

Dr. MOAZAMA BATOOL

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**Assistant Professor, Department of Zoology, GC Women University
Sialkot**

As a highly motivated worker I can develop good working relationships and communicate efficiently with personnel at all levels. I have developed skills in evaluating and solving problems in order to make calculated decisions. I am results driven and geared to work as hard as required in order to realize my goals, especially in a science based environment. Basically, I am a zoologist with a working background in aquatic toxicology, Limnology and Oxidative stress (antioxidant enzymes).



Father's Name: Muhammad Boota
Husband's Name: Shahbaz Ahmad
Nationality: Pakistani
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Domicile District: Hafizabad
Religion: Islam
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ACADEMIC RECORD

PhD	University of Agriculture, Faisalabad, 2014, Zoology
M.Phil	University of Agriculture, Faisalabad, 2008, Zoology
M.Sc	University of Agriculture, Faisalabad, 2006 Zoology
B.Sc	University of Punjab, Lahore, 2004, Zoology, Botany Chemistry
F.Sc	Board of Intermediate and Secondary Education Gujranwala, 2002, Biology, Physics, Chemistry
Matriculation	Board of Intermediate and Secondary Education Gujranwala, 1998, Biology, Physics, Chemistry

PROFESSIONAL QUALIFICATION:

M.Ed.	Allama Iqbal Open University, Islamabad, Pakistan, 2011 (Science Education)
B.Ed.	Allama Iqbal Open University, Islamabad, Pakistan, 2009 (Science Education)

SERVICE EXPERIENCE:

- Worked as Assistant Professor (Zoology) since 01-12-2014 to 28-08-17 in the Department of Zoology, GC Women University, Faisalabad.
 - Currently working as Assistant Professor (Zoology) from 29-08-2017 to date in the Department of Zoology, GC Women University, Sialkot.
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RESEARCH Projects:

1. Studies on acute and chronic responses of *Channa marulius* and *Wallago attu* to metals and their mixture. **(Ph.D)**
 2. Studies on lethal and LC₅₀ responses of *Catla catla* and *Cirrhina mrigala* against waterborne toxicity of zinc. **(M.Phil)**
 3. Studies on limnological parameters of semi-intensive iron stressed fish culture ponds. **(M.Sc)**
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RESEARCH PROJECT AS A PI:

- Estimation of Acetylcholine esterase activity, lipid peroxidation and genotoxicity as a oxidative dynamics in Chinese carps exposed to selected Insecticides. **(SRGP funded by HEC, Completed) No.21-1996/SRGP/R&D/HEC/2018**

HEC APPROVED SUPERVISOR:

- HEC approved supervisor for MS/M. Phil and Ph.D. research.

AWARDS AND HONORS:

- Young researcher Award 2023 GCWUS
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LIST OF MS SUPERVISED STUDENTS:

Sr. #.	Student's Name	Thesis Title	Session
1.	Qurra tul ain 2014-GCWUF-0171	Studies on the Purification and Characterization of Superoxide dismutase (SOD) in cadmium exposed <i>Channa marulius</i> .	2015-2017
2.	Aysha Naz 2015-GCWUF-0667	Biochemical changes of peroxidase enzyme in <i>Channa marulius</i> after chronic exposure of chromium and copper.	2015-2017
3.	Rabia Khalid Zool-1606	Evaluation of serum biochemical parameters of <i>Cirrhinus mrigala</i> under acute toxicity of arsenic.	2016-2018

4.	Hijab Tariq Zool-1609	Studies on growth performance and hematological parameters of <i>Labeo rohita</i> under arsenic exposure.	2016-2018
5	Mamoona Mahmood Zool-1703	Effect of Aloe vera on growth performance and digestive enzymes of <i>Cirrhinus mrigala</i> against arsenic sub-lethal toxicity.	2017-2019
6	Howaina Asghar Zool-1704	Effect of turmeric (<i>Curcuma longa</i>) on growth performance, haematology and immunity of Common Carp (<i>Cyprinus carpio</i>)	2017-2019
7	Ammal Mir Zool-1705	Effect of dietary garlic on growth performance, haematology and catalase enzyme activity of <i>Labeo rohita</i> .	2017-2019
8	Anam Dilshad Zool-1805	Toxic effects of chlorpyrifos on acetylcholinesterase, lipid peroxidation and nuclear abnormalities in <i>Ctenophrygodon idella</i> .	2018-2020
9	Ayesha Sarwar Zool-1807	Effect of bifenthrin toxicity on acetylcholinesterase, lipid peroxidation and micronuclei formation in <i>Hypophthalmichthys molitrix</i> .	2018-2020
10	Iqra Abbas Zool-1809	Response of biochemical and genotoxic parameters of <i>Ctenophrygodon idella</i> under bifenthrin exposure.	2018-2020
11	Ayesha Zool-1906	Studies on acute toxicity and evaluation of genotoxic parameters of bifenthrin exposed <i>Cyprinus carpio</i> .	2019-2021
12	Ratab Shahid Zool-1907	Chlorpyrifos induced changes in the Acetylcholinestrerase activity, lipid peroxidation and genotoxicity in fish, <i>Hypophthalmichthys molitrix</i> , under lethal and sublethal exposure.	2019-2021
13	Syeda Ansa Fatima Zool-1913	Effect of bifenthrin exposure on behavioral and blood parameters of <i>Ctenophrygodon idella</i> .	2019-2021
14	Zeryab Zool-1916	Studies on the DNA damage in peripheral blood of chlorpyrifos exposed fish, Common carp.	2019-2021
15	Hafsa Sultan Zool-2002	Chlorpyrifos and bifenthrin induced oxidative stress and DNA damage in different organs of <i>Hypophthalmichthys molitrix</i> .	2020-2022
16	Saiqa Rauf Zool-2013	Evaluation of insecticides induced organ impairment in <i>Cyprinus carpio</i> by metabolic and histological analysis.	2020-2022
17	Mehroze Khalid Zool-20021	Assessment of genotoxicity and antioxidant enzymes status in <i>Cyprinus carpio</i> exposed to selected insecticides.	2020-2022
18	Farwa Shehzadi 2021-GCWUS-1863	Assessment of di-butyl and di-isononyl phthalates induced oxidative stress and DNA damage in <i>Oreochromis mossambicus</i> (Tilapia)	2021-2023
19	Asma Aziz 2021-GCWUS-1877	Effects of di-butyl and di-isononyl phthalates on antioxidant enzyme status and DNA damage in <i>Cyprinus carpio</i> (Common carp)	2021-2023

20	Tehniat Tahir 2021-GCWUS-1878	Histological and hematological analysis of organ impairment in <i>Oreochromis mossambicus</i> (Tilapia) after exposure to selected phthalates.	2021-2023
21	Hina Nabi Ahmad 2021-GCWUS-1879	Assessment of di-butyl and di-isononyl induced toxicity in <i>Oreochromis mossambicus</i> (Tilapia): An <i>in vitro</i> experimental approach.	2021-2023
22	Sheeza Zafar 18-B/Zool/001	Therapeutic Potential of Kaempferol Against Triclosan Induced Histopathology and Haematological Alterations in <i>Labeo rohita</i>	2022-2024
23	Rimsha 18-B/Zool/034	Possible Protective Effects of Kaempferol Against Triclosan Induced Genotoxicity and Oxidative Stress in <i>Labeo rohita</i>	2022-2024
24	Khansa Ahmad 17-B/Zool/130	<i>In Vitro</i> Assessment of Oxidative Stress and DNA Damage in <i>Cyprinus carpio</i> Exposed to Di-Butyl and Di-Isononyl Phthalates.	2022-2024
25	Kanwal Shehzadi MS-ZOO-F23-R-001	Mitigation of Metformin-Induced Biochemical and Histopathological Alterations by Silymarin in <i>Catla catla</i> .	2023-2025 In Process
26	Kainat Naeem MS-ZOO-F23-R-009	Amelioration of Metformin-Induced Toxicity by Silymarin in <i>Labeo rohita</i> : A Histopathological and Biochemical Analysis.	2023-2025 In Process
27	Marya Murrawat MS-ZOO-F23-R-011	Therapeutic Effects of Silymarin Against Metformin-Induced Oxidative Stress and genotoxicity in <i>Labeo rohita</i>	2023-2025 In Process
28	Sumayya Jalil MS-ZOO-F23-R-020	Silymarin-Mediated Protection Against Metformin-Induced toxicity by modulating Antioxidant enzymes status and DNA integrity in <i>Catla catla</i> .	2023-2025 In Process

LIST OF RESEARCH PUBLICATIONS:

1. Ayesha Hafeez, Sadia Maalik, Sajida Mushtaq, **Moazama Batool**, Naheed Bano, Nazia Ehsan. 2025. Laboratory rearing of herbivore larva of *Spodoptera frugiperda* (Order: Lepidoptera) to assess yield loss of economically important crops. *Journal of Zoology and Systematics*, 3(1), 36-46. <https://doi.org/10.56946/jzs.v3i1.575> -Y-Category
2. Mahnoor Anjum, Nazia Ehsan, Arfa Tahir, **Moazama Batool**, Hamida Hamdi, and Muhammad Umar Ijaz. 2025. Nephroprotective Potential of Rhamnazin Against Cadmium-Induced Kidney Damages via Activation of Nrf2/Keap1 Pathway. *Natural Product Communications*, 20(1): 1–13. DOI: [10.1177/1934578X251316691](https://doi.org/10.1177/1934578X251316691)-(IF:1.5)
3. **Moazama Batool**, Howaina Asghar, Qurat-ul-Ain, Sheeza Bano, Sadia Maalik, Sajida Mushtaq, Mamoona Mahmood. 2025. Therapeutic effect of dietary turmeric (*Curcuma longa*) on growth performance, hematology profile and immunity parameters of common carp (*Cyprinus carpio*). *Journal of Zoology and Systematics*, 3(1), 27–35. <https://doi.org/10.56946/jzs.v3i1.554> -Y-Category
4. Sadia Nazir, Noor Khan, Dilawar Hussain, Mahroze Fatima, Hamda Azmat, **Moazama Batool**, Sheeza Bano, Muhammad Asghar, Zahra Hussain, Summia Perveen, Simon J.

