Curriculum Vitae

Name : Dr. Sajid Abdullah

Associate Professor,

Department of Zoology, Wildlife

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Father's name : Muhammad Abdullah

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Research Expertise: Aquatic Toxicology and Freshwater Fisheries

ACADEMIC OUALIFICATIONS:

| DEGREE | YEAR | MARKS/CGPA | INSTITUATION |
|----------------------|------|-----------------|---|
| Ph.D. (Zoology) | 2007 | 1 st | University of Agriculture Faisalabad |
| M.Phil. (Zoology) | 2003 | 3.63/4.00 | University of Agriculture Faisalabad |
| M.Sc. (Zoology) | 2000 | 3.41/4.00 | University of Agriculture Faisalabad |

Name of Supervisor: **Prof. Dr. Muhammad Javed**

Name of Institution: University of Agriculture, Faisalabad

Ph.D. Thesis Title: Studies on acute toxicity of metals to the fish viz. Catla catla, Labeo

rohita and Cirrhina mrigala.

M.Phil Thesis Title: Studies on the growth performance of major carps under integrated

semi-intensive culture system.

M.Sc Thesis Title: Bio-accumulation of zinc and iron in Catla catla from river Ravi.

PUBLICATIONS:

Book Chapters

- Jamil M, S Abdullah, W Mustfa, M Faran, F Talib, T Ashiq, M Sayedh & U Khursheed, 2024. Advances in Vertebrate Pest Management. In: Zoology: Advancements and Research Trends (Ijaz MU, N Ehsan, M Imran & S Yousaf, eds): FahumSci, Lahore, Pakistan, pp: 305-311. ISBN: 978-627-7745-02-8. https://doi.org/10.61748/Zool.2024/38
- 2. Jamil M, S Abdullah, R Azmat, Bushra, M Faran, N Kanwal, A Ghafoor & F Shafique, 2024. Fisheries economics: Balancing profitability with conservation goals. In: Zoology: Advancements and Research Trends (Ijaz MU, N Ehsan, M Imran & S Yousaf, eds): FahumSci, Lahore, Pakistan, pp: 179-186. ISBN: 978-627-7745-02-8. https://doi.org/10.61748/Zool.2024/23
- 3. Dureshahwar, **S Abdullah**, A Abbas, A Shehzadi, N Aslam, U Farwa, F Ansir & S Ashiq, 2024. Human induced toxicological impacts on aquatic life. In: Zoology: Advancements and Research Trends (Ijaz MU, N Ehsan, M Imran & S Yousaf, eds): FahumSci, Lahore, Pakistan, pp: 140-147. ISBN: 978-627-7745-02-8. https://doi.org/10.61748/Zool.2024/18
- 4. Jamil M, **Abdullah S**, Iqbal R, Abbas A, Talib F and Mustafa S, 2024. Moringa oleifera as plant protein source in fish meal. In: Abbas RZ, Khan AMA, Qamar W, Arshad J and Mehnaz S (eds), **Complementary and Alternative Medicine: Botanicals/Homeopathy/Herbal Medicine**. Unique Scientific Publishers, Faisalabad, Pakistan, pp: 163-170. https://doi.org/10.47278/book.CAM/2024.243
- 5. Jamil M, **Abdullah S**, Abbas A, Ihsan F, Talib F and Mustafa S, 2024. Ameliorative effect of dietary turmeric supplementation in fish. In: Khan A, Mohsin M, Khan AMA and Aziz S (eds), **Complementary and Alternative Medicine: Chinese/Traditional Medicine**. Unique Scientific Publishers, Faisalabad, Pakistan, pp: 180-186. https://doi.org/10.47278/book.CAM/2024.151
- 6. Mina Jamil, **Sajid Abdullah**, Fatima Talib, Rabia Bashir, Naila Ghafoor, Khadija Javed, Umm E Ummara and Ayesha Ghafoor. 2023. Vibrionaceae and Fish Zoonosis. In: Altaf S, Khan A and Abbas RZ (eds), Book: **Zoonosis**, Published by Unique Scientific Publishers, Faisalabad, Pakistan, ISBN: 978-969-2201-13-1. Vol 4: 468-480.
- 7. Sana Aziz and **Sajid Abdullah**. 2021. Toxicity of metal oxide nanoparticles in freshwater fish. Edited by Kaushik Pal and Tean Zaheer. Book: **Nanomaterials in the Battle against Pathogens and Disease Vectors.** Published by Boca Raton CRC Press, Taylor and Francis Group. ISBN: 9781003126256. 277-301 pp.
- 8. Sana Aziz and **Sajid Abdullah**. 2021. Common bacterial diseases of fish: prevention and control strategies. Edited by Dr. Rao Zahid Abbas and Dr. Ahrar Khan. **Book: Veterinary Pathobiology and Public Health.** Unique Scientific Publisher. ISBN: 978-969-2201-00-1. 352-366 pp.

