CURRICULUM VITAE

DR. ZAKIA PARVEEN

Professor, Department of Soil, Water and Environment, University of Dhaka.
Provost, Bangamata Sheikh Fazilatunnesa Mujib Hall, University of Dhaka.
Member, Dhaka University Teachers' Association, University of Dhaka.
Present Address: House- 6/4, Block- B, Lalmatia, Dhaka- 1207, Bangladesh.
Permanent Address: Vill.- Khudrokati, PO.- Koloshkati, Bakergonj, Barisal.
Contact no: 01764055613, 88-02-9661920-73 Ext. 7494, 4520, 5520.
Email address: zakiaparveen1@yahoo.ca, zakiaparveen56@du.ac.bd

Professional Experience

- 1. **Professor**, Department of Soil, Water and Environment, University of Dhaka, Bangladesh, 2005 to till date.
- 2. **Provost**, Bangamata Sheikh Fazilatunnesa Mujib Hall, Dhaka University, from April 2016 to till date.
- 3. Member, Dhaka University Teachers' Association-2020, University of Dhaka.
- 4. **Associate Professor**, Department of Soil, Water and Environment, University of Dhaka, Bangladesh, 1997-2004.
- 5. Assistant Professor, Department of Soil Science, University of Dhaka. Teaching and Research, 1993-1997.
- 6. Lecturer, Department of Soil Science, University of Dhaka Teaching and Research, 1987-1993.
- 7. **Member**, Research Coordination Committee (RCC), Air Quality Research and Monitoring Laboratory, Center for Advanced Research in Sciences (CARS), University of Dhaka, Dhaka- 1000.
- 8. **Member**, Research Coordination Committee (RCC), Basic Facilities and Sample Preparation Laboratory. Center for Advanced Research in Sciences (CARS), University of Dhaka, Dhaka- 1000.
- 9. **Member**, Research Coordination Committee (RCC), Environmental and Analytical Chemistry Laboratory, Center for Advanced Research in Sciences (CARS), University of Dhaka, Dhaka-1000.
- 10. Women Affairs Secretary, Barisal Bibhag kalyan Sangstha (BBKS).
- 11. **Member** (selected by the honorable Vice-chancellor), Governing Body, Kumudini Womens' Medical College, Mirzapur, Bangladesh.
- 12. **Member,** Teachers selection Board, Zainul Hoque Sikder Womens' Medical College, Dhaka- 1209, Bangladesh.
- 13. **Principal investigator,** Threat of Cd in Bangladesh's Agricultural System, 2017-18, Funded by Bangladesh Bureau of Educational Information and Statistics (BANBEIS), Ministry of Education, GoB.
- 14. **Principal investigator,** Air Quality Monitoring and Environmental Pollution in Brickmaking Operations, 2017-18. Funded by Ministry of Science and Technology, GoB.
- 15. **Principal investigator**, Environmental pollution from brick making operations and their effects on workers, 2013-14. Funded by Ministry of Science and Technology, GoB.

- Sub-project manager, Establishment of air quality research and monitoring centre, 2011-13. Funded by World Bank and Bangladesh Government in collaboration with Wuppertal University, Germany.
- 17. **Principal investigator**, Status of heavy metals in the water and sediments of the Balu River and their subsequent transfer to crops, Funded by Ministry of Science and Technology, GoB, 2011-12.
- 18. **Principal investigator,** Effect of different levels of sewage sludge and nitrogen on the composition and yield of maize funded by University of Dhaka, 1996-1997.
- 19. **Postdoctoral Research Fellow**, Environmental Science, Environment Department, University of York, U.K., 2000.
- 20. Associate Editor, Barisal University Journal.
- 21. Assistant House Tutor, Shamsun Nahar Hall, University of Dhaka from 1990-1998.
- 22. Scientific Officer, Bangladesh Agricultural Research Institute (BARI), The Govt. of People's Republic of Bangladesh. From 1983 to 1987.

Academic Qualifications

- 1. **Doctor of Philosophy (PhD)** with specialization in soil environmental pollution, Department of Soil and Plant Science, University of Aberdeen, U.K, 1993.
- 2. Postgraduate Diploma in Soil Science, Agricultural University of As, Norway, 1983.
- 3. Master of Science (Thesis) in Soil Science, University of Dhaka, Bangladesh, 1981.
- 4. Bachelor of Science (Hons.) in Soil Science, University of Dhaka, Bangladesh, 1979.

