

ARIF REZA

Environment Ecology lab, Room no. 311,
Center for Lake Management Research,
Department of Environmental Science, Kangwon National University,
Chuncheon-si, Gangwon-do, 24341, South Korea
Cell: +82-10-7217-1176
E-mail: bd.rezaarif@gmail.com; arif@kangwon.ac.kr
Born and citizenship: 7 November, 1986; Bangladeshi

Research Interest

Nutrient dynamics, soil erosion and sedimentation process, best management practices, impacts of land use and climate change on water resources, and management of inland water systems.

Professional Summary

- ✚ Highly motivated and technically sound Researcher with 5+ years of laboratory experience in limnology and excellent academic achievements.
- ✚ Extensive experience in the fields of water quality monitoring, non-point source pollution, sediment dynamics, biogeochemistry, freshwater ecosystem, and watershed hydrology.
- ✚ Substantial experience in conducting initial research, data management, writing research papers and reports.
- ✚ Experienced in participating research projects with cross-functional scientific and research teams.

Education

- 📖 Kangwon National University, South Korea
PhD in Environmental Science **2016**
Dissertation title: Non-point source pollutant export and phosphorus budget in a highland agricultural watershed under the influence of monsoon climate
- 📖 Independent University, Bangladesh
MSc in Environmental Management **2011**
Dissertation title: Application of bioadsorbents for the wastewater treatment of a composite knit industry
CGPA: 3.60 out of 4
- 📖 Hajee Mohammad Danesh Science & Technology University, Dinajpur, Bangladesh
BSc in Agriculture **2008**
Dissertation title: Effect of nitrogen on the yield and yield contributing characters of two local aromatic varieties of rice
CGPA: 3.33 out of 4

Positions Held

Department of Environmental Science, Kangwon National University, South Korea
Researcher **September, 2016 - till now**

- Lead and conduct limnological-pedological-sedimentological sampling. Data analysis and writing project proposals, research papers and reports. Advice and mentor undergraduate students.

Department of Environmental Science, Kangwon National University, South Korea
Research Assistant **March, 2012 - August, 2016**

- Conduct limnological-pedological-sedimentological sampling. Maintain and deploy water quality sensors (Hydrolab DS 5X, DS 5, MS 5, Mini Sonde, Mini Sonde 4a, Quanta). Manage and analysis of collected samples. Data analysis and writing research papers and reports.

Bohubrihy, Bangladesh

Monitoring and Evaluation officer

July, 2011 – December, 2011

- Monitor the ongoing projects and prepare reports. Maintain close liaison with other stakeholders (line agencies, development partners, NGOs etc.). Organize various events (workshop, seminar, training course, meeting etc.) and prepare minutes of meetings.

Urban Agro Consultancy Firm, Bangladesh

Research Assistant

April, 2009 – May, 2011

- Prepare technical/project proposals for the organization. Develop new technologies to face the problems related to urban agriculture, climate change and environment. Analyze collected data and information.

Research Projects (participated and ongoing)

- Survey on ecological status of Han River (April, 2016 – till now)
- Monitoring and evaluation of non-point source pollution from a forested watershed. (May, 2015 – till now)
- Effects of alum treatment on water quality in Gamdon reservoir (June, 2015- December, 2015)
- Advanced in-situ monitoring of urban streams (March 2014- till now)
- Survey on ecosystem structure of lakes in the upper region of the North Han River system (Korea) (May, 2012 – Till now)
- Monitoring and evaluation of non-point source priority management region: The watershed of Lake Soyang (Korea) (May, 2012 – December, 2014)
- Assessment of distribution and potential pollution risk of phosphorus in the lake sediments (Korea) (June, 2013 – December, 2013)
- Developing tools for assessing lake ecosystem integrity (Korea) (May, 2012- May, 2014)
- Participatory agro-product diversification project (Bangladesh) (July, 2011 – December, 2011)
- Cleaner and greener city: Dhaka (Bangladesh) (March, 2010 – March, 2011)

