

CURRICULUM VITAE

Sana Ullah, Ph.D.

Assistant Professor, Department of Zoology

**Division of Science and Technology, University of Education Lahore, Jauharabad Campus,
Jauharabad-41200, District Khushab, Punjab, Pakistan**

International Recognition: Top 2% Scientists – Stanford/ Elsevier
Top 0.05% of 30 million Scholars (All fields of Scholarly Endeavor) – ScholarGPS®
Ranked 1st in Biological Sciences – University of Education (AD Scientific Index)
GBD Senior Collaborator – IHME, University of Washington
Sakura Fellow – AST Japan

Research Output: Research Papers: 90+ Cumulative Impact Factor: 900+
Citations – 19000+ (Google Scholar), 17500+ (ResearchGate), 14500+ (Scopus), 9000+ (WOS)
h-index – 39 (Google Scholar), 40 (ResearchGate), 35 (Scopus), and 28 (Web of Sciences)

Research Interest: Fisheries and Aquaculture
Fisheries Toxicology and Ecotoxicology of Emerging Contaminants
Chemical Risk Assessment using Fish as a Model Organism
Limnology
Public & Global Health and Safety
Environmental Health and Safety

Education

2016-19 PhD in Biology (Zoology) from Nanjing University, People's Republic of China – Ranked 62nd globally in the Times Higher Education World University Rankings (2026), 103rd in the QS World University Rankings (2026), and 8th (2025) globally in Nature Index (Research Leaders).
Thesis Title: A multi-scale study on the hostile effects of pollution on humans and fish: from behavior, physiology, biochemistry, to toxicology

2014-15 MPhil in Zoology (Fisheries & Aquaculture) from Quaid-i-Azam University, Pakistan – Ranked 354th globally and 1st in Pakistan in the QS World University Ranking (2026).
Thesis Title: Protective role of vitamin C against Cypermethrin induced toxicity in *Labeo rohita* (Ham.): Biochemical aspects

2012-13 PGD in Geographic Information Systems & Remote Sensing from the University of Peshawar, Pakistan – Ranked 901-950 in QS World University Ranking (2026).
Thesis Title: A GIS integrated approach for assessment of drinking water quality of District Dir Lower K.P.

2011-12 MSc in Zoology (Fisheries) from the University of Peshawar, Pakistan – Ranked 901-950 in QS World University Ranking (2026).
Thesis Title: The ichthyofaunal diversity, relative abundance, physicochemical analysis and the estimation of biodiversity index of River Panjkora, District Dir (Lower), Khyber Pakhtunkhwa

2009-10 BSc from the University of Malakand, Pakistan – Ranked 601-800 in Times Higher Education (2025).

2007-08 Higher Secondary School Certificate, Govt. Postgraduate College, Timergara, District Lower Dir, Khyber Pakhtunkhwa (BISE Malakand)

2005-06 Secondary School Certificate, Wisdom House Public School, Timergara, District Lower Dir, Khyber Pakhtunkhwa (BISE Malakand)

Academic Appointments

- Sep 2020 – Current Assistant Professor, Department of Zoology, Division of Science and Technology, University of Education (Lahore), Jauharabad Campus
- July 2020 – Sep 2020 IPFP Fellow, Department of Zoology, Shaheed Benazir Bhutto University, Sheringal, District Upper Dir, Khyber Pakhtunkhwa, Pakistan