Research Articles

- 1. Kaynat Saeed, **Sajid Abdullah**, Shakeela Parveen, Muhammad Shahbaz. Determination of Optimal Dietary Tryptophan Requirements for the Fingerlings of *Labeo rohita*, *Cirrhinus mrigala*, and *Catla catla* to Study Growth and Hematological Parameters under Stress. American Journal of Psychiatric Rehabilitation. 28(1): 807-820. https://doi.org/10.69980/ajpr.v28i1.197
- 2. Mina Jamil, **Sajid Abdullah**, Shakeela Parveen, Muhammad Kashif. 2025. Toxicity Assessment of Synthetic Polycyclic Musk: Survival, Oxidative Stress and Histopathology of Freshwater Fish *Labeo rohita*. American Journal of Psychiatric Rehabilitation. 28(1): 548-560. https://doi.org/10.69980/ajpr.v28i1.138

- 3. Muhammad Atif Ali, **Sajid Abdullah**, Khalid Abbas, Muhammad Anjum Zia. 2025. Impact of Benzophenone UV Filter on Oxidative Stress Biomarkers and Antioxidant Defense in *Labeo rohita*. American Journal of Psychiatric Rehabilitation. 28(1): 541-547. https://doi.org/10.69980/ajpr.v28i1.137
- 1. N. N. . Kanwal, **S. . Abdullah**, S. Hayat, S. . Abbas, M. . Saqlain, Z. . Wasif, J. . Wakeel, & M. . Luqman , Trans.. (2025). Immunological and Hematological Responses of Labeo rohita under Starvation. Journal of Agriculture and Biology, 3(1), 248-255. https://doi.org/10.55627/agribiol.003.01.1202
- 2. Amjad, H., Abbas, K., **Abdullah, S.,** & Zia, M. A. (2025). Loss of Genetic Polymorphism in Hatchery Produced Cirrhinus mrigala as Revealed by Microsatellite Loci Analyses. Pak. J. Zool., 57(2): 851-859. https://dx.doi.org/10.17582/journal.pjz/20211012081005
- 3. Riaz, M., **Abdullah, S.,** Jamil, M., Rasheed, A., Sheikh, U., Fatima, M., ... & Aslam, K. (2025). Evaluation of toxic effects of benzophenone on histopathology of *Labeo rohita*. *Toxicology Reports*, *12*, Article 101914. https://doi.org/10.1016/j.toxrep.2025.101914 (*Impact factor = 1.7*) **ISSN**: 2214-7500
- 4. Naveed, M., Mateen, A., & **Abdullah, S.** (2024). Assessment of Partially Replacement of Fishmeal with Lactobacillus plantarum Fermented Soybean Meal, Probiotics in the Diet of Oreochromis niloticus on the Growth Profile, Enzymatic Indices and Immunity. *Pakistan Journal of Agricultural Sciences*, 61(2).
- **5.** Mustafa, S., Khan, H. A., **Abdullah, S.,** & Arshad, M. 2024. Comparative Effectiveness of Repellents for Rose-Ringed Parakeet and House Crow at University of Agriculture, Faisalabad, Pakistan. Pak.J. Zool., pp:1-9.