- Davies. 2024. Dietary Vitamin C fortification enhances the growth performance, hematological status, defensive antioxidant enzymes, and resistance against *Aeromonas hydrophila* infection for bullseye snakehead (*Channa marulius*). Journal of Zoology and Systematics. 2(2), 70-87. <https://doi.org/10.56946/jzs.v2i2.476>-Y-Category
5. **Moazama Batool**, Mamoonah Mahmood, Qurat Ul Ain, Muhammad Umar Ijaz, Sheeza Bano, Sadia Nazir and Hafsa Sultan. 2024. Effect of Aloe Vera on Growth Performance and Digestive Enzymes Activity of Mrigal (*Cirrhinus mrigala*) against Arsenic Sub-Lethal Toxicity. Pakistan Journal of Agricultural Sciences, 61(4), 958-964. [DOI:10.21162/PAKJAS/24.127](https://doi.org/10.21162/PAKJAS/24.127) (IF:0.856)
 6. Nazia Ehsan, Muhammad Gulfam, Ali Akbar, **Moazama Batool**, Mohammad Z. Ahmed, Mian Nadeem Riaz. 2024. Cardioprotective potential of sakuranetin to counteract polyethylene microplastics induced cardiotoxicity. Journal of King Saud University–Science, 36(11): 103529- <https://doi.org/10.1016/j.jksus.2024.103529>. (W-IF=3.7)
 7. Naila Ghafoor, Kainat Fatima, **Moazama Batool**, Muhammad Imran, Shaik Althaf Hussain, Usman Atique. 2024. Ginkgetin alleviates polystyrene microplastics-instigated liver injury in rats through Nrf-2/Keap-1 pathway activation. Journal of King Saud University–Science, 36(11): 103515- <https://doi.org/10.1016/j.jksus.2024.103515>. (W-IF=3.7)
 8. Muhammad Faisal Hayat, Marrium Bibi, **Moazama Batool**, Rimsha Eman, Hamida Hamdi, Muhammad Umar Ijaz. 2024. Ameliorative Potential of Sudachitin Against Paraquat Induced Renal Toxicity in Rats Via Regulating Nrf2/Keap1 Pathway: An Inflammatory, Apoptotic and Histopathological Assessment. Chemistry and Biodiversity, 22 September 2024-<https://doi.org/10.1002/cbdv.202401656>. (X-IF=2.3)
 9. Sadia Maalik, Sajida Mushtaq, Qurat-UL-Ain, **Moazama Batool**, Naheed Bano and Ayesha Hafeez. 2024. Life table Analysis and Extent of Damage caused by *Spodoptera exigua* (Noctuidae: Lepidoptera), a serious Pest. Journal of Zoo Biology, 07(01):35-41. <https://doi.org/10.33687/zoobiol.007.01.5103> (Y Category)
 10. Meerub Sarfraz, Mamoonah Mahmood, **Moazama Batool**, Qurat-UL-Ain, Sajida Mushtaq, Sadia Maalik. 2024. Potential Benefits of Pomegranate as an Additive in Fish Diet and Fish Products: A Review. BioScientific Review, 6(4):67-85. <https://doi.org/10.32350/bsr.64.i> (Y Category)
 11. Naila Ghafoor, Tooba Mehar, **Moazama Batool**, Muhammad Zaid Salar, Mohammad Z. Ahmed, Usman Atique. 2024. Attenuative effects of poncirin against polyethylene microplastics-prompted hepatotoxicity in rats. Journal of King Saud University–Science, 36(10): 103475- <https://doi.org/10.1016/j.jksus.2024.103475>. (W-IF=3.7)
 12. Shama Mustafa, Rabia Azmat, **Moazama Batool**, Mohammad Z. Ahmed, Mian Nadeem Riaz. 2024. Tangeretin alleviates malathion-instigated testicular toxicity via ameliorating biochemical, apoptotic, hormonal & steroidogenic markers. Journal of King Saud University–Science, 36(10): 103447. <https://doi.org/10.1016/j.jksus.2024.103447>. (W-IF=3.7)
 13. Sheeza Bano, Noor Khan, Sadia Nazir, **Moazama Batool**, Dilawar Hussain, Ayesha Tanveer, Maryam Tahir, Simon John Davies. 2024. Modulatory potential of selenium supplementations on the growth, nutrients profile and regulation of antioxidant status of striped catfish (*Pangasius hypophthalmus*): Impact of selenium supplementation on striped catfish (*Pangasius hypophthalmus*). Journal of Zoology and Systematics. 2(2):

41–48. <https://doi.org/10.56946/jzs.v2i2.436>. (Y Category)

14. Muhammad Umar Ijaz, Sana Imtiaz, Muhammad Faisal Hayat, **Moazama Batool**, Khalid A. Al-Ghanim, Mian Nadeem Riaz. 2024. Sudachitin alleviates paraquat instigated testicular toxicity in albino rats via regulating Nrf-2/Keap-1, inflammatory, steroidogenic and histological profile. *Environmental Toxicology*, 2024; 0:1-12. <https://doi.org/10.1002/tox.24408>- (W-IF=4.4)
15. Saba Yaqoob, Ali Hamza, **Moazama Batool**, Aisha Khatoon, Shaik Althaf Hussain, Mian Nadeem Riaz. 2024. Rhamnetin abrogates polystyrene microplastics prompted hepatic damage by regulating Nrf-2/Keap-1 pathway. *Journal of King Saud University – Science*, 36(9): 103403. <https://doi.org/10.1016/j.jksus.2024.103403>. - (W-IF=3.7)
16. Saima Naz, **Moazama Batool**, Qurat Ul Ain, Ahmad Manan Mustafa Chatha, Sheeza Bano, Sadia Nazir, Ghulam Abbas and Unab Zahra. 2024. Inquisition of Malathion Induced Histopathology, Nuclear Abnormalities in Erythrocytes and DNA damage in *Hypophthalmichthys molitrix*. *Sarhad Journal of Agriculture*, 40(3): 980-987. <https://dx.doi.org/10.17582/journal.sja/2024/40.3.980.987> -(Y Category)
17. Kaynat Alvi, Ali Hamza, Nazia Ehsan, **Moazama Batool**, Muhammad Zaid Salar, Zubair Ahmed, Uman Atique. 2024. Juglanin cures polyethylene microplastics-induced testicular damage in rats. *Journal of King Saud University – Science*, 36(9): 103394. <https://doi.org/10.1016/j.jksus.2024.103394>-(W-IF=3.7)
18. Rida Ajmaal, Huma Naz, Khalid Mehmood, **Moazama Batool**, Najeeb Ur Rehman, Tanveer Ahmed, Syed Qaswar Ali Shah, Warda Safdar, Sharjeel Imam, Muhammad Umar Ijaz and Muhammad Usman. 2024. Histo-morphometric Indices and Catalase Response in Muscles, Gills and Intestine of Cadmium Stressed *Hypophthalmichthys molitrix*. **Pakistan Journal of Zoology**, available online 09 August 2024. <https://dx.doi.org/10.17582/journal.pjz/20230509070520>- (X-IF= 0.500)
19. Muhammad Faisal Hayat, Anees Ur Rahman, Amara Tahir, **Moazama Batool**, Zubair Ahmed, Usman Atique. 2024. Palliative potential of robinetin to avert polystyrene microplastics instigated pulmonary toxicity in rats. *Journal of King Saud University – Science*, 36(9): 103348. <https://doi.org/10.1016/j.jksus.2024.103348>-(W-IF=3.7)
20. Ali Akbar, Fatima Amin, **Moazama Batool**, Aisha Khatoon, Zubair Ahmad, Usman Atique. 2024. Sakuranetin counteracts polyethylene microplastics induced nephrotoxic effects via modulation of Nrf2/Keap1 pathway. *Journal of King Saud University – Science*, 36(8):103343. <https://doi.org/10.1016/j.jksus.2024.103343>-(W-IF=3.7)
21. Ansa Javed, Rabia Azmat, **Moazama Batool**, Amjad Islam Aqib, Shaik Althaf Hussain, Ayesha Ishtiaq. 2024. Hepatoprotective potential of sciadopitysin against paraquat induced liver damage in rats. *Journal of King Saud University – Science*, 36(8):103328. <https://doi.org/10.1016/j.jksus.2024.103328> (W-IF=3.7)
22. Sadia Nazir, Noor Khan, Dilawar Hussain, Sheeza Bano, **Moazama Batool**, Muhammad Asghar, Muhammad Adnan Ali, Zahra Hussain, Ayesha Tanveer, Simon J. Davies. 2024. Effects of Synthetic Hormones on Fertilization, Fecundity, Hatching and Gonado-Somatic Index of Giant Snakehead (*Channa Marulius*) in Captivity. *Journal of Zoology and Systematics*, 2(1): 44-52. <https://doi.org/10.56946/jzs.v2i1.412>
23. Wajeeha Tanveer, Sajida Mushtaq, Nimra Ijaz, **Moazama Batool**, Sadia Maalik. 2024. Amazon Rainforest Wildfires: Causes and Impact on Mammalian and Avian Diversity. *University of Sindh Journal of Animal Sciences*, 8(1); 59-69. <https://doi.org/10.57038/usjas.v8i01.6962>- Y Category