Publications

Journal Articles

1. **Reza, A.**, Eum, J., Jung, S., Choi, Y., Owen, J. S., and Kim, B. (2016). Export of non-point source suspended sediment, nitrogen and phosphorus from sloping highland agricultural fields in monsoon region. *Environmental Monitoring and Assessment*. (Article in press). (DOI 10.1007/s10661-016-5681-9)
2. Jung, S., Kim, K., Lee, Y., Lee, J., Cheong, Y., **Reza, A.**, Kim, J., Owen, J. S., and Kim, B. (2016). The effect of phosphorus removal from sewage on the plankton community in a hypertrophic reservoir. *Journal of Ecology and Environment*. 40(9). (DOI 10.1186/s41610-016-0005-0)
3. **Reza, A.**, Sheikh, F. A., Zargar, M. A., and Abedin, M. Z. (2016). Facile and efficient strategy for removal of reactive industrial dye by using tea waste. *Advanced Materials Letters*. 7(11), 878-885. (DOI 10.5185/amlett.2016.6363)
4. **Reza, A.**, and Yousuf, T. B. (2016). Impacts of waste dumping on surface water quality in the Buriganga River, Bangladesh and possible mitigation measures. *Journal of the Environment*, 11(1), 35-40.
5. **Reza, A.**, Rafique, M., Ahmad, N., Naeem, A., Saadat, S., and Shahnawaz, M. (2016). Determination of trace elements in tap water using PIXE technique. *Journal of Chemical*

and Pharmaceutical Sciences, 9(1), 34-38.

6. **Reza**, A., Sheikh, F. A., Abedin, M. Z., and Kim, H. (2015). Facile strategy for utilizing sugarcane bagasse as bio-adsorbent for the removal of contaminant form effluents of textile industry. *Energy and Environment Focus*, 4(1), 28-33. (DOI 10.1166/eef.2015.1135)
7. **Reza**, A., and Abedin, M. Z. (2011). Application of bioadsorbents for the wastewater treatment of a composite knit industry. *Journal of the Environment*, 8(1), 19-26.

Manuscripts under preparation

1. **Reza**, A., Eum, J., Owen, J., and Kim, B. Phosphorus budget in an intensive agriculture watershed under monsoon climate. (For submission to Biogeochemistry in December, 2016)
2. Sakib, H.M., Ansary, W. R. M., **Reza**, A., and Owen, J. A socio economic study on adaptation of alien fish species in Bangladesh.
3. **Reza**, A., and Kim, B. A review on the export of phosphorus from highland agricultural watersheds: origin and fate

Conference proceedings

1. **Reza**, A., Eum, J., Jung, S., Choi, Y., and Kim, B. (2015). Non-point source pollutants export from a sloping highland agricultural watershed in upper reaches of Lake Soyang, Korea. In proceedings of 13th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Tottori, Japan. Nov. 11-13, 2015.
2. **Reza**, A., Eum, J., Jung, S., Choi, Y., and Kim, B. (2015). Nutrient budgets of a mixed land use watershed under monsoon climate impacted by intensive agriculture. In proceedings of 12th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Chuncheon, South Korea. Jan. 6-8, 2015.
3. **Reza**, A., Choi, Y., Jung, S., and Kim, B. (2013). Assessment of sediment phosphorus release from Lake Uiam, Korea. In proceedings of 11th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Tottori, Japan. Nov. 13-15, 2013.
4. **Reza**, A., and Yousuf, T. B. (2012). Environmental impact assessment of dumping of Buriganga River waste and its possible mitigation. In proceedings of 10th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Chuncheon, South Korea. Oct. 22-23, 2012.
5. Yousuf, T. B. and **Reza**, A. (2013). 3R Action Plan: A targeted waste management solution for Bangladesh. 3rd International Conference on Solid Waste Management in the Developing Countries. Khulna, Bangladesh. Feb. 10-12, 2013. (Paper Id. 122)
6. **Reza**, A., Yousuf, T. B., Abedin, M. Z. (2013). Bagasse as an adsorbent for the wastewater treatment of a composite knit industry. 3rd International Conference on Solid Waste Management in the Developing Countries. Khulna, Bangladesh. Feb. 10-12, 2013. (Paper Id. 126)
7. Yousuf, T. B. and **Reza**, A. (2011). E-Waste management in Bangladesh: present trend and future implication. In proceedings of World Congress of International Solid Waste Association (ISWA). EXCO Daegu, South Korea. Oct. 17-20, 2011.