Selected Peer Reviewed Publications

- Ashraf, M.K., *Ullah, S., Bilal, M., Multisanti, C.R. and Faggio, C. 2025. Multi-biomarker assessment of essential and toxic elements accumulation in *Labeo gonius* from Khushab Lake (Pakistan). Environmental Pharmacology and Toxicology. 119: 104814.
- *Ullah, S., Ahmad, S., Ashraf, M.K., Bilal, M., Iqbal, T. and Azzam, M.M. 2025. Exposure to acute concentration of Malathion induced behavioral, hematological and biochemical toxicities in the brain of *Labeo rohita*. Life. 15(2): 158.
- Khan, K., Dawar, F.U., Shah, S.A.U.R. and Ullah, S. 2025. Morphological and biochemical abnormalities caused by malathion during early development of rohu (*Labeo rohita*). Pakistan Journal of Agricultural Sciences. 62(1): 769-776.
- Shaheen, M., Ullah, S., Bilal, M., Muneeb, A., Yurdakok-Dikmen, B. and Faggio, C. 2024. Determination of Heavy Metals and Hemato-Biochemical Profiling of *Bagre marinus* and *Bagarius bagarius* in Jhelum River. Water. 16: 2994.
- *Ullah, S., Zuberi, A., Ullah, I. and Azzam, M.M. 2024. Ameliorative role of Vitamin C against Cypermethrin induced oxidative stress and DNA damage in *Labeo rohita* (Hamilton, 1822) using single cell gel electrophoresis. Toxics. 12: 664.
- Ejaz, A., Ullah, S., Ijaz, S., Bilal, M., Banaee, M., Mosotto, C. and Faggio, C. 2024. Bioaccumulation and Health Risk Assessment of Heavy Metals in *Labeo rohita* and *Mystus seenghala* from Jhelum River, Punjab, Pakistan. Water. 16(20), 2994.
- Shah, S.A., Rauf, M., Ali, S., Ullah, S., Ullah, K., Anjum, S.I., Azizullah, A. and Dawar, F.U. 2023. Variations in the behaviour, survival, haematology, and biochemistry of *Ctenopharyngodon idella* (Grass Carp) after exposure to commercial grade atrazine. Bulletin of Environmental Contamination and Toxicology. 111:14.
- Hassan, S., Ahmad, B., Khan, M.W., Shah, Z.A., Ullah, A., Ullah, S., Khan, D., Rizwan, M., Ahmad, A., Ali, Q., Kaushik, P. and Yilmaz, S. 2023. Cytotoxic activity of phytoconstituents isolated from *Monotheca buxifolia* against hepatocellular carcinoma cell line hepg2: *in vitro* and molecular docking studies. ACS Omega. 8(37): 33572-33579.
- *Ullah, S., Ahmad, S., Altaf, Y., Dawar, F.U., Anjum, S.I., Baig, M.M.F.A., Fahad, S., Al-Misned, F., Atique, U., Guo, X. and Nabi, G. 2022. Bifenthrin induced toxicity in *Ctenopharyngodon idella* at an acute concentration: A multi-biomarkers based study. Journal of King Saud University-Science. 34(2): 101752.
- Zhang, Z., Li, Y., Ullah, S., Chen, L., Ning, S., Lu, L., Lin, W. and Li, Z. 2022. Home Range and Activity Patterns of Free-Ranging Cats: A Case Study from a Chinese University Campus. Animals. 12(9): 1141.
- Nabi, S., Ahmad, S., Ullah, S., Zada, S., Sarfraz, M., Guo, X., Ismail, M. and Wanghe, K. 2022. The adverse health effects of increasing microplastic pollution on aquatic mammals. Journal of King Saud University-Science. 34(4): 102006.
- Ullah, S., Li, Z., Hassan, S., Ahmad, S., Guo, X., Wanghe, K. and Nabi, G. 2021. Heavy metals bioaccumulation and subsequent multiple biomarkers based appraisal of toxicity in the critically endangered *Tor putitora*. Ecotoxicology and Environmental Safety. 228:113032.
- *Ullah, S., Ullah, N., Rajper, S.A., Ahmad, I. and Li, Z. 2021. Air pollution and associated self-reported effects on the exposed students at Malakand division, Pakistan. Environmental Monitoring and Assessment. 163: 708.
- Yu, C., Chen, L., Ning, S., Ullah, S. and Li, Z. 2021. Do bovids evolve hindquarter markings for anti- predation?. Current Zoology. 68(2): 143-148.
- Wang, L., Luo, Y., Maierdiyali, A., Chang, H., Ullah, S. and Li, Z. 2021. Azure-winged magpies passed the tasks on the Uzgiris-Hill scale of object permanence. Journal of Ornithology. 162: 605-613.
- Rajper, S.A., Nazir, A., *Ullah, S. and Li, Z. 2020. Perceived health risks of exposure to indoor air pollution from cooking fuels in Sindh, Pakistan. Polish Journal of Environmental Studies. 29(4): 2833-2844.
- *Ullah, S., Hasan, Z., Li, Z., Zuberi, A., Zorriehzahra, M.J. and Nabi, G. 2020. Diversity and community composition of ichthyofauna at Konhaye stream, district Dir Lower, Pakistan. Iranian Journal of Fisheries Sciences. 19(5): 2322-2339.