24. Muhammad Umar Ijaz, Maria Ghaffar, Rabia Azmat, **Moazama Batool**, Hammad Ahmed Khan, Shaik Althaf Hussain, Mian Nadeem Riaz. 2024. Narirutin ameliorates polystyrene microplastics induced nephrotoxicity by modulating oxidative stress, inflammation and Nrf2/Keap1 pathway. *Journal of King Saud University – Science*, 36(8): 103288. <https://doi.org/10.1016/j.jksus.2024.103288>- (W IF=3.8)
25. Syeda Sania Zahara, Mehrab Khalil, **Moazama Batool**, Muhammad Faisal Hayat, Bader O. Almutairi, Mian Nadeem Riaz. 2024. Pachypodol attenuates arsenic triggered cardiac damage via rectifying oxidative stress, inflammation, apoptosis and histopathological alterations. *Journal of King Saud University – Science*, 36(7):103260. <https://doi.org/10.1016/j.jksus.2024.103260>- (W IF=3.8)
26. Mubashar Hussain, Hifza Liaquat, Muhammad Faheem Malik, Kiran Aftab, **Moazama Batool**, Razia Iqbal and Somia Liaquat. 2024. Distribution Patterns of Insect Pollinator Assemblages at Deva Vatala National Park, Bhimber, Azad Jammu and Kashmir. *Pakistan Journal of Zoology*, 56(4):1639-1651. <https://dx.doi.org/10.17582/journal.pjz/20221004171007>- (X IF= 0.687)
27. **Moazama Batool**, Saima Naz, Ahmad Manan Mustafa Chatha, Qurat Ul Ain, Asma Irshad, Mamoonah Mahmood, Asma Aziz, Ghulam Abbas and Fatima Yasmin. 2024. Toxic Effects of Lead Chloride (PbCl₂) on Behavioral, Hematological, and Serum Biochemical Parameters in *Labeo rohita*. *BioScientific Review*. 6(2):57–76. <https://doi.org/10.32350/bsr.62.05>- (Y Category)
28. Muhammad Faisal Hayat, **Moazama Batool**, Hussain Ahmed, Rabia Azmat, Mukhtar Ahmed, Mian Nadeem Riaz. 2024. Protective effects of cupressuflavone against doxorubicin-induced hepatic damage in rats. *Journal of King Saud University – Science*, 36(7):103240. <https://doi.org/10.1016/j.jksus.2024.103240>-(W IF=3.8)
29. **Moazama Batool**, Syeda Ansa Fatima, Saima Naz, Qurat Ul Ain, Sheeza Bano, Ghulam Abbas and Ahmad Manan Mustafa Chatha. 2024. Behavioral and Hematological Alterations in Grass Carp (*Ctenopharyngodon idella*) Exposed to Bifenthrin. *Sarhad Journal of Agriculture*. 40(2):440-447. <https://dx.doi.org/10.17582/journal.sja/2024/40.2.440.477>- (Y Category)
30. Muhammad Faisal Hayat, Muhammad Zohaib, Muhammad Umar Ijaz, **Moazama Batool**, Asma Ashraf, Bader O. Almutairi Usman Atique. 2024. Ameliorative potential of eriocitrin against cadmium instigated hepatotoxicity in rats via regulating Nrf2/keap1 pathway. *Journal of Trace Elements in Medicine and Biology*, 84 July-2024 127445. <https://doi.org/10.1016/j.jtemb.2024.127445>- (W IF=3.5)
31. Ali Hamza, **Moazama Batool**, Mudassar Yaseen, Naila Ghafoor, Mukhtar Ahmed, Mian Nadeem Riaz. 2024. Attenuative role of didymin against paraquat prompted cardiotoxicity in albino rats. *Journal of King Saud University – Science*, 36(6): 103194. <https://doi.org/10.1016/j.jksus.2024.103194>- (W IF=3.8)
32. Ali Akbar, Rabia Azmat, **Moazama Batool**, Bader O. Almutairi, Mian Nadeem Riaz. 2024. Rhoifolin protects cisplatin mediated pulmonary toxicity via attenuation of oxidative stress, inflammatory response, apoptosis and histopathological damages. *Journal of King Saud University – Science*, 36(5): 103149. <https://doi.org/10.1016/j.jksus.2024.103149> (W IF=3.8)
33. **Moazama Batool**, Saima Naz, Sheeza Bano, Sadia Nazir, Ghulam Abbas, Ahmad Manan Mustafa Chatha, Maria Lateef and Fatima Yasmin. 2024. Adverse Impacts of a Mixture of Metals on Two Freshwater Fish Species, *Catla catla* and *Labeo rohita*.

- Sarhad Journal of Agriculture, 40(1): 221-230.
<https://dx.doi.org/10.17582/journal.sja/2024/40.1.221.230-> (Y Category)
34. **Moazama Batool**, Saima Naz, Ghulam Abbas, Ahmad Manan Mustafa Chatha, Mamoonah Mahmood, Asma Aziz and Fatima Yasmin. 2024. Hematological and Biochemical Studies in Commercially Important Fish *Labeo rohita* Exposed to Cadmium Chloride. Sarhad Journal of Agriculture, 40(1): 158-170.
<https://dx.doi.org/10.17582/journal.sja/2024/40.1.158.170-> (Y Category)
 35. Sadia Maalik, Sajida Mushtaq, Naheed Bano, **Moazama Batool** and Ayesha Hafeez. 2024. Diversity and relative abundance of braconids (Hymenoptera) among selected crops of District Faisalabad, Pakistan. World Journal of Biology and Biotechnology, 9(1): 13-16.
<https://doi.org/10.33865/wjb.009.01.1125-> (Y Category)
 36. Mehrab Khalil, Muhammad Faisal Hayat, **Moazama Batool**, Mukhtar Ahmed, Mian Nadeem Riaz. 2024. Pinostrobin attenuated cadmium instigated cardiotoxicity in albino rats: A biochemical, inflammatory, apoptotic and histopathological examination. Journal of King Saud University – Science, 36 (2): 1-6-103074.
<https://doi.org/10.1016/j.jksus.2023.103074-> (W IF=3.8)
 37. Muhammad Umar Ijaz, Muhammad Muzammil Sultan, **Moazama Batool**, Asma Ashraf, Mikhilid H. Almutairi, Ayesha Ishtiaq. 2024. Protective effects of nobiletin against metabolic and reproductive disturbance in letrozole induced polycystic ovarian syndrome in rats. Journal of King Saud University – Science, 36 (2): 1-5-103045.
<https://doi.org/10.1016/j.jksus.2023.103045-> (W IF=3.8)
 38. Muhammad Umar Ijaz, Syeda Sania Zahara, **Moazama Batool**, Mikhilid H. Almutairi, Ayesha Ishtiaq, Asma Ashraf. 2024. Therapeutic potential of kaempferide against paraquat instigated cardiac toxicity in rats. Journal of King Saud University – Science, 36 (1): 1-6-102980. <https://doi.org/10.1016/j.jksus.2023.102980-> (W IF=3.8)
 39. Tasneem Kauser, Sajida Mushtaq, Sadia Maalik, **Moazama Batool**, Naheed Bano and Wishia Jaffer. 2023. Diversity of Aphids and Assessment of their Potential Natural Enemies in District Sialkot, Punjab, Pakistan. Proc. Pakistan Congr. Zool., 41: 01-08.
 40. Suneela, Sajida Mushtaq, Sadia Maalik, Asma Waheed Qureshi, **Moazama Batool**. 2023. Insect faunal diversity and relative abundance associated with *Trifolium alexandrinum* (Berseem) in district Sialkot, Pakistan. Biologia (Lahore), 69(2): 40-47.
<https://dx.doi.org/10.17582/journal.Biologia/2023/69.2.40.47->
 41. Nazia Ehsan, Sana Ali, Ali Hamza, **Moazama Batool**, Khalid A. Al-Ghanim, Usman Atique and Muhammad Umar Ijaz. 2023. Attenuative Effects of Ginkgetin against Polystyrene Microplastics-Induced Renal Toxicity in Rats. Pakistan Veterinary Journal, 43(4): 819-823. <http://dx.doi.org/10.29261/pakvetj/2023.104-> (X IF= 2.3)
 42. Nimra Tahir, Aadab Akhtar, **Moazama Batool**, Qurat Ul Ain. 2023. “Excessive Use of Pesticides Is a Risk Factor to Fishes: A Review on its Effects and Control Strategies.” Journal of Zoology and Systematics. 1(2), 31–39. <https://doi.org/10.56946/jzs.v1i2.221->
 43. Moazama Batool, Rabia Khalid, Qurat Ul Ain, Sadia Maalik, Sajida Mushtaq, Mamoonah Mahmood. 2023. “Evaluation of Serum Biochemical Parameters of *Cirrhinus mrigala* Under Acute Exposure of Arsenic”. Journal of Zoology and Systematics. 1(2), 22–30. <https://doi.org/10.56946/jzs.v1i2.220->
 44. Muhammad Umar Ijaz, Sidra Aziz, Ali Hamza, **Moazama Batool**, Saad Alkahtani,