Posters

1. Kim, B., Jung, S., Shin, M., Eum, J., Choi, Y., **Reza**, A., and Lee, J. (2016). The effects of Asian summer monsoons on algal blooms in reservoirs. GLEON 18 All-Hands & NETLAKE Meetings, Lunz & Gaming, Austria. July 4-8, 2016.

2. Kim, D., Cha, S., **Reza**, A., and Kim, B. (2016). Responses of aquatic ecosystems in urban streams to weather condition (In-situ Monitoring). GLEON 18 All-Hands & NETLAKE Meetings, Lunz & Gaming, Austria. July 4-8, 2016.
3. **Reza**, A., Eum, J., Jung, S., Choi, Y., and Kim, B. (2015). Monitoring of water quality variation in an upstream mixed land use watershed under monsoon climate. Annual Conference on Environmental Research organized by Environment Research Institute, Kangwon National University. Chuncheon, South Korea. Dec. 9, 2015.
4. Cha, S., Kwon, S., Eum, J., **Reza**, A., and Kim, B. (2015). Influence of monsoon climate on water quality variation in a forested-agricultural watershed. 13th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Tottori, Japan. Nov. 11-13, 2015.
5. **Reza**, A., Eum, J., Jung, S., Choi, Y., and Kim, B. (2014). Phosphorus budget of a mixed land use watershed under monsoon climate impacted by intensive agriculture. Annual Conference on Environmental Research organized by Environment Research Institute, Kangwon National University. Chuncheon, South Korea. Dec. 12, 2014.

Research Presentations

1. The Annual Conference on Environmental Research, Kangwon National University, Chuncheon, South Korea. . Dec. 9, 2015.
2. The 13th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Tottori, Japan. Nov. 11-13, 2015.
3. The 12th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Chuncheon, South Korea. Jan. 6-8, 2015.
4. The Annual Conference on Environmental Research, Kangwon National University. Chuncheon, South Korea. Dec. 12, 2014.
5. The 11th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Tottori, Japan. Nov. 13-15, 2013.
6. The 10th Joint Symposium of Kangwon National University and Tottori University on Environmental Issues. Chuncheon, South Korea. Oct. 22-23, 2012.
7. The workshop on Integrated Sustainable Solid Waste Management in Asia (ISSOWAMA), Dhaka, Bangladesh.

Teaching experience

Department of Environmental Science, Kangwon National University, South Korea.

Teaching Assistant

331088-1: Water quality analysis and experiments

- | | |
|----------------|----------------|
| • Spring, 2012 | • Spring, 2013 |
| • Spring, 2014 | • Fall, 2015 |
| • Spring, 2016 | |

Skills and qualification

Language

English (*fluent*), Bengali (*native*), Korean (*intermediate*)

Computer

Microsoft office, Endnote and Mendeley bibliography database software, Sigma plot 10.0, SAS, R.

Other skills

Presentation and discussion, limnological-pedological-sedimentological analysis methods.

Awards / Scholarships

- Bring Excellent Students to Kangwon National University (BEST-KNU) scholarship for PhD (\$ 30,000), 2012-2014
- Water Aid Bangladesh Training Fellowship on 'Urban Rainwater Harvesting' (\$500), 2010

Memberships

- Global Lake Ecological Observatory Network (GLEON)
- International Society of Limnology (SIL)
- Resource Available in Nature (RAiN) Forum

References

1. Bomchul Kim, PhD
Professor
Department of Environmental Science,
Kangwon National University,
Chuncheon-si, Gangwon-do,
24341, South Korea.
E-mail: bkim@kangwon.ac.kr
Tel.: +82-33-250-8572
Cell: +82-10-9238-8572
2. Jeffrey Scott Owen, PhD
Assistant Professor
Department of Environmental Science,
Hankuk University of Foreign Studies,
Yongin-si, Gyeonggi-do,
17035, South Korea.
E-mail: owenjef2002@gmail.com
Cell: +82-10-7577-1849
3. Md. Jahidul Islam, PhD
Professor
Department of Agricultural Chemistry
Hajee Mohammad Danesh Science and Technology University (HSTU)
Dinajpur-5200,
Bangladesh.
E-mail: jahid@mail2world.com
Cell: +88-01738-553028