- Wang, L., Lou, Y., Wang, H., Zou, Y., Yao, H., **Ullah, S.** and Li, Z. 2020. Azure-winged magpies fail to understand the principle of mirror imaging. *Behavioural Processes*. 177: 104155.
- **Ullah, S.**, Li, Z., Arifeen, M.Z.U., Khan, S.U. and Fahad, S. 2019. Multiple biomarkers based appraisal of deltamethrin induced toxicity in silver carp (*Hypophthalmichthys molitrix*). *Chemosphere*. 214: 519-533.
- ***Ullah, S.**, Li, Z. 2019. Hydro-electric power in the Panjkora basin at the expense of environmental deterioration and biodiversity loss – Immediate action required for mitigation. *Environmental Science and Pollution Research*. 26(1): 1008-1011.
- ***Ullah, S.**, Li, Z., Zuberi, A., Arifeen, M.Z.U. and Baig, M.M.F.A. 2019. Biomarkers of pyrethroid toxicity in fish. *Environmental Chemistry Letters*. 17(2): 945-973.
- Afridi, A.J., Zuberi, A., Yousafzai, A.M., Maria., Kamran, M. and ***Ullah, S.** 2019. Hemp (Marijuana) reverted Copper-induced toxic effects on the essential fatty acid profile of *Labeo rohita* and *Cirrhinus mrigala*. *Molecular Biology Reports*. 46(1):391-401.
- **Ullah, S.**, Li, Z., Hasan, Z., Khan, S.U. and Fahad, S. 2018. Malathion induced oxidative stress leads to histopathological and biochemical toxicity in the liver of rohu (*Labeo rohita*, Hamilton) at acute concentration. *Ecotoxicology and Environmental Safety*. 161(2018): 270-280.
- ***Ullah, S.**, Zuberi, A., Alagawany, M., Farag, M.R., Dadar, M., Karthik, K., Tiwari, R., Dhama, K. and Iqbal, H.M.N. 2018. Cypermethrin induced toxicities in fish and adverse health outcomes: Its prevention and control measure adaptation. *Journal of Environmental Management*. 206 (2018): 863-871.
- **Ullah, S.**, Khan, S.U., Saleh, T.A. and Fahad, S. 2018. Mad honey: uses, intoxicating/poisoning effects, diagnosis, and treatment. *RSC Advances*. 8(33): 18635-18646.
- Rajper, S.A., ****Ullah, S.** and Li, Z. 2018. Exposure to air pollution and self-reported effects on Chinese students: A case study of 13 megacities. *PLoS One*. 13(3): e0194364.
- Guan, M., Fang, W., **Ullah, S.**, Zhang, X., Saquib, Q. and Al-khedhairy, A.A. 2018. Functional genomics assessment of narcotic and specific acting chemical pollutants using *E. coli*. *Environmental Pollution*. 232: 146-153.
- Nabi, G., **Ullah, S.**, Khan, Suliman, Ahmad, S. and Kumar, S. 2018. China-Pakistan Economic Corridor (CPEC): melting glaciers—a potential threat to ecosystem and biodiversity. *Environmental Science and Pollution Research*. 25(4): 3209-3210.