- **6.** Kanwal N, S Aziz, **S Abdullah**, MS Ali and N Ahmad, 2024. Studies on the changes in antioxidant enzyme activity induced by parathion in Hypophthalmichthys molitrix. Continental Vet J, 4(1): 40-45.
- 7. Shakeela Manzoor, Sana Aziz, **Sajid Abdullah** and Muhammad Sarfraz Ali. 2024. Effect of nickel oxide nanoparticles on antioxidant enzyme system and hematology of tilapia. Pak.J. Zool., pp:1-4. (**Impact Factor= 0.687**)
- 8. Hina Amjad, Khalid Abbas, **Sajid Abdullah**, Muhammad Anjum Zia. 2023. Loss of Genetic Polymorphism in Hatchery Produced *Cirrhinus mrigala* as Revealed by Microsatellite Loci Analyses. Pak. J. Zool., pp:1-9. (**Impact Factor= 0.687**)
- 9. Sana Aziz, **Sajid Abdullah**. 2023. Evaluation of toxicity induced by engineered CuO Nanoparticles in fresh water fish, *Labeo rohita* Turkish J. Fish. Aquat. Sci. 23(8): (**Impact Factor =1.464**)
- 10. Sana Aziz, Nazia Ehsan, Fariha Latif, Muhammmad Sarfraz Ali, **Sajid Abdullah**. 2023. Comparison of biodiversity and abundance of earthworms in maize croplands irrigated with sewage and canal water of district Faisalabad, Pakistan. J. Bioras. Manag. 10(1): 156-164. (**Impact Score** =)
- **11.**Amara Akhtar, **Sajid Abdullah**, **A**bdul Mateen, Muhammad Anjum Zia, 2023. Impact of different percentages of animal and plant-based dietary lipids on the weight gain, total length, fork length, and serum metabolites of *cirrhinus mrigala*. J. Xi'an Shiyou Univ. Nat. Sci. Ed. 3(66): 150-158. (**Impact Factor =0.38**)
- **12.** Amara Akhtar, **Sajid Abdullah**, Arifa Mehreen, Muhammad Ahmed Saqib, Qurat-ulane Gillani, Muhammad Anwar Iqbal, Qurat-ulain Ahmad and Muhammad Tahir. 2022. Influence of Animal and Plant Source Dietary Lipids on The Growth Performance And Proximate Composition Of Major Carps. J.P.S.P., 6(12): 485-508. (**Impact Score =8.0**)
- **13.**Huma Naz, **Sajid Abdullah**, Khalid Abbas, Laiba Shafique, Qingyou Liu and Peng Zhu. 2022. Comparative study: antioxidant enzymes, DNA damage and nuclear abnormalities in three fish species *cirrhina mrigala*, *catla catla* and *labeo rohita* exposed to insecticides mixture (endosulfan + chlorpyrifos + bifenthrine). Pak. J. Agri. Sci., 59(2):295-301. (**Impact Factor =0.856**)
- **14.**Shanza Ahmed, Abdul Mateen, **Sajid Abdullah** and Muhammad Hamid Bashir. 2022. Efficacy of green synthesized silver Nanoparticles against *Tetranychus urticae* Koch (Acari: Tetranychidae). Pak. J. Agri. Sci., Vol. 59(4):635-642. (**Impact Factor= 0.856**)