- Mian Nadeem Riaz, Asma Ashraf. 2023. Curative effects of kaempferide on cadmium-instigated hepatotoxicity in male albino rats. *Journal of King Saud University – Science*, 35 (8): 1-6- 102885. <https://doi.org/10.1016/j.jksus.2023.102885>. (W IF=3.8)
45. Saima Naz, Hafiz Zeshan Wadood, **Moazama Batool**, Ahmad Manan Mustafa Chatha. 2023. Efficacy of Insect Feed as Protein Source in Aqua Feed and its Impact on Growth Performance of Fish. *BioScientific Review (BSR)*, 5(2): 39-55. <https://doi.org/10.32350/bsr.52.05> (Y Category)
 46. M. Hussain, F. Hameed, K. Aftab, R. Iqbal, N. Arif, **M. Batool**, R. Iqbal, S. Toufeeq, A. Syed, A.M. Elgorban, R. Eswaramoorthy. 2023. Prospects of *Poikelocercus pictus* (Orthoptera: Acrididae) as an Alternative Protein Source for Rhode Island Red Chicken. *Journal of King Saud University – Science*, 35(4):1-5. 102623. <https://doi.org/10.1016/j.jksus.2023.102623>- (W IF: 3.829)
 47. Muhammad Umar Ijaz, Tahreem Fatima, **Moazama Batool**, Rabia Azmat, Ambreen Sadaf, Namra Ghafoor, Mehrab Khalil. 2023. Therapeutic Efficacy of Chrysoeriol on Doxorubicin-induced Liver Damage by Improving Biochemical and Histological Profile in Rats. *Journal of Food and Nutrition Research*, 11 (1):57-62. [DOI:10.12691/jfmr-11-1-6](https://doi.org/10.12691/jfmr-11-1-6)- (X IF:1.25)
 48. Mahroze Fatima, Syed Zakir Hussain Shah, Muhammad Afzal, Shazia Shamas, Sadia Roshan, **Moazama Batool** and Muhammad Bilal. 2023. Assessment of Dietary Requirement of Vitamin E for Rohu, *Labeo rohita* fingerlings fed practical diet. *Pakistan Journal of Zoology*, 55(2):581-590. <https://dx.doi.org/10.17582/journal.pjz/20211111051119>- (X IF:0.831)
 49. Amber Iqbal, Mahroze Fatima, Syed Z. H. Shah, Muhammad Afzal, **Moazama Batool**, Naheed Bano, Ayesha Khizar, Maida Mushtaq, Sumbal Iqbal. 2023. Effect of Refrigerated Storage on Fillet Quality of Vitamin E Fed Rohu, *Labeo rohita*. *Pakistan Journal of Zoology*, 55(2): 545-553. <https://dx.doi.org/10.17582/journal.pjz/20211110061150>- (X IF:0.831)
 50. Moazama Batool, Hijab Tariq, Huma Naz, Sajida Mushtaq, Sadia Maalik and Mamoon Mahmood. 2022. Arsenic induced toxic impacts on the growth performance and haematological aspects of rahu (*Labeo rohita*). *Pakistan Research Journal of Biological Sciences*, 1(2): 1- 15. ISSN:3005-6845
 51. Sadia Maalik, Sajida Mushtaq, **Moazama Batool**, Nazia Ehsan, Naheed Bano and Ayesha Hafeez. 2022. Approximation of agricultural loss caused by pernicious larvae of *Helicoverpa armigera* (Noctuidae; Lepidoptera) by analysis of feeding potential on selected plants. *Journal of Entomological Research*, 46 (1): 24-27. [10.5958/0974-4576.2022.00003.2](https://doi.org/10.5958/0974-4576.2022.00003.2)- (Y Category)
 52. M.U. Ijaz, M. **Batool**, K.A. Al-Ghanim, S. Shahzadi, A. Samad, A. Ashraf, F. Al-Misned, A. Mustafa, S. Mahboob. 2022. A study on the curative effect of nobiletin on paraquat induced toxicity in rat. *Journal of King Saud University – Science*, 34:1-101673. <https://doi.org/10.1016/j.jksus.2021.101673>. (W IF:4.011)
 53. **Moazama Batool**, Sajid Abdullah, Huma Naz, Mubashar Hussain, Sadia Maalik, Sajida Mushtaq, Tanveer Ahmed and Laiba Shafique. 2021. Evaluation of Growth Performance and Bioaccumulation Pattern of Metals in Catfish Species, *Channa marulius* and *Wallago attu* under Cadmium and Chromium Toxicity. *Punjab University Journal of Zoology*, 36(2): 125-130. <https://dx.doi.org/10.17582/journal.pujz/2021.36.2.125.130>. (Y Category)

54. Muhammad Umar Ijaz, **Moazama Batool**, Afsheen Batool, K. A. Al-Ghanimd, Sara Zafar, Asma Ashraf, F. Al-Misned, Z. Ahmed⁴, Sabahat Shahzadi, Abdul Samad, P. Virik, N. Al-Mulhm and S. Mahboob. 2021. Protective effects of vitexin on cadmium-induced renal toxicity in rats. Saudi Journal of Biological Sciences, 28(10): 5850-5864. <https://doi.org/10.1016/j.sjbs.2021.06.040>. (W IF:4.219)
55. Muhammad Umar, Muhammad Arshad, Mubashar Hussain, **Moazama Batool** and Muhammad Faheem Malik. 2021. Assessment of Avifauna and Water Quality Parameters of Mangla Wetland, Azad Kashmir, Pakistan. Pakistan Journal of Zoology, 53(3):809-819. <https://dx.doi.org/10.17582/journal.pjz/201704031>. (X IF:0.831)
56. M. Umar Ijaz, **M. Batool**, A. Ashraf, M. Hussnain Siddique, S. Zafar, S. Muzzamil, F. Ayaz, A. Samad, K. Al-Ghanim, S. Mahboob. 2020. A study on the Potential reprotoxic effects of thimerosal in male albino rats. Saudi Journal of Biological Sciences, 27 (10): 2798-2802. <https://doi.org/10.1016/j.sjbs.2020.06.045>. (W IF=2.802)
57. Hussain, M., Younas, M., Malik, M.F., Umar, M., Kanwal, M. and **Batool, M.**, 2020. Spatio-temporal diversity of dung beetles in selected locales of Sialkot, Punjab, Pakistan. Punjab University Journal of Zoology, 35(1): 35-42. <https://dx.doi.org/10.17582/journal.pujz/2020.35.1.35.42>. (Y Category)
58. Sumaira Abbas, Muhammad Sultan Haider, Fatima Kafayet, Sana Ashraf, Atifa Masood and **Moazma Batool**. 2020. Effect of Citrus Peels Mingled Diets on *Carassius auratus* Coloration. Pakistan Journal of Zoology, 52(2):519-524. <https://dx.doi.org/10.17582/journal.pjz/20161107041109>. (X IF:0.79)
59. Huma Naz, Sajid Abdullah, Khalid Abbas, Wardah Hassan, **Moazama Batool**, Shakeela Perveen, Sadia Maalik and Sajida Mushtaq. 2019. Toxic effect of insecticides mixtures on antioxidant enzymes in different organs of fish, *Labeo rohita*. Pakistan Journal of Zoology, 51(4): 1355-1361. <http://dx.doi.org/10.17582/journal.pjz/2019.51.4.1355.1361>. (X IF:0.79)
60. **Moazama Batool**, Sajid Abdullah, Muhammad Umar Ijaz, Safina Kousar, Mahroz Fatima, Rahila Ilyas, Faiza Ambreen and Komal Tayyab Mughal. 2018. Heavy metals (cadmium and lead) induced oxidative stress in *Channa marulius* and *Wallago attu* during acute toxicity experiments. Pakistan Journal of Zoology, Suppl. Ser., (13): 74-79. <http://dx.doi.org/10.17582/journal.pjz/2018.SupplSer13>. (X IF:0.54)
61. Faiza Ambreen, Muhammad Javed, Sidra Abbas, Safina Kousar, Rahila Ilyas and **Moazama Batool**. 2018. DNA damage in peripheral erythrocytes of *Ctenopharyngodon idella* during chronic exposure to pesticide mixture. Pakistan Journal of Zoology, Suppl. Ser., (13): 19-25. <http://dx.doi.org/10.17582/journal.pjz/2018.SupplSer13>. (X IF:0.54)
62. Rahila Ilyas, Muhammad Javed, Safina Kousar, Faiza Ambreen, **Moazama Batool** and Hamda Azmat. 2018. Genotoxicity evaluation of dietary bifenthrin through comet assay in peripheral blood erythrocytes of fresh water fish, *Cirrhina mrigala*. Pakistan Journal of Zoology, Suppl. Ser., (13): 26-31. <http://dx.doi.org/10.17582/journal.pjz/2018.SupplSer13>. (X IF:0.54)
63. Safina Kousar, Muhammad Javed, Faiza Ambreen, Asma Ashraf, Rahila Ilyas, **Moazama Batool** and Hamda Azmat. 2018. Assessment of copper induced genotoxicity in peripheral erythrocytes of *Cirrhina mrigala* by using comet assay and micronucleus test. Pakistan Journal of Zoology, Suppl. Ser., (13): 65-73. <http://dx.doi.org/10.17582/journal.pjz/2018.SupplSer13>. (X IF:0.54)