<u>Skills</u>

- Teaching and Research in Soil, Water and Environment Department.
- Research and Teaching experience of Environmental Pollution, Environmental Quality and Environmental Law, Environmental Chemistry, Soil Fertility and Plant Nutrition, and Soil Colloidal Chemistry.
- Analysis of soil, water, plant tissues, nitrogen and acid deposition upon natural ecosystem in UK.
- Research experience on characterization of slow pyrolyzed Biochars and their consequences after application to soils in terms of nutrient availability, GHG emission and plant growth for agricultural adaptation to changing climate.
- Research experience on heavy metal concentration of sewage sludge, solid waste regarding pollution impact in soil/plant system using radioisotopes and environmental impact analysis of landfill sites.
- Experienced in statistical analysis (Excel, Genestate, SPSS, Freelance Graphic), interpretation of large data sets, writing reports and scientific publication for international journals using different computer program.
- The incumbent is well conversant with EIA guidelines of ADB, World Bank, JICA, FPCO and DoE rules, regulations and guidelines. The incumbent also has extensive experience in Teaching and Research in Soil, Water and Environment Department.

Membership in Professional Societies

- 1. Soil Science Society of Bangladesh.
- 2. The Bangladesh Association for the Advancement of Science.
- 3. Soil, Water and Environment Department, University of Dhaka Trust (SWED-DU TRUST).
- 4. Soil Science Ex-Student's Association (EDAPHOS), University of Dhaka.

Awards Received:

- 1999 Common wealth Fellowship Award for Postdoctoral Research in U.K.
- 1990 Common wealth Scholarship Award for Ph.D. Programme in U.K.
- 1982 NORAD Scholarship Award for Post graduate Course in Norway
- 1977 Dhaka University Scholarship for M. Sc. Results
- 1976 Dhaka University Scholarship for B.Sc. Results
- 1974 Jessore Board Scholarship for Higher Secondary Certificate results
- 1973 Jessore Board Scholarship for Secondary School Certificate results
- 1968 First Grade Scholarship, Year Eight, Jessore Division
- 1966 First Grade Scholarship, Year Five, Barisal

List of Publications

Md. Faruque Hossain, ASM Maksud Kamal, Abdul Halim Farhad Sikder and **Zakia Parveen**. 2019. Air Quality Measurement at the Solid Waste Disposal of Matuail Landfill Site at Dhaka, Bangladesh. *American Journal of Environmental Sciences*. **15**(5): 167-179.

Md. Mamun Howladar, Md. Jamal Uddin, Md. Mahmudul Islam, Md. Faruque Hossain, **Zakia Parveen** and Md. Khalilur Rahman. 2019. Interactive effects of arsenic and phosphorus on dry matter yield and concentration of nutrients in rice (*Oryza Sativa* L.). *Journal of Biodiversity Conservation and Bioresource Management*, **5**(1): 31-38.

Mahmudul Islam Piash, Md. Faruque Hossain and **Zakia Parveen**. 2019. Effect of Biochar and Fertilizer Application on the Growth and Nutrient Accumulation of Rice and Vegetable in Two Contrast Soils. *Acta Scientific Agriculture*. **3**(3): 74-83.

Md. Faruque Hossain, Esrat Jahan, **Zakia Parveen** S. Mosaddeq Ahmed and Md. Jamal Uddin. 2018. Solid waste disposal and its impact on surrounding environment of Matuail landfill site, Dhaka, Bangladesh. *American Journal of Environmental Sciences*. **14(5)**: 234-245.

Monera Akter Eva, Mahmudul Islam Piash, Md. Faruque Hossain and **Zakia Parveen**. 2018. Fractionation of Organic Carbon in Arial Beel Wetland Soils of Bangladesh. *American journal of environmental sciences*. **14(2)**: 86-94.

Mahmudul Islam Piash, Md. Faruque Hossain and **Zakia Parveen**. 2018. Effect of biochar application on soil carbon fluxes from sequential dry and wet cultivation systems. *American Journal of Climate Change*. **7**(**1**): 40-53.