- 15. Mamona Jabeen, Sumra Naz, Hina Amjad, Khalid Abbas, **Sajid Abdullah**, Muhammad Anjum Zia, Taqwa Safdar and Muhammad Sarfraz Ahmad. 2022. DNA markers based genetic polymorphism in natural populations of *Channa marulius*. Pak. J. Zool., pp:1-7. (**Impact Factor= 0.687**)
- **16.**Ammara Akhtar and **Sajid Abdullah**. 2022. Studies on the Growth Performance and Feed Conversion Ratio of *Catlacatla* Fed with Different Levels of Animal and Plant based Dietary Lipids. Annals of R.S.C.B., 26(1): 1841 1857. (**Impact Factor= 0.90**)
- 17. Muhammad Mudassar Shahzad, Iram Liaquat, Syed Makhdoom Hussain, Majid Hussain, Zawar Hussain, Asma Chaudhary, Sajid Abdullah, Syed Zakir Hussain Shah, Nisar Ahmad, Khalil Ahmad khan, Sana Bashir and Muhammad Tahir Rafique. 2022. Effects of dietary phytase (PHY) levels on nutrient digestibility, mineral absorption and growth performance of *Oreochromis niloticus* fingerlings fed Moringa based diets. Pak. J. Agri. Sci., Vol. 59(2):269-278. (Impact Factor= 0.856)
- **18.**Sana Aziz, **Sajid Abdullah**, Fariha Latif and Hafeez Anwar. 2022. Evaluation of waterborne zinc oxide nanoparticles induced toxicity in bighead carp, *Hypophthalmichthys nobilis*. J. Anim. Plant Sci., 32(5):1299-1305. (**Impact Factor=0.570**)
- **19.**Sana Aziz, **Sajid Abdullah**, Hafeez Anwar and Fariha Latif. 2022. DNA Damage and Oxidative Stress in Economically Important Fish, Bighead Carp (*Hypophthalmichthys nobilis*) Exposed to Engineered Copper Oxide Nanoparticles. Pak. Vet. J., 42(1):1-8. (**Impact Factor= 1.803**)
- 20. Huma Naz, **Sajid Abdullah**, Tanveer Ahmed, Khalid Abbas, Muhammad Umer Ijaz, S. Kumar, M. A. Hassan and S. Q. A. Shah. 2022. Toxicity, oxidative stress and genotoxicity: lethal and sub-lethal effects of three different insecticides mixtures on *Cirrhina mrigala*. J. Anim. Plant Sci., 32(1):256-265. (**Impact Factor= 0.570**)
- **21.** Amara Akhtar and **Sajid Abdullah. 2021.** Effect Of Animal And Plant Based Dietary Lipids On Growth (Weight Gain) And Serum Metabolites Of Labeo Rohita (Rohu). Webology (ISSN: 1735-188X) 18 (3): 925-935. (**Impact Factor= 1.565**)
- **22.**Huma Naz, **Sajid Abdullah**, Tanveer Ahmed, Khalid Abbas, Muhammad Umar Ijaz, Muhammad Adeel Hassan and Muhammad Anjum Zia. 2021. Thermal stability of purified superoxide dismutase from liver of commercially valuable fish, *Labeo rohita* Exposed to Pb+Cr mixture. Pak. J. Agri. Sci., 58(4):1191-1196. (**Impact Factor= 0.856**)
- 23. Muhammad Yasin, Hammad Ahmad Khan, Sajid Abdullah and Mansoor Hameed. 2021. Impact of climate changes on the diurnal behaviour of some passerines in some selected habitats of central Punjab, Pakistan. Pak. J. Agri. Sci., 58(4):1177-1184. (Impact Factor= 0.856)
- **24.**Sana Aziz, **Sajid Abdullah**, Hafeez Anwar, Fariha Latif, Warda Mustfa. 2021. Effect of engineered nickel oxide nanoparticles on antioxidant enzymes in freshwater fish, *Labeo rohita*. Pak. Vet. J., 41(3):424-428. (**Impact Factor= 1.803**)
- **25.**Nuzhat Naseem, **Sajid Abdullah** and Sana Aziz. 2021. Effect of phytase supplemented diet on whole body proximate composition of *Labeo rohita* fingerlings. Pak. J. Zool., pp:1-4. (**Impact Factor= 0.687**)
- **26.** Aliya Munir, **Sajid Abdullah**, Huma Naz, Khalid Abbas, Tanveer Ahmed and Zahid Farooq. 2021. Tissue-Specific Response of Peroxidase Activity in *Channa striata* under Acute Exposure of Pesticides (Deltamethrin + Endosulfan) Mixture. Punjab Univ. J. Zool., 36(2) 147-151. (**Impact Factor= 0.50**)
- 27. 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 Univ. J. Zool., 36(2):125-130. (**Impact Factor= 0.50**)
- **28.** Abeera Razzaq, **Sajid Abdullah**, Huma Naz, Khalid Abbas, Laiba Shafique and Qingyou Liu. 2021. Micronuclei Assay: A sauitable tool for evaluating the heavy metal induced genotoxicity in Fish, *Labeo rohita* Pakistan J. Zool. pp:1-4. *Impact Factor* (0.687)