64. Muhahammad Sultan Haider, Arshad Javid, Hamda Azmat, Sumaira Abbas, Sana Ashraf, Muhammad Altaf, Usman Atique, Sonia Iqbal, Khalid Javid Iqbal and **Moazma Batool**. 2018. Effect of processed fish waste on growth rate and digestive enzymes activities in *Cyprinus carpio*. Pakistan Journal of Zoology, Suppl. Ser., (13): 191-198. <http://dx.doi.org/10.17582/journal.pjz/2018.SupplSer13>. (X IF:0.54)
65. Huma Naz, Sajid Abdullah, Sidra Naz, Sidra Abbas, Wardah Hassan, Shakeela Parveen, **Moazama Batool** and Laiba Shafique. 2018. Comparative assessment of the acute toxicity, behavior and Catalase activity in *Cirrhina mrigala* exposed to Fe+Ni+Pb+Zn mixture. Punjab University Journal of Zoology, 33(1): 91-97. <http://dx.doi.org/10.17582/pujz/2018.33.1.91.97>. (Y Category)
66. M. Ghazanfar, M. Hussain, Z. Abbas and **M. Batool**. 2017. Diversity, composition and distribution of dung beetle fauna in croplands and pastures of Jhelum, Punjab, Pakistan. Pakistan Journal of Science, 69 (4): 369-374. <https://www.researchgate.net/publication-> (Z Category)
67. K. Tayyab., M. Afzal, M. Iqbal, A. Arshad, S. Aslam and **M. Batool**. 2017. Enhanced digestibility of Phytase treated canola meal based diet for *Labeo rohita* fingerlings. Journal of Animal and Plant Sciences, 27(4): 1386-1393. (Y IF:0.38)
68. Hassan, W., S. Abdullah, K. Abbas, **M. Batool** and S. Yaqoob. 2015. The effect of sub-lethal level of dietary copper and cadmium on the growth performance and oxidative stress in *Cirrhina mrigala*. Pakistan Journal of Agricultural Sciences, 52(3): 789-794. (X IF:1.049)
69. **Batool, M.**, S. Abdullah and K. Abbas. 2014. Antioxidant enzymes activity during acute toxicity of chromium and cadmium to *Channa marulius* and *Wallago attu*. Pakistan Journal of Agricultural Sciences, 51(4): 1117-1123. (X IF:1.054)
70. **Batool, M.**, S. Abdullah and M. Javed. 2014. Behavioral intoxication of *Channa marulius* and *Wallago attu* during acute exposure of cadmium and copper. Pakistan Journal of life and social Sciences, 12(1): 7-15. (Y Category)
71. A. Shafiq, S. Abdullah, M. Javed, S. Hayat and **M. Batool**. 2012. Effect of combined exposure of water-borne and dietary nickel on the growth performance of *Cirrhina mrigala*. Journal of Animal and Plant Sciences, 22(2): 425-430. (Y IF:0.63)

Total Impact Factor=109.54

PUBLISHED BOOK CHAPTERS:

1. Ain QU, **Batool M**, Sultan H, Mahmood M, Talib F and Bano S, 2024. Role of prebiotics and probiotics in biomedical sciences. In: Farooqi SH, Aqib AI, Zafar MA, Akhtar T and Ghafoor N (eds), Complementary and Alternative Medicine: Prebiotics and Probiotics. Unique Scientific Publishers, Faisalabad, Pakistan, pp: 12-20. ISBN: 978-969-2201-15-5. <https://doi.org/10.47278/book.CAM/2024.155>.
2. **Batool M**, Ain QU, Bano S, Mahmood M, Sultan H and Talib F, 2024. Overview of nanoparticles and their biomedical applications. In: Ahmed R, Khan A, Abbas RZ, Farooqi SH and Asrar R (eds), Complementary and Alternative Medicine: Nanotechnology-II. Unique Scientific Publishers, Faisalabad, Pakistan, pp: 180-188. ISBN: 978-969-2201-20-9. <https://doi.org/10.47278/book.CAM/2024.244>.

3. Ain Qu, **M Batool** & S Imran, 2024. Toxicology implications of endocrine disrupting chemicals on reproduction. In: Zoology: Advancements and Research Trends (Ijaz MU, N Ehsan, M Imran & S Yousaf, eds): FahumSci, Lahore, Pakistan, pp: 44-51. ISBN: 978-627-7745-02-8. <https://doi.org/10.61748/Zool.2024/07>.
4. Ain Qu, **M Batool**, F Talib, M Mahmood & S Imran, 2024. Toxicology consequences of heavy metal exposure on male fertility. In: Zoology: Advancements and Research Trends (Ijaz MU, N Ehsan, M Imran & S Yousaf, eds): FahumSci, Lahore, Pakistan, pp: 52-60. ISBN: 978-627-7745-02-8. <https://doi.org/10.61748/Zool.2024/08>.
5. **Batool M**, QU Ain & S Imran, 2024. Fish immunology: Understanding the interaction between pollutants and the immune system. In: Zoology: Advancements and Research Trends (Ijaz MU, N Ehsan, M Imran & S Yousaf, eds): FahumSci, Lahore, Pakistan, pp: 206-214. ISBN: 978-627-7745-02-8. <https://doi.org/10.61748/Zool.2024/26>.

ACCEPTED BOOK CHAPTERS:

1. Bano S, Batool M, Haider R, Tahir M, Saeed K, Tanveer A, Aftab S and Nazir S, 2025. Role of amino acids in stress management and growth in aquatic species. Holistic Health: xx-xx. <https://doi.org/10.47278/book.HH/2025.xxx> **(In Press)**
2. **HOH-551**-Batool M, Ain Q, Rauf S, Maalik S, Mushtaq S, David M, Saeed K, Mahmood M, Talib F, 2025. Pollution and Mental Health: The Hidden Psychological Impact. Holistic Health: **Accepted**
3. **HOH-106**-Ain Q, David M, Batool M, Sultan H, Talib F, Mahmood M, Rauf S, Saeed K, 2025. Synergistic Effects: Combined Herbal Remedies and Essential Oils for Enhanced Therapeutic Outcomes. Holistic Health: **Accepted**
4. **HOH-242**- Maalik S, Hafeez A, Mushtaq S, Batool M, Butt MN, Ehsan N, Bano N, Saeed K, 2025. Reforestation and Afforestation: Reviving the Green Earth. Holistic Health: **Accepted**
5. **HOH-462**-David M, Ain Q, Batool M, Talib F, Mahmood M, Rauf S, Saeed K, 2025. Hormonal imbalance: their role in female and male reproductive disorders. Holistic Health: **Accepted**
6. **HOH-552**-Mushtaq S, Khan FT, Maalik S, Batool M, Ehsan N, Bano N, Umair K, 2025. Food Chain Contaminants: How Pollution Infiltrates Our Diet. Holistic Health: **Accepted**

ORAL PRESENTATIONS/PUBLICATION IN INTERNATIONAL CONGRESSES:

1. **O-21/ICAZ-2024** -Mamoona Mahmood, **Moazama Batool**, Qurat ul Ain, Asma Aziz, Sadia Maalik, Sajida Mushtaq, Mehwish David. Effects of di-butyl and di-isononyl phthalate on antioxidant enzyme status and DNA damage in *Cyprinus carpio* (Common carp). 7th International Conference on Applied Zoology organized by The Applied Zoological Society of Pakistan Held on 22 -23rd October 2024.
2. **O-109/ICAZ-2024**- Fatima Talib, Qurat-ul-Ain, **Moazama Batool**, Mehwish David, Ayesha Saddiqa, Sajida Mushtaq, Sadia Maalik. Therapeutic Potential of Vitamin C and Zinc against Furan Induced Reproductive Toxicity in Rats. 7th International Conference on Applied Zoology organized by The Applied Zoological Society of Pakistan Held on 22 -23rd October 2024.