- Amir, I., Zuberi, A., Imran, M. and **Ullah, S.** 2018. Evaluation of yeast and bacterial based probiotics for early rearing of *Labeo rohita* (Hamilton, 1822). *Aquaculture Research*. 49(12): 3856-3863.
- ***Ullah, S.**, Hasan, Z., Zorriehzahra, M.J. and Ahmad, S. 2017. Diagnosis of endosulfan induced DNA damage in rohu (*Labeo rohita*, Hamilton) using comet assay. *Iranian Journal of Fisheries Sciences*. 16(1): 138-149.
- ***Ullah, S.**, Hasan, Z. and Zuberi, A. 2016. Heavy metals in three commercially valuable cyprinids in the river Panjkora, district Lower Dir, Khyber Pakhtunkhwa, Pakistan. *Toxicological & Environmental Chemistry*. 98(1): 64-76.
- ***Ullah, S.**, Begum, M., Ahmad, S. and Dhama, K. 2016. Genotoxic effect of endosulfan at sublethal concentrations in mori (*Cirrhinus mrigala*) fish using single cell gel electrophoresis (comet) assay. *International Journal of Pharmacology*. 12(3): 169-176.
- **Ullah, S.**, Rahman, K. and Hedayati, M. 2016. Hyperbilirubinemia in neonates: types, causes, clinical examination, preventive measures and treatment: a narrative review article. *Iranian Journal of Public Health*. 45(5): 558-568.
- ***Ullah, S.**, Hasan, Z. and Dhama, K. 2016. Toxic effects of endosulfan on behavior, protein contents and antioxidant enzyme system in gills, brain, liver, and muscle tissues of rohu, *Labeo rohita*. *International Journal of Pharmacology*. 12(1): 1-10.
- **Ullah, S.**, Hussain, Z., Mahboob, S. and Al-Ghanim, K. 2016. Heavy Metals in *Garra gotyla*, *Cyprinus carpio* and *Cyprinodon watsoni* from the River Panjkora, District, Lower Dir, Khyber Pakhtunkhwa, Pakistan. *Brazilian Archives of Biology and Technology*. 59: e16160321.
- Ullah, R., Zuberi, A., Muhammad, N. and **Ullah, S.** 2015. Toxicity to hematology and morphology of liver, brain, and gills during acute exposure of mahseer (*Tor putitora*) to Cypermethrin. *International Journal of Agriculture and Biology*. 17(1): 199-204.
- Ullah, R., Zuberi, A., **Ullah, S.**, Ullah, I., Ullah, F. 2014. Cypermethrin induced behavioral and biochemical changes in mahseer, *Tor putitora*. *Journal of Toxicological Sciences*. 39(6): 829-836.
- Hasan, Z., **Ullah, S.**, Rasheed, S.B., Kakar, A. and Ali, N. 2013. Ichthyofaunal diversity of river Panjkora, District Dir Lower, Khyber Pakhtunkhwa. *The Journal of Animal and Plant Sciences*. 25(3): 550-563.

