

**Dr. Rukhsanda Aziz****Assistant Professor,**

Environmental Science Program, Centre for Interdisciplinary Research in Basic Sciences (CIRBS),  
International Islamic University, Islamabad.

**Specialization:** Environmental Toxicology

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**Education:**

**MSc. Zoology,** Lahore College for Women University, Lahore, Pakistan (2008)

**PhD in Environmental Sciences,** Zhejiang University, Hangzhou, China (2015)

Dr. Rukhsanda Aziz joined Department of Environmental Science, International Islamic University, Islamabad as Assistant Professor in August, 2015. She did her MSc from Lahore College for Women University, Lahore and completed her PhD in Environmental Science from Zhejiang University, China in 2015. She joined Environmental Science Program at CIRBS as Assistant Professor in August, 2022.

Dr. Aziz was awarded Chinese government scholarship to peruse her PhD studies in Zhejiang University China. Her research focuses on the impact of bioavailability of heavy metals on Plants and Human health. She also studied the health risk assessment of edible crops grown on contaminated soils using human cell line models. Her research articles have been published in highly reputed and scientifically recognized international journals in the field of Environmental Sciences like, Science of the Total Environment, Journal of Environmental Quality, Ecotoxicology and Environmental safety and Chemosphere. Dr. Aziz has authored 28 research articles with a cumulative impact factor of more than 80. She is serving as referee of prestigious journals like Environmental Pollution, Chemosphere and Environmental Science and Pollution Research. Dr. Aziz teaches courses in Environmental Sciences at PhD, MS and BS levels. She has supervised and successfully produced 45 BS and 36 MS students in Environmental Sciences. Four PhD students are also working under her research supervision.

**Research Interests and Focus:** Environmental Toxicology, Environmental Risk Assessment. Remediation of contaminated soil and water.

**Research Grants/ Awards/Honours:**

1. Startup Research Grant Programme (SRGP) PKR: 437250/- project titled “*Phytoavailability and bioaccessibility of Lead (Pb) in different spinach cultivars grown on Lead contaminated soils: A model for assessment of soil and food safety*” has been completed and the final report has been submitted to HEC. (PI)
2. Startup Research Grant Programme (SRGP) PKR: 1000000/- project titled “*Photocatalytic activity of Metal doped Zinc oxide/Graphene oxide nanocomposites for the degradation of environmental pollutants*” awarded by Higher Education Commission-NAHE. (Co-PI)

**Current Research Students:****MS Research Student**

<b>Student name</b>	<b>Status</b>
Rida Suleman	Research
Amna Saleem	Research
Hira Anum	Research

## PhD Research Student

Student name	Status
Zoneira Summan Amjad	Research in progress
Maria Aziz	Synopsis Preparation
Sidra Gran	Synopsis Preparation
Hafsa Ashraf	Synopsis Preparation