3. **O-93/ICAZ-2024-** Sadia Maalik, Zainab Sarfraz, Sajida Mushtaq, **Moazama Batool**, Naheed Bano, Ayesha Hafeez. PCR bases SCAR primer development using RAPD primers for *Chrysolina oricalcia* (order; Coleoptera). 7th International Conference on Applied Zoology organized by The Applied Zoological Society of Pakistan Held on 22 -23rd October 2024.
4. **IC-SOSDG-24-Moazama Batool**, Qurat Ul Ain, Saiqa Rauf, Mehroz Khalid, Fatima Siddique. Assessment of Insecticides Induced Organ Impairment in *Cyprinus Carpio* Through Biochemical and Histological Analysis. 6th International Conference SCIENTIFIC OUTLOOK OF SUSTAINABLE DEVELOPMENT GOALS (IC-SOSDG-24) organized by Women University Mardan held on 15-16th January, 2024.
5. **IC-SOSDG-24-Qurat Ul Ain, Moazama Batool**, Hafsa Sultan, Jwaher, Hira. Histopathological Alterations and Oxidative Stress Associated with Chlorpyrifos and Bifenthrin in *Hypophthalmichthys Molitrix*. 6th International Conference SCIENTIFIC OUTLOOK OF SUSTAINABLE DEVELOPMENT GOALS (IC-SOSDG-24) organized by Women University Mardan held on 15-16th January, 2024.
6. **O-16/ICAZ-2023-** Sadia Maalik, Sajida Mushtaq, Naheed Bano, **Moazama Batool**, Nazia Ehsan and Ayesha Hafeez. Development of SCAR marker using PCR based RAPD primers for Molecular based identification of *Cotesia glomerata* (Braconidae: Hymenoptera). **6th International Conference on Applied Zoology (ICAZ-2023)** organized by Department of Zoology. Govt. College University Faisalabad in collaboration with the Applied Zoological Society of Pakistan (AZSP), held on 18-19 December, 2023.
7. **WD-EST23-Wajeeha Tanweer, Sajida Mushtaq, Sadia Maalik, Qurat Ul Ain and Moazama Batool**. Toxicity of insecticides bifenthrin and fipronil against *Oxya japonica* (Orthoptera: Acrididae). **1st International Conference on Women Development in Engineering, Science & Technology (WD-EST'23)** organized by Women Engineer Development Committee, Pakistan Engineering Council & Mehran University of Engineering & Technology, Jamshoro, held on 03-05 October, 2023.
8. **WD-EST23-Aleena Yousaf, Sadia Maalik, Sajida Mushtaq, Moazama Batool and Qurat Ul Ain**. Effect of selected insecticides on Coleopteran foliage fauna of district Sialkot. **1st International Conference on Women Development in Engineering, Science & Technology (WD-EST'23)** organized by Women Engineer Development Committee, Pakistan Engineering Council & Mehran University of Engineering & Technology, Jamshoro, held on 03-05 October, 2023.
9. **PC-26-Tasneem Kauser, Sajida Mushta, Sadia Maalik, Moazama Batool, Qurat Ul Ain and Naheed Bano**. Diversity of Aphids and assessment of potential of their selected natural enemies in district Sialkot, Punjab, Pakistan. 41st PAKISTAN CONGRESS OF ZOOLOGY (International) March 16-18, 2023, Organized by Institute of Zoology, University of the Punjab, Lahore.
10. **RGVASH-2022-SA02-Fizza Ali, Sajida Mushtaq, Sadia Maalik, Moazama Batool, Naheed Bano, Nazia Ehsan**. Diversity and relative abundance of braconid larval parasitoid (Hymenoptera: braconidae) of selected agro-ecosystems of District Sialkot. International Conference on Remote Sensing and GIS Integrated in Veterinary, Agriculture and Health Sciences. Organized by Faculty and Animal Sciences, MNS-University of Agriculture, Multan. 23&24 February, 2022.

11. **CBGP-149**-Zunera Abbas, Sajid Abdullah, Huma Naz, Khalid Abbas, **Moazama Batool** and Wardah Hassan. Evaluation of Chromium induced genotoxicity in blood erythrocytes of fish, *Wallago attu* by micronuclei assay. 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
12. **CBGP-150**- Huma Naz, Sajid Abdullah, Khalid Abbas, **Moazama Batool**, Wardah Hassan, Shakeela Perveen and Laiba Shafique. Assessment of nuclear abnormalities in erythrocytes of *Labeo rohita* exposed to acute concentration of Endosulfan+Chlorpyrifos mixture. 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
13. **CBGP-164**- Rabia Khalid, **Moazama Batool**, Sadia Maalik, Sajida Mushtaq, Huma Naz and Mehwish Qamar. Evaluation of serum biochemical parameters of *Cirrhinus mrigala* under acute exposure to arsenic. 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
14. **CBGP-165**-Ayesha Asghar, Sadia Maalik, Sajida Mushtaq, Noreen Rana, **Moazama Batool**, Nazia Ehsan and Mehwish Qamar. Estimation of faunal diversity affected by heavy metal, Cadmium and Lead contamination in rice crop irrigated with tanneries wastewater in district Sialkot. 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
15. **CBGP-166**-Omema Qadeer, Sajida Mushtaq, Sadia Maalik, Noreen Rana, **Moazama Batool**, Nazia Ehsan and Mehwish Qamar. Study of effects of selected metals cadmium and lead on insect fauna of *Brassica* crop irrigated with tanneries wastewater in district Sialkot. 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
16. **ENT-60**- Rafia Ashraf, Sajida Mushtaq, Sadia Maalik, **Moazama Batool** and Huma Naz. Insect faunal diversity from *Brassica* crop along with metals accumulation (Chromium and Nickel) in them in district Sialkot. 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
17. **FEWFM-24**-Sadia Sadat, Sadia Maalik, Sajida Mushtaq, Noreen Rana, **Moazama Batool**, Nazia Ehsan, Naheed Bano and Huma Naz. Investigation of the effect of selected natural (Black Cumin) and synthetic preservative (Sodium Acetate) on protein and fat content of *L. rohita*. 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
18. **FEWFM-25**-Urooj Malik, Sajida Mushtaq, Sadia Maalik, Noreen Rana, **Moazama Batool**, Nazia Ehsan, Naheed Bano and Huma Naz. Effect of Cinnamon and Garlic on protein and fat contents of Rohu (*Labeo rohita*). 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
19. **POSTER-123**-Hijab Tariq, **Moazama Batool**, Huma Naz, Sadia Maalik, Sajida Mushtaq and Mehwish Qamar. Assessment of toxic effect of arsenic on growth and haematological parameters of *Labeo rohita* during sub-lethal exposure. 40th PAKISTAN CONGRESS OF ZOOLOGY (International) March 10-12, 2020.
20. **MEET-2020-STM-94**-Sajida Mushtaq, Ayesha Asghar, Omema Qadeer, Sadia Maalik, **Moazma Batool** and Humma Naz. 2020. Assessment of concentration of selected metals Cadmium and Lead and their impact on insect faunal diversity of Rice and *Brassica* crop cultivated near tannery area of district Sialkot. 1st Multidisciplinary National Conference held on March 4, 2020. At UNIVERSITY OF JHANG.

21. Imza Rouf, Sadia Maalik, Sajida Mushtaq, **Moazama Batool**, Saima Imran and Salma Khurshid. Effect of drying on ether extract and protein contents of Rohu (*Labeo rohita*) and Mori (*Cirrhinus mrigala*). 39th PAKISTAN CONGRESS OF ZOOLOGY (International) March 4-6, 2019.
22. Ujala Kinat, Sajida Mushtaq, Sadia Maalik, **Moazama Batool** and Saima Imran. Effects of freezing on ether extract and protein contents of Rohu (*Labeo rohita*) and Mori (*Cirrhinus mrigala*). 39th PAKISTAN CONGRESS OF ZOOLOGY (International) March 4-6, 2019.
23. Uzma Nazir, Sajid Abdullah, Huma Naz, Khalid Abbas, Wardah Hassan and **Moazama Batool**. 2019. Assessment of nuclear abnormalities in peripheral erythrocytes of carnivorous fish, *Wallago attu* exposed to lead. 39th PAKISTAN CONGRESS OF ZOOLOGY (International) March 4-6, 2019.
24. Abeera Razzaq, Sajid Abdullah, Huma Naz, Khalid Abbas, Wardah Hassan and **Moazama Batool**. 2019. Micronuclei Assay: A suitable tool for evaluating the heavy metals (Cr+Co) induced genotoxicity in fish *Labeo rohita*. 39th PAKISTAN CONGRESS OF ZOOLOGY (International) March 4-6, 2019.
25. Sobia Sadiq, Sadia Maalik, Sajida Mushtaq, **Moazama Batool** and Suneela Nasrullah. Assessment of diversity and relative abundance of insect fauna associated with *Triticum aestivum* by using quadrat method from district Sialkot. 39th PAKISTAN CONGRESS OF ZOOLOGY (International) March 4-6, 2019.
26. Anam Sarwar, Sajida Mushtaq, Sadia Maalik, **Moazama Batool** and Suneela Nasrullah. Study of eco-biology, diversity and relative abundance of insect fauna of *Zea mays* (maize) and *Trifolium alexandrinum* (Berseem) by using sweep method from district Sialkot. 39th PAKISTAN CONGRESS OF ZOOLOGY (International) March 4-6, 2019.
27. Suneela Nasrullah, Sadia Maalik, Sajida Mushtaq, **Moazama Batool**, Mehwish Qamar and Anam Sarwar. Estimation of diversity and relative abundance of Berseem crop in district Sialkot by using quadrat method. 39th PAKISTAN CONGRESS OF ZOOLOGY (International) March 4-6, 2019.
28. **IFAC-2019-FPMVA-08** Salma Khurshid, Sadia Maalik, Sajida Mushtaq, Naheed Bano and **Moazama Batool**. Effect of selected preservatives on ether extracts and proteins of Rohu (*Labeo rohita*) and Mori (*Cirrhinus mrigala*). International Fisheries and Aquaculture Conference-2019, January 30-31, 2019.
29. **IFAC-2019-FPMVA-09** Saima Amin Bhutta, Sajida Mushtaq, Sadia Maalik, Naheed Bano and **Moazama Batool**. Effect of salting on ether extract and protein of rohu (*Labeo rohita*) and Mori (*Cirrhinus mrigala*). International Fisheries and Aquaculture Conference-2019, January 30-31, 2019.
30. **IFAC-2019-FNF-30** Mahroze Fatima, Muhammad Afzal, Syed Zakir Hussain Shah, Noor Khan, Hamda Azmat, Fayyaz Rasool and **Moazama Batool**. Effect of dietary vitamin E on growth, antioxidant defense mechanism and fatty acid profile of *Labeo rohita*. International Fisheries and Aquaculture Conference-2019, January 30-31, 2019.
31. **IFAC-2019-FHD-39** Huma Naz, Sajid Abdullah, Khalid Abbas, Wardah Hassan, **Moazama Batool**, Shakeela Perveen and Sajida Mushtaq. Responses of oxidative stress dynamics to bifenthrin, chlorpyrifos and endosulfan in three economically important fish

species *Catla catla*, *Cirrhina mrigala* and *Labeo rohita*. International Fisheries and Aquaculture Conference-2019, January 30-31, 2019.