- Hasan, Z., Ullah, N., **Ullah, S.** and Kakar, A., 2015. Ichthyo-diversity of river Zhob, district Zhob, Balochistan. The Journal of Animal and Plant Sciences. 25(3): 532-535.

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Citations: 12650+; h-index: 36 (Source: ResearchGate, September 2025)

Citations: 14450+; h-index: 35; i10-index: 78 (Source: Google Scholar, September 2025)

ResearchGate Profile: https://www.researchgate.net/profile/Sana_Ullah22

Google Scholar: <https://scholar.google.com/citations?user=1f6AkNwAAAAJ&hl=en>

Conferences, Seminars, and Presentations

- June 18-19, 2025: Participated as a presenter in SymBio2025 – International Symposium (Hybrid): From Proposal to Discovery – Emerging Research in Zoology, arranged by the University of Swat.
- Dec 7-8, 2024: Participated as a **Keynote Speaker** in the 1st International Conference on Sciences for Future Trends (ICSFT 2024), arranged by the University of Lahore. → Delivered a keynote talk on “Zoology as an Interdisciplinary Subject with a Focus on Animal Modeling in Modern Research”.
- Sep 4, 2024: Participated as **National Keynote Speaker** in SymBio, arranged by the University of Swat. → Delivered a keynote talk on “Zoology as an interdisciplinary subject”.
- Dec 10-11, 2020: Participation as an **Invited Keynote Speaker** in the 1st International Conference on Emerging Trends in Inter-Disciplinary Research in Biomedical Sciences (ETIRBS-2020) at the University of Okara, Okara Pakistan. → Delivered a talk on the “Role of Zoology in Biomedical Sciences”.
- Sep 21-23, 2018: **Oral presentation** in the 12th Zoological Conference and Academic Meeting, arranged by Jiangsu Zoological Society in association with Nanjing Agricultural University, Nanjing Normal University, and major Research Institutes from Jiangsu Province of P.R. China. → Won the best thesis award, out of 93 theses (from over 80 universities and research institutes).
- **Ullah, S.** 2018. **Oral Presentation**: Pesticides' exposure and hepatotoxicity in fish. Nara Women's University, Nara, Japan (During Japan-Asia Youth Exchange Program (Sakura Science Project) from September 9th to 20th, 2018).
- **Ullah, S.** 2018. **Oral Presentation**: Pesticide exposure and hepatotoxicity induction. School of Environmental Sciences and Resources, Anhui University, Anqing, Anhui.
- Shoaib, A., Zuberi, A., Aslam, S., **Ullah, S.** and Younis, N. 2015. Effect of stocking density on growth performance and survival of *Oreochromis niloticus* in cage culture system. 5th IFS (Fisheries Trade, Investment and Opportunities), Lahore, Pakistan.
- April 2-4, 2014: **Active participation and Oral presentation** in the 33rd Pakistan Congress of Zoology (International) at Pakistan Convention Hall, jointly arranged by Pakistan Museum of Natural History, Islamabad, and PMAS Arid Agriculture University, Rawalpindi, Pakistan.
- March 6-8, 2012: **Active participation and Oral presentation** in the 32nd Pakistan Congress of Zoology (International) at Government College University, Lahore, Pakistan.

MS/MPhil Students Supervised

- **Sardar Suleman** (2023) Trichlorfon induced hematological and biochemical toxicity in Rohu (*Labeo rohita*). Graduated with MS in Zoology.
- **Aansa Ejaz** (2023) Heavy metal load in selected commercially valuable fish species and associated human health risks at district Khushab, Punjab, Pakistan. Graduated with MS in Zoology.
- **Muneeba Shaheen** (2023) Heavy metal bioaccumulation and subsequent toxic impacts on commercially valuable fish species in river Jhelum at district Khushab. Graduated with MS in Zoology.
- **Babar Rehman Khan** (2023) Air pollution mediated hostile effects on hematology and selected biochemical indices of traffic wardens at district Khushab, Punjab, Pakistan. Graduated with MS in Zoology.
- **Muhammad Khawar Hayyat** (2024) Chlorfenapyr Mediated Behavioral, Hematological, Liver Histopathological, and Selected Biochemical Toxicities in *Labeo rohita* in Water dispersible Granules Formulation. Graduated with MS in Zoology.
- **Raheel Fatima** (2024) Hemato-biochemical Profile and Risk Perception of Farmers Regarding Pesticides Use at District Khushab, Punjab. Graduated with MS in Zoology.
- **Ghulam Sakeena** (2024) Prevalence of Anemia among Pregnant Women, Association with Socio- demographic Factors, and Hemoglobin Profiling in District Khushab. Graduated with MS in Zoology.
- **Insha Rehman** (2024) A Comparative Study on the Proximate Composition of Commercially Valuable Fish

Species Consumed at District Khushab, Punjab. Graduated with MS in Zoology.