Mahmudul Islam Piash, Md. Faruque Hossain and **Zakia Parveen**. 2016. Physicochemical properties and Nutrient content of some slow pyrolysis Biochars produced from different feedstocks. *Bangladesh Journal of Scientific Research*. **29(2)**: 111-122.

Reshma Akter, Md. Faruque Hossain, Md. Jamal Uddin and **Zakia Parveen**, 2016. Influence of brick manufacturing on phosphorus and sulfur in different agroecological soils of Bangladesh. *Bangladesh Journal of Scientific Research*. **29(2)**: 123-131

Md. Jamal Uddin, Md. Faruque Hossain and **Zakia Parveen**. 2016. Status of Heavy Metals in Water and Sediments of Canals and Rivers around the Dhaka City of Bangladesh and their Subsequent Transfer to Crops. *Advances in Plants & Agriculture Research*. **5** (4): 00189.

Esrat Jahan, Ashrafun Nessa, Md. Faruque Hossain and **Zakia Parveen**, 2016. Characteristics of municipal landfill leachate and its impact on surrounding agricultural land. *Bangladesh Journal of Scientific Research*. **29**(**1**): 31-39.

Abdul Halim Farhad Sikder, Kalpana Begum, **Zakia Parveen** and Md. Faruque Hossain, 2016. Assessment of macro and micro nutrients around brick kilns agricultural environment. *Information Processing in Agriculture*. **3**: 61-68.

Kalpana Begum, Md. Faruque Hossain and **Zakia Parveen**, 2016. Fractionation of Fe and Mn in a catena of Madhupur soils of Bangladesh. *Journal of Agricultural and Environmental Sciences*. **3**(1) (Accepted).

Kalpana Begum, Md. Faruque Hossain and **Zakia Parveen**, 2016. Distribution of zinc fractions in relation to properties of some soils of Bangladesh. *The Dhaka University Journal of Biological Sciences*. **25**(1): 19-25.

Abdul Halim Farhad Sikder, Md. Faruque Hossain, Sayma Khanom and **Zakia Parveen**, 2016. Accumulation of Zn, Cu, Fe, Mn, and Pb due to brick manufacturing in agricultural soils and plants. *The Dhaka University Journal of Biological Science*. **25**(1): 75-81.

Kalpana Begum, Md. Faruque Hossain and **Zakia Parveen**, 2015. Speciation of native copper in some soils of Bangladesh. Bangladesh Jounrnal of Soil Science. **37**: 55-67.

Kalpana Begum, Abdul Halim Farhad Sikder, Sayma Khanom, Md. Faruque Hossain and **Zakia Parveen**, 2015. Nutrient uptake by plants from different land types of Madhupur soils. *Bangladesh Journal of Scientific Research*. **28**(2): 113-121.

Md. Jamal Uddin, Sayma Khanom, Shamim Al Mamun and **Zakia Parveen**, 2015. Effects of irrigation water on some vegetables around industrial areas of Dhaka. *Bangladesh Journal of Scientific Research*. **28**(2): 151-159.

Abdul Halim Farhad Sikder, Md. Delwar Hossain Molla, Md. Faruque Hossain and **Zakia Parveen**, 2015. Lead and Cadmium accumulation in nearby brick kiln Agri-Environmental ecosystems. *Bangladesh Journal of Scientific Research*. **28**(1): 51-59.

Uddin J. M. Mamun S. A., Nessa A., **Parveen Z.** and Imamul Huq S. M. 2014. Effects of waste water irrigation on the growth and nutrient status of Kalmi (*Ipomoea aquatic* Forssk). *The Dhaka University Journal of Biological Sciences*. **23**(1):1-8.

Ferdous M.A., Khan M.H.R., Nessa A. and **Parveen Z.,** 2013. Assessment of long term effects of basic slag in reclaiming acid sulfate soil. *Bangladesh Journal of Scientific Research* 26(1&2):1-9.

Roy S, **Parveen Z** and Imamul Huq S. M. 2012. Effect of Arsenic on the Nutrient Uptake Pattern of *Amaranthus*. *The Dhaka University Journal of Biological Sciences* 21(1): 87-96.