32. **IFAC-2019-FHD-40 Moazama Batool**, Sajid Abdullah, Qurra-tul-ain, Huma Naz, Sadia Maalik and Sajida Mushtaq. Purification and partial characterization of Superoxide dismutase (SOD) enzyme from chronic cadmium exposed carnivorous fish organs (*Channa marulius*). International Fisheries and Aquaculture Conference-2019, January 30-31, 2019.
33. **IFAC-2019-FHD-41** Huma Naz, Sajid Abdullah, Khalid Abbas, Wardah Hassan, Shakeela Perveen, **Moazama Batool** and Irfan Baboo. Evaluation of antioxidant enzymes in different organs of three fish species *Catla catla*, *Cirrhina mrigala* and *Labeo rohita* under chronic exposure of insecticides mixture (Bifenthrine, Chlorpyrifos and Endosulfan). International Fisheries and Aquaculture Conference-2019, January 30-31, 2019.
34. **IFAC-2019-FHD-42** Huma Naz, Sajid Abdullah, Khalid Abbas, Muhammad Anjum Zia, **Moazama Batool**, Irfan Baboo and Sadia Maalik. Kinetic and thermodynamic characterization of Superoxide dismutase from liver of *Labeo rohita* under stress of Pb+Cr mixture. International Fisheries and Aquaculture Conference-2019, January 30-31, 2019.
35. **Moazama Batool**, Sajid Abdullah, Sadia Maalik, Sajida Mushtaq, Mehroze Fatima and Huma Naz. 2018. Effect of chronic exposure of metals on the growth performance of *Channa marulius* and *Wallago attu*. 38th Congress of Zoology, 27 feb- 1st March, 2018.
36. Mehwish Qamer, Sadia Maalik, Sajida Mushtaq, Naheed Bano, **Moazama Batool** and Saima Imran. Effects on corn based feed ingredients with varying protein levels on growth performance of *Labeo rohita*. 38th Congress of Zoology. 27 feb- 1st March, 2018.
37. Ujala Kainat, Sadia Maalik, Sajida Mushtaq, Naheed Bano, **Moazama Batool** and Imza Rauf. Effects of freezing on ether extract and protein contents of Rohu (*Labeo rohita*) and Mori (*Cirrhinus mrigala*). 38th Congress of Zoology. 27 feb- 1st March, 2018.
38. Mubashra Ikram, Sajid Abdullah, Huma Naz, Khalid Abbas, Wardah Hassan and **Moazama Batool**. Behavioral abnormalities in *Labeo rohita* under the acute exposure of organophosphate insecticide, chlorpyrifos. 38th Congress of Zoology. 27 feb- 1st March, 2018.
39. Muhammad Shahbaz, Sajid Abdullah, Huma Naz, Khalid Abbas, Wardah Hassan, **Moazama Batool** and Sana Mehmood. 2018. Effect of dietary vitamin E supplementation on catalase activity of grass carp (*Ctenopharyngodon idella*). 38th Congress of Zoology, 27 feb- 1st March, 2018.
40. Fatima Tufail, Sajid Abdullah, Huma Naz, Khalid Abbas, Wardah Hassan and **Moazama Batool** and Shakeela Perveen. Partial Purification and kinetic characterization of renal catalase from carnivore fish, *Channa striata* exposed to pesticides mixture, deltamethrin+endosulfan. 38th Congress of Zoology, 27 feb- 1st March, 2018.
41. Made Poster and Oral Presentation in the 6th International Fisheries Symposium and Expo-2017 held at Falit Hotel, Lahore on 8 to 9 Feb, 2017.
42. Made Oral Presentation in the 37th Pakistan Congress of Zoology (International) held at GC University, Faisalabad, Pakistan on Feb 28 to 2nd March, 2017.

43. Made Oral Presentation in the “1st International Conference on Advancements in Biotechnology” held at GC Women University Faisalabad, Pakistan on 30-31st March, 2016.
44. **Moazama Batool**, Sajid Abdullah, Sadia Maalik, Sajida Mushtaq and Wardah Hassan. Response of antioxidant enzymes of freshwater fish *Channa marulius* and *Wallago attu* to acute metal (Cr, Cu, Cd and Pb) exposures. Proceedings of 35th Pakistan International Congress of Zoology, March 1 – 4, 2015.
45. Warda Hassan, Sajid Abdullah, Khalid Abbas, Huma Naz and **Moazama Batool**. Acute toxicity of water borne nickel and manganese mixture to the fish *C. idella*. Proceedings of 35th Pakistan International Congress of Zoology, March 1 – 4, 2015.
46. Huma Naz, Sajid Abdullah, Khalid Abbas, Warda Hassan and **Moazama Batool**. Studies on the toxic effects of iron, zinc, lead and nickel mixture to the fish *C. mrigala*. Proceedings of 35th Pakistan International Congress of Zoology, March 1 – 4, 2015.
47. Sadia Maalik, Shahnaz Akhtar Rana, Naureen Rana, Sajida Mushtaq, Nazia Ehsan and **Moazama Batool**. Estimation of life cycle and foraging efficiency of *Pieris brassicae* on four crop plants. Proceedings of 35th Pakistan International Congress of Zoology, March 1 – 4, 2015.
48. **Moazama Batool**, Sajid Abdullah and Khalid Abbas. Acute Toxicity of cadmium chloride ($\text{CdCl}_2 \cdot \text{H}_2\text{O}$) on *Channa marulius* and *Wallago attu* and their behaviour responses. Proceedings of 33rd Pakistan International Congress of Zoology, April 2-4, 2013.
49. **Moazama Batool**, Sajid Abdullah and Sobia Nawaz. Studies on the activities of antioxidant enzymes in fish viz. *Labeo Rohita* and *Cirrhina Mrigala*. Proceedings of 32nd Pakistan International Congress of Zoology, March 6 – 8, 2012.
50. Sajid Abdullah, **Moazama Batool** and Munizah Javaid. Studies on the digestive enzyme, Amylase in fish viz. *Channa marulius* and *Ctenopharyngodon idella* with different nutritional habits. Proceedings of 32nd Pakistan International Congress of Zoology, March 6 – 8, 2012.
51. **Moazama Batool**, Sajid Abdullah and Muhammad Javed. Acute toxicity of zinc to *Catla catla* and *Cirrhina mrigala*. Made Oral Presentation in Proceedings of 31st Pakistan International Congress of Zoology, April 19 – 21, 2011.
52. **Moazama Batool**, Muhammad Javed, Sajid Abdullah and Sikander Hayat. Response of *Catla catla*, *Labeo rohita* and *Cirrhina mrigala* during sub-lethal chronic exposure of iron. Made Oral Presentation in Proceedings of 30th Pakistan International Congress of Zoology, March 2 – 4, 2010.
53. **Moazama Batool**, Muhammad Javed, Sajid Abdullah and Sikander Hayat. Studies on limnological parameters of semi-intensive iron stressed fish culture ponds. Proceedings of 4th National Symposium on Fisheries, March 18 -19, 2009.

WORKING AS:

- ❖ Coordinator of MS Zoology from Session 2021-23 onwards, Department of Zoology, GCWUS
- ❖ Incharge of Zoology Research Lab, GCWUS.

- ❖ Workload Incharge of Department of Zoology, GCWUS.
- ❖ Timetable Incharge of Department of Zoology, GCWUS.
- ❖ Member of Departmental Research Program Committee (DRPC) of Department of Zoology, GCWUS.
- ❖ Member of technical Committee (For equipment), Department of Zoology, GCWUS.
- ❖ Member of Students Counselling Committee Department of Zoology, GCWUS
- ❖ Member of Curriculum Committee, Department of Zoology, GCWUS.
- ❖ Member of Zoological Society, Department of Zoology, GCWUS.
- ❖ Member of Discipline Committee, Department of Zoology, GCWUS

WORKED AS:

- ❖ Convener of Dengue Management Committee, Govt. College Women University Sialkot from 03-08-2021 to
- ❖ Focal Person for Prospectus, Department of Zoology, GCWUS.
- ❖ Focal person of MSc Admission Committee, Department of Zoology, GCWUS
- ❖ MSc Coordinator Department of Zoology, GCWUS, 2017 to 2019.
- ❖ Focal person of TISC, GCWUS.
- ❖ Additional Charge of Manager Intellectual Property/legal Services of GCWUS Since 23-09-2020.
- ❖ Member Admission Scrutiny Committee at GCWUF.
- ❖ Member of Self-Assessment Report, Department of Zoology, GCWUF.
- ❖ Member Dengue Control Committee, GCWUF.
- ❖ Member Dengue Seminar Committee, GCWUF.
- ❖ Member flex and poster preparation Committee, GCWUF.
- ❖ Member Hall Management Committee for the 1st International Conference on Advancements in Biotechnology.