- **Shanzeel Ahmed** (2024) Culturing zooplanktons (Moina and Daphnia) for the maximum survival and growth of fries of *Clarias gariepinus*. Graduated with MS in Zoology.
- **Muhammad Ammar Jabbar** (2024) Instant super (Nitenpyram) mediated behavioral, hematological, selected biochemical, and histopathological toxicities on Rohu (*Labeo rohita*). Graduated with MS in Zoology.
- **Muhammad Kashif Ashraf** (2025) Bioaccumulation and trophic transfer of heavy metals in three fish species of different feeding regimes and associated toxicities at Khushab Lake. Graduated with MS in Zoology.
- **Muhammad Bilal** (2025) Heavy metals bioaccumulation and hemato-biochemical, physiological, and histopathological profiling of three indigenous fish species from river Jhelum. Graduated with MS in Zoology.
- **Muhammad Sohail** (2025) Multiple biomarkers based appraisal of Methomyl induced toxicities in Nile tilapia (*Oreochromis niloticus*). Graduated with MS in Zoology.
- **Palwasha Asif** (2025) Comparative determination of essential elements and heavy metals in wild and farm reared *Labeo rohita*. Graduated with MS in Zoology.
- **Sehrish Ijaz** (2025) Bioaccumulation of heavy metals and subsequent heamto-biochemical effects on *Cyprinus carpio* and *Cirrhinus mrigala*. Graduated with MS in Zoology.
- **Mehwish Saleem** (2025) Dichlorvos induced behavioral, hemato-biochemical, and histopathological toxicities in grass carp (*Ctenopharyngodon idella*). Graduated with MS in Zoology.

Research Students Co-Supervised

- Asya Murad (2023) – MS in Zoology from Kohat University of Science and Technology, Khyber Pakhtunkhwa
- Azam Hussain (2023) – MS in Chemistry from the University of Education, Lahore.
- Amna Akbar (2024) – MS in Chemistry from the University of Education, Lahore.
- Muhammad Hasnain (2025) – MS in Chemistry from the University of Education, Lahore.
- Wardah Fazal (2025) – MS in Zoology from the University of Education, Lahore.
- Tayyaba Shahid (2025) – MS in Zoology from the University of Lahore (Sargodha Campus)
- Kashifa Malik (2025) – MS in Zoology from the University of Lahore (Sargodha Campus)
- Romana (2026) – *viva* awaiting – MS in Zoology from the University of Malakand, Khyber Pakhtunkhwa

Research Students under Supervision

- Amina Parveen (2026) –
- Ayesha Firdoos (2026) –
- Nayab Sehar (2026) –
- Jaweria Shafique (2026) –
- Tehreem Asif (2026) –
- Jahazeb Iqbal (2026) –

References

- Prof. Dr. Zhongqiu Li (PhD Research Supervisor)
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School of Life Sciences, Nanjing University, Nanjing, Jiangsu, P.R. China
Email: lizq@nju.edu.cn / lizq0314@gmail.com
- Prof. Dr. Amina Zuberi (MPhil Research Supervisor)
Head, Fisheries and Aquaculture Program / Fisheries Research Station,
Chairperson, Department of Zoology, Quaid-i-Azam University, Islamabad, Pakistan
Email: amina.zuberi@qau.edu.pk / amina871@hotmail.com
- Dr. Zaigham Hasan (MSc Research Supervisor)
Assistant Professor and Head (Fisheries Lab)
Department of Zoology, University of Peshawar, Khyber Pakhtunkhwa, Pakistan
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