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Miah M.R., Joardar J.C., Chowdhury S.A., Imamul Huq S.M. and **Parveen Z. 2010.** Contribution of diverse industrial wastes to environmental degradation around Dhaka city. *The Bangladesh Journal of Scientific Research* 23(1):11-16.

Parveen Z, Rahman S and Akhter M **2007** Effect of different levels of sewage sludge and nitrogen on the composition and yield of maize. *The Dhaka University Journal of Biological Sciences* 16(1): 87-89.

Cresser MS, **Parveen Z**, Smart R, White C, Gammack S and Deacon C. 2002 Impact of (NH₄)₂SO₄ on Calluna Valgaris/Peat Microcosms and Associated Soil solution. *Chemistry and Ecology*. Vol 19.

Parveen Z, Smart R, White C, Gammack S, Deacon C and Cresser MS. 2002 Effects of Simulated H₂SO₄ deposition on calluna valgaris/peat Microcosms and Associated soil solution *Chemistry and Ecology*. Vol 17, pp 293-341.

Rouf MD. Rahman S, and **Parveen Z**, 1999 Distribution and Fraction of Zinc in some selected soil profiles in Bangladesh. *Bangladesh journal of Agriculture Research*. Vol. 24 (2).

Rouf MD, Rahman S and **Parveen Z**. 1999 Distribution and Fractionation of Copper in some selected profiles in Bangladesh. *Journal of Asiatic Society of Bangladesh Science*. Vol. 25(1): 9-17

Rouf MD, **Parveen**, **Z** and Rahman S. 1998 Distribution and Fractionation of Zinc, Copper, Iron and Management in some selected surface soils in Bangladesh. *Journal of Asiatic Society of Bangladesh Science*. Vol. 24(1): 35-45.

Rahman S, Khan ZH, **Parveen Z**, and Rahman S. 1998 Characterization of acid sulfate soil from the mangrove Flood plains Bangladesh. *Thai. J. Agric. Sci.* Vol. 31(1): 21-30

Cresser MS and **Parveen Z**. 1997 Speculation and ecotoxicity dynamic of Cd. Cu and Zn in sludge treated soils their relevance to critical loads. Workshop on Critical limits and effects and effect Based Approaches for Heavy metals and persistent organic Pollutions. Bad Harzbug, Germany. 5-7, Nov. 1997. Proceeding 1137-1138

Rahman S and **Parveen Z**. 1997 Nature and Management of Selected problem soils in Bangladesh. Proceeding of Soil Quality Management and Argo Ecosystem Health. Fkourth International Conference organized by the Korean Society of Soil Science and Fertilizer. 69-81, November 11-14, Korea.

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Rahaman S, Islam S, Hossain MS, **Parveen Z** and Mohiuddin ASM. 1993. Identifying Characteristics of potential and actual acid sulphate soil, *Bangladesh Journal of Soil Science*. 24(1 & 2): 41-49.

Mirdha MAU, Mitra M and **Parveen Z**. 1993 Rhizobium interaction in productivity and nutrient content of yard of long bean (Vignaunguiculata sesquipedalian) In: Mycorrhizas in Ecosystems. Edited by D. J. Read, D. H. Lwis, A. H. Fitter and I. J. Alexander.

Cresser MS, Edwards AC and **Parveen Z.** 1993 Soil Chemistry and Landuse. *Endeavor New Series*. Vol. 17. No.3.

Ahmad IU, **Parveen Z**, Hossain SG and Rahman S. Effect of Bone meal as a substitute or compliment to Triple Super Phosphate on the growth, yield and nutrition of wheat. *Bangladesh Journal of Scientific Research*. 9(2): 133-139; 1991.

Rahman S, Islam W and **Parveen Z**. 1990. Acid Sulphate Soil of Bangladesh, their characteristics and Landuse systems. *Bangladesh Journal of Soil Science*. 21(1): 53-60.

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Ahmed IU and **Parveen Z**. 1983. Effect of Rock Phosphate as a Substitute or complement to Triple super phosphate on the growth and yield of wheat, *Bangladesh Journal of Agriculture*. Vol. 8, No.1, 108-114.