SEMINARS/CONGRESS/WORKSHOPS ATTENDED:

- Organized “**Awareness Seminar and Fund Raising Campaign on Hemophilia**” as Organizing Committee Member, at GCWUS under Blood donor and health society, GCWUS Dated 05 December 2024.
- Organized a one day Seminar on "**Shrimp Farming**" with Walk/Project/Cooking Competition as a **program Coordinator** on **World Fisheries Day** held on 3rd December 2024 at Department of Zoology at GCWUS.
- Organized a Poster Competition on "**Life Below Water**" (SDG-14) as a **program Coordinator** held on 3rd December 2024 at Department of Zoology at GCWUS.
- Organized a Poster Competition on "**Life on Land**" (SDG-15) as an **organizing Committee Member** held on 3rd December 2024 at Department of Zoology at GCWUS.
- Organized a seminar as Organizing Committee Member of Anti-dengue campaign (Seminar/Walk) on “**Collaborative and Comprehensive Approaches towards Dengue Management**” held on 06 November 2024 at Government College Women University Sialkot.
- Organized “**Pink Ribbon Campaign**” and Seminar on “**Awareness of Breast Cancer**” as Organizing Committee Member, held at GC Women University Sialkot, 18th October, 2024.

Organized by Blood Donor and Health Society in Collaboration With Social Work and Pink Ribbon Societies, GCWUS.

- Organized two Days Hands on Training on “**Handling of Laboratory Animals in Biomedical Research**” 15-16th October, 2024. Organized by Zoological Society in Collaboration with ORIC, GCWUS.
- Certificate of **Organizing Member** of “**Awareness seminar on Diabetes**” held on 05 December 2023 at Government College Women University Sialkot.
- Certificate of **Organizer** of “**Awareness seminar on AIDS**” held on 05 December 2023 (in celebration of World AIDS Day) at Government College Women University Sialkot.
- Organized a one day Seminar on “**Toxicity in Blue Life**” with Walk/Project/Model Competition as a **program Coordinator** on **World Fisheries Day** held on 28th November 2023 at Department of Zoology at GCWUS.
- Attended a Webinar on “**Navigating the pathways of publishing in High-quality journals**” Organized by Researcher Academy, Elsevier on Wednesday 08 November, 2023.
- Certificate of **Organizing Member** of Awareness seminar entitled “**Conjunctivitis Pink Eye Infection**” held on 18 October 2023 at Government College Women University Sialkot.
- Certificate of participation for ICESCO’S “**1st International Next Generation Sequencing Data Analysis Workshop**” organized by ICESCO/INTERGEN/CPMSATS on 28th September, 2023.
- Attended One Day Training on **ENDNOTE (Software)** organized by Department of Zoology, 3rd April, 2023 in Video Conference Room at Government College Women University Sialkot.
- Attended One Day Training Workshop titled “**Intellectual Property and Patent Filling**” Organized by Punjab Higher Education Commission on Tuesday dated 22-02-2023.
- Certificate of appreciation as member organizing committee of “**Seminar on Thalassemia**” held at GC Women University, Sialkot, 14th December 2022, Organized by Zoological Society, Blood Donor and Health Society and DSA.
- Certificate of appreciation as Organizer on “**Seminar on Breast Cancer Awareness**” held at GC Women University Sialkot, 18th October, 2022. Organized by Blood Donor and Health Society, Social Work Society, Pink Ribbon Youth Program by HEC, in collaboration with DSA, GCWUS.
- Organized a one day Seminar on ‘**Recant Trends in Fisheries and Aquaculture**’ with Walk/Project/Model Competition as a program Coordinator on **World Fisheries Day** held on November 30, 2022 by Department of Zoology at GCWUS.
- Organized an awareness Seminar as a Convener of Dengue Management Committee on ‘**Dengue Prevention and Control**’ on Dengue celebration day on 2n^d July, 2022 at GCWUS.

- Organized a seminar as a Focal Person of Dengue Management Committee on Awareness Seminar on **Dengue Prevention and Control** on 24 august, 2022 at GCWUS on Dengue week celebration (22 to 27 August).
- Attended training session on **Professional Development of Faculty 2022** organized by **GC Women University Sialkot**, funded by Higher Education commission held on June 20, 2022 to July 1, 2022.
- Organized a one day Project/Model Competition on **“Fish is Future of Protein”** as a programme Coordinator on World Fisheries Day held on December 08, 2021 by Department of Zoology at GCWUS.
- Organized a seminar for the purpose of **“Awareness of Dengue Fever amongst parents through students”** as a convener of Anti-dengue management committee held on December 02, 2021 by Department of Zoology at GCWUS.
- Attended a Seminar on **“Covid-19 and Vaccination Campaign in Italy at Glance”** held on **22nd November**, 2021 Organized by CIE Committee, GCWUS.
- Attended a Webinar on **“Protection of Intellectual Property: Filling, Process, and Prosecution of Patents”** held on **12th October 2021** Organized by Office of Dean ORIC and the Chemical Society of Pakistan at University of Management and Technology (UMT), Lahore.
- Attended 2 Days online Vital workshop on **“Using Patent system by Women Inventors”** Organized by World Intellectual Property Organization with collaboration of HEC held on 1st & 2nd of June, 2021.
- Attended a Webinar on ‘Global Importance of Parasite Disease Epidemiology and Anti-parasitic Drug Resistance in Animals and Humans’ on Friday, 2nd April 2021, with collaboration of ITSC, GCWUS.
- Attended the online **‘Elsevier-HEC Workshop on Journal indexing in Scopus’** at Higher Education Commission of Pakistan, on Thursday 21 January, 2021.
- Attended six days training on **“HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)”** at Central Research Laboratory, GCWUS, held on 14-16, 21-23 December, 2020.
- Attended Training Session for **Entry of Publications on Scopus organized by QEC**, GC Women University Sialkot, held on 24 September, 2020.
- Organized a seminar entitled **“Awareness for Prevention from Coronavirus”** held on February 14, 2020 by Department of Zoology at GCWUS.
- Organized a one day seminar on **“Potential of Fisheries in Pakistan”** as a programme Coordinator on World Fisheries Day held on November 29, 2019 by Department of Zoology at GCWUS.
- Certificate of active Participation in One day seminar on **“Dengue awareness”** Organized by Dengue committee and Zoological Society, GCWUS, October 09, 2019.

- Participated in One Day Training entitled “**Academic Programs and Teaching: Innovate to Lead**” held on March 02, 2019 organized by Quality Enhancement Cell, at GCWUS.
- Participation in “**International Fisheries & Aquaculture Conference-2019**” organized by Department of Fisheries & Aquaculture, University of Veterinary & Animal Sciences Lahore, January 30-31, 2019.
- Made Poster Presentation in the **International Fisheries and Aquaculture Conference-2019**, January 30-31, 2019.
- One day Hands-On Workshop on “**BIOSAFETY PRACTICES IN LABORATORY**” organized by Zoological Society, GCWUS in Collaboration with **National Academy of Young Scientists (NAYS) and ORIC, GCWUS**, April 12, 2018.
- One-day seminar on “**Role of Biochemistry in Improving Nutritional Status of Pakistani Women**” Organized by Department of Biochemistry, GC Women University Faisalabad on May 05, 2017.
- Certificate of active Participation in the **6th International Fisheries Symposium and Expo-2017** held at Falttis Hotel, Lahore on 8 to 9 Feb, 2017.
- **37th Pakistan Congress of Zoology** (International) held on 28 Feb to 2nd March, 2017 organized by GC
- National Training Workshop on “**Nanomaterials and One Day Symposium on Nanotechnology Research in Pakistan**” Organized by National Institute for Biotechnology and Genetics Engineering on (NIBGE) 7-9 November, 2016.
- “**1st International Conference on Advancements in Biotechnology**” jointly organized by GC Women University Faisalabad and AKHUWAT FIRST on 30-31st March, 2016.
- Two-day seminar on “**Biosafety and Bioethics in Academic Practices**” conducted by GC Women University Faisalabad on 23-24 August, 2016.
- Four-day workshop on “**Basic Biological Techniques**” organized by Dept. of Zoology, GC Women University Faisalabad on 04-07 May, 2016.
- “**Project Formulation Workshop**” Organized by Pakistan Science Foundation at GC Women University, Faisalabad on 20-21 January, 2016.
- “**1st Two Day International Seerat Conference**” Organized by faculty of Islamic and Oriental Learning, GC Women University, and Faisalabad on 19-20 January, 2016.
- Actively participated as member of organizing committee of Four-day workshop on “**Basic Biological Techniques**” organized by GCWUF on 04-07 April, 2016.
- One-day workshop on “**International Property Rights**” conducted by GCWUF on 28 August 2015.
- Certificate of active Participation in seminar titled “**Ethnobotany, The Future Perspective**” on May 11, 2015. At department of Botany, GC Women University, Faisalabad.

- Certificate of active Participation in one-day National seminar titled “**Functional Foods; Recent Approaches towards Human Health**” on December 04, 2014. At department of Home Economics and Food Sciences, GC Women University, Faisalabad.
- Actively participated as member of organizing committee of **30th (International) Congress Pakistan congress of Zoology** on March 2-4, 2010. At University of Agriculture, Faisalabad.
- Certificate of active Participation in “**4th National Symposium on Fisheries**” held at Jilani Hall, G.O.R-1 on March 18-19, 2009.
- Successfully Completed the Course of “**Fisheries and Aquaculture Management**” Organized by National Vocational & Technical Education Commission in collaboration with University of Agriculture, Faisalabad from 03-09-2007 to 02-03-2008.