v20i03.038>

RESEARCH & PROFESSIONAL APPOINTMENT

- **Fall 2023 – Spring 2027**, Trustees Doctoral Fellow, Department of Biology, University of Central Florida
- **Fall 2021- Present**, [Graduate Research Assistant](#), Science and Technologies for Phosphorus Sustainability ([STEPS](#)), Department of Applied Ecology, North Carolina State University
- **2015 – 2021**, **Lecturer**, Department of Textile Engineering, Southeast University, Dhaka, Bangladesh

AWARD AND HONORS

- August 2023 – May 2027 – **Awarded for four-year Board of Trustees Fellowship** from University of Central, Orlando, Florida, Annual \$25000 + Annual \$7200 summer work, Total \$32200/year + Tuition and Health Insurance benefit.
- September 2022- Winner of “[SRA Advanced Materials and Technologies Specialty Group \(AMTSG\) Student Merit](#)” Award. \$750
- August 2021- August 2023, Graduate Research Assistantship, Annual \$28,600 + Tuition and Health insurance, Department of Applied Ecology, NCSU
- 2021 Fall & 2022 Spring, American Rescue Plan (ARP) Emergency Fund, Office of Scholarships and Financial Aid, NCSU. \$750 + \$750
- 2017, **Prime Minister Gold Medal Award 2014** for holding **1st position** in the Faculty of Textile Engineering, Bangladesh University of Textiles, University Grants Commission, Bangladesh
- 2010 - 2013, Student Merit Based Academic Scholarship, Bangladesh University of Textiles
- 2006, Exim Bank Merit-Based Scholarship, Exim Bank Ltd. Bangladesh
- 2006, Prothom Alo Meritorious Student Award, Prothom Alo Daily Newspaper

CONFERENCE PRESENTATION

Riza, M., December 2022. Risk screening of phosphorus (P) capturing materials for eutrophication control: Environmental impacts and sustainable management. SRA Annual Meeting, Tampa, Florida. *Oral*

Riza, M., Grieger, K., November 2022. Phosphorus-capturing materials for eutrophication control: Environmental risk, impacts, and implications for sustainable management, Phosphorus Week 2022, Raleigh, NC. *Poster*

Riza, M., October 2021. Phytoremediation of Copper and Zinc Contaminated Soil around Textile Industries using *Bryophyllum pinnatum* Plant. Research Triangle Regional Organization, Society for Risk Analysis. *Online Poster*

TECHNICAL REPORT

Grieger, K., **Riza, M.**, Horgan, M., Merck, A. (2022). Society for Risk Analysis Strategic Initiative Funding: Final Report. Prepared for the Society for Risk Analysis, grant no. 2020-1006, SRA internal account code 879-265

PROFESSIONAL DEVELOPMENT & OUTREACH ACTIVITIES

2021, Present, **Treasurer**, Society of Risk Analysis- Research Triangle- Regional Organization, NC

2022, **Student lead of Session 1**: Feast or Famine: P Sustainability in Agriculture, Phosphorus Week 2022, Sustainable Phosphorus Summit, Raleigh, NC

2022- Present, **Seminar Coordinator**, Graduate Student Association of Biology, NCSU

2022- Present, **Patron Representative**, Feed the Pack, NC State University, 2022-2023 Board

2022, NC State Feed the Pack's Panel Discussion with Multicultural Student Affairs

Skills

- MS Office, R, Spreadsheet, Tableau, ArcGIS Pro
- Atomic Absorption Spectrophotometer (Varian AAS)
- Color Measurement Spectrophotometer (Datacolor)

CERTIFICATION & TRAINING

Collaborative Institutional Training Initiative (CITI program)
NCSU Office of Information Technology (OIT) Data Security
Gallup Clifton Strength Assessment
NCSU Office for Institutional Equity and Diversity (OIED) Diversity, Equity, and Inclusion
How to Structure Results and Discussion Sections
How to Synthesize Literature Reviews, DISC Style Personality Assessment

MEMBERSHIP

2021-2023, Student Member, Society for Risk Analysis
2022, Member, Student Leadership Council, Science and Technologies for Phosphorus Sustainability (STEPS)

REFERENCES

Khara Grieger, PhD

Assistant Professor & Extension
Specialist in Environmental Health and
Risk Assessment, Department of
Applied Ecology, NCSU
Email: kdgriege@ncsu.edu

Dr. JoAnn Burkholder

William Neal Reynolds Distinguished
Professor and Director – [Center for
Applied Aquatic Ecology](#)
Email: jburk@ncsu.edu

Dr. Tamara Pandolfo

Teaching Assistant Professor
College of Natural Resources
NCSU
Email: tjpandol@ncsu.edu