## Research Publications (2020-2023):

1. Ghaffar, A.; Masaaki, T.; **Aziz, R.**; Sarfraz, S. Catalytic degradation of lindane using gamma radiations: Degradation products. *Radiation Physics and Chemistry* 205 (2023) 110741. <https://doi.org/10.1016/j.radphyschem.2022.110741>. (**Impact Factor: 2.776**)
2. Khan, S.A.; Rafiq, M.T.; Shah, F.A.; **Aziz, R.**; Din, I.; Yasir, A.; Iqbal, A. Evaluating the impact of Nalla Lai contamination on drinking quality of groundwater in Rawalpindi city, Pakistan. *Water Practice & Technology* Vol 18 No 2, 367. <http://iwaponline.com/wpt/articlepdf/18/2/366/1178254/wpt0180366> (**Impact Factor: 0.784**)
3. Liu, D.; **Aziz, R.**; Shohag, M.J.I.; Lu, L.; Wang, Y.; Feng, Y.; Li, T.; Wang, M.; Tian, S.; Yang, X.; et al. Assessment of Indicators in a Human Liver Cell Line HL-7702 for Tetracycline Toxicity in Farm Soil. *Agronomy* 2022, 12, 730. <https://doi.org/10.3390/agronomy12030730>. (**Impact Factor: 3.949**)
4. Alam, T.; Jilani, G.; Chaudhry, A.N.; Ahmad, M.S.; **Aziz, R.**; Ahmad, R. Terpenes and phenolics in alcoholic extracts of pine needles exhibit biocontrol of weeds (*Melilotus albus* and *Asphodelus tenuifolius*) and insect-pest (*Plutella xylostella*). *Journal of King Saud University – Science* 34 (2022) 101913. <https://doi.org/10.1016/j.jksus.2022.101913>. (**Impact Factor: 3.829**)
5. Ghani, M.A.; Abbas, M.M.; Ali, B.; **Aziz, R.**; Qadri, R.W.K.; et al., Alleviating Role of Gibberellic Acid in Enhancing Plant Growth and Stimulating Phenolic Compounds in Carrot (*Daucus carota* L.) under Lead Stress. *Sustainability* (2021) 13, 12329. <https://doi.org/10.3390/su132112329> (**Impact Factor: 3.48**)
6. Sidra Gran, **Rukhsanda Aziz**, Muhammad Tariq Rafiq, Maryam Abbasi, Abdul Qayyum, Ashraf Y. Elnaggar, Hussein H. Elganzory, Zeinhom M. El-Bahy, Enas E. Hussein. Development of Cerium Oxide/Corn cob Nanocomposite: A Cost-Effective and Eco-Friendly Adsorbent for the Removal of Heavy Metals. *Polymers* (2021) 13, 4464. <https://doi.org/10.3390/polym13244464> (**Impact Factor: 4.329**)
7. Talat Ara, Waqar-Un Nisa, **Rukhsanda Aziz**, Muhammad Tariq Rafiq, Razaqat Ali Gill, Malik Tahir Hayat, Uzma Afridi. Health risk assessment of hexachlorocyclohexane in soil, water and plants in the agricultural area of Potohar region, Punjab, Pakistan. *Environ Geochem Health* (2021) 43:3625–3641. <https://doi.org/10.1007/s10653-021-00847-9>. (**Impact Factor: 4.609**).
8. Sadaf Laraib, Saiqa Sharif, Yamin Bibi, Sobia Nisa, **Rukhsanda Aziz**, Abdul Qayyum. Phytochemical Analysis and Some Bioactivities of Leaves and Fruits of *Myrsine africana* Linn.

Arabian Journal for Science and Engineering (2021) 46:53–63. <https://doi.org/10.1007/s13369-020-04710-4>. (Impact Factor: 1.711).

9. Rafiq, M. K., Bai, Y., **Aziz, R.**, Rafiq, M. T., Mašek, O., Bachmann, R. T., Joseph, S., Shahbaz, M., Qayyum, A., Shang, Z., Danaee, M., Long, R. Biochar amendment improves alpine meadows growth and soil health in Tibetan plateau over a three year period. Science of the Total Environment 717 (2020) 135296 (Impact Factor: 6.551)

## Conferences

- International Workshop on Eco-Remediation of Water Eutrophication and Bioenergy Exploitation, August 2012, Key Laboratory of Environmental Remediation and Ecological Health, Zhejiang University, China (Participant)
- International conference on Environmentally Sustainable Development (ESDev-VII), August 2017, Department of Environmental Sciences, COMSATS Abbottabad, Pakistan. (Participant)
- 2nd International Seminar on “Strengthening Health Care with Eastern Medicine for Growth and Development of Socio- Economic Environment” May 2017, Department of Environmental Science, IIUI. (Organizer).
- International Workshop on “Phytotechnologies for Environmental Cleanup” May 2018, Institute of Environmental Science and Engineering, NUST, Islamabad, Pakistan. (Participant)
- International Conference on “Training and Capacity Building in Sustainable Agricultural Water Management to Address Food Security and Social Instability in Pakistan”, June 2018, PMAS Arid Agriculture University, Rawalpindi, Pakistan. (Participant)
- 1st Annual Conference on “The Current Usage of Nanotherapeutics and Biodrugs”, December 2018, Quaid-e-Azam Auditorium Old Campus, International Islamic University, Islamabad, Pakistan. (Participant)
- 8th International Conference on “Environmentally Sustainable Development (ESDev-VIII)” August 2019, Department of Environmental Sciences, COMSATS, Abbotabad. (Presenter)
- Applied Biotechnology and Biocomputing (AB2), February 2019, Department of Biological Sciences, IIUI (Participant)
- One – day International Online Symposium on Recent Research Trends in Chemistry, September 2020, Department of Chemistry, University of Okara. (Participant)
- International Webinar on “Air Pollution, Climate Change and their Impacts on Mountain Water Resources” January 2021, Department of Environmental Sciences, CUI Abbottabad. (Participant)
- 1st International Hybrid Mode Conference on “Emerging Innovative Research Trends in Biology” August 2021, Department of Biotechnology and Genetic Engineering, KUST, Kohat. (Oral Presentation)