- **29.**Fatima Tufail, **Sajid Abdullah**, Huma Naz, Khalid Abbas, Tanveer Ahmed and Muhammad Umar Ijaz. 2020. Partial purification and kinetic characterization of renal catalase from carnivorous fish, *Channa striata* exposed to pesticides mixture Deltamethrin+Endosulfan. Pak. J. Agri. Sci., 56(5):1287-1291. (**Impact Factor=0.748**)
- **30.**Sadia Kanwal, Khalid Abbas, Tanveer Ahmed, **Sajid Abdullah**, Huma Naz, Muhammad Anjum Zia and Zaheer Ahmed. 2020. Description of isolated bacterial pathogens from diseased *Cirrhinus mrigala*. Aquac. Res., 52(5): 2130-2137. *Impact factor* (1.748).
- **31.**Qaisra Siddique, **Sajid Abdullah**, Huma Naz, Khalid Abbas and Laiba Shafique. 2020. Changes in glutathione S-Transferase activity and total protein contents of *Labeo rohita*. Punjab Univ. J. Zool., 35(1). 25-29. (**Impact Factor= 0.50**)
- **32.**Sana Aziz, **Sajid Abdullah**, Khalid Abbas and M. Anjum Zia. 2020. Effect of engineered zinc oxide nanoparticles on freshwater fish, *Labeo rohita*: Characterization of ZnO nanoparticles, Acute Toxicity and Oxidative Stress. Pak. Vet. J., 40(4):479-483. *Impact Factor* (1.17).
- **33.**Tehreem Usman, **Sajid Abdullah**, Huma Naz, Khalid Abbas, Labia Shafique and Qaisra Siddique 2020. Acute toxic effect of technical grade insecticides on behavior, catalase activity and total protein contents of fish *Ctenopharhngdon idella*. Pakistan J. Zool. 52(5): 2023-2026. *Impact Factor* (**0.687**)
- 34. Amina Malik, **Sajid Abdullah**, Huma Naz, Khalid Abbas, Tanveer Ahmed, Wardha Hassan and Qaisra Siddique. 2019. Total protein contents analysis in muscle of Indian Major Carps. Univ. Sindh J. Anim. Sci. 3(2): 1-4.
- **35.** Hamda Azmat, Muhammad Javed, and **Sajid Adbullah.** 2019. Effects of sub-lethal exposure of aluminium on growth and metal accumulation patterns in Indian major carps. J. Anim. Plant Sci., 29(6):1770-1774. *Impact Factor* (0.481)
- 36. Rimsha Naz, Syed Shafat Hussain, Naunain Mehmood, **Sajid Abdullah**, Sana Malik, Iqra Munawar and Sadaf Dogar. 2019. Determination and impact of heavy metals in Common Mayna (*Acridotheres tristis*) of District Faisalabad. J. Bio. Envi. Sci.,14 (6): 234-240.
- 37. Huma Naz, **Sajid Abdullah**, Khalid Abbas, Muhammad Rizwan Tariq, Laiba Shafique and Ghazala Nazeer. 2019. Comet Assay:Quantification of Damaged DNA in *Catla catla* Exposed to Endodulfan+Chlorpyrifos. Punjab Univ. J. Zool. 34(1): 85-88.
- 38. Fatima Tufail, **Sajid Abdullah**, Huma Naz, Khalid Abbas and Laiba Shafique. 2019. Purification and Kinetic Characterization of Hepatic Catalase from Carnivore Fish, *Channa striata* Exposed to Agrochemicals (Endodulfan+deltamethrin). Punjab Univ. J. Zool. 34(1):79-84.
- **39.** Huma Naz, **Sajid Abdullah**, Khalid Abbas, Wardha Hassan, Moazama Batool, Shakeela Parveen, Sadia Maalik and Sajida Mushtaq. 2019. Toxic effect of insecticides mixtures on antioxidant enzymes in different organs of fish *Labeo rohita*. Pakistan J. Zool. 51(4): 1355-1361. *Impact Factor* (**0.924**)
- **40.** Huma Naz, **Sajid Abdullah**, Khalid Abbas and Muhammad Anjum Zia. 2019. Thermodynamic characterization of kidney superoxide dismutase from *Labeo rohita*

- exposed to the mixture of lead and chromium. Pakistan J. Zool. 51(3):1105-1112. *Impact Factor* (0.924)
- **41.Sajid Abdullah**, Abdul Mateen, Khalid Abbas, Huma Naz, Wardah Hassan and Saliha Anum. 2018. Changes in Glutathione S- Transferase activity in fish *Channa striata* exposed to different aquatic pollutants (heavy metals and pesticides mixture). Pakistan J. Zool. Suppl. Ser. (13). 42-47. *Impact Factor* (0.776)
- **42.**Nadia Nazish, Khalid Abbas, **Sajid Abdullah** and Muhammad Anjum Zia. 2018. Microsatellite diversity and population structure of *Hypophthalmicthys molitrix* in hatchery populations of Punjab. Turkish J. Fish. and Aquat. Sci., 18(9):1113-1122. (**Impact factor = 1.46**)
- **43.**Samreen Gull, **Sajid Abdullah**, Huma Naz and Khalid Abbas. 2018. Chromium Induced Elevated Glutathione S-transferase Activity in *Cirrhina mrigala*: Response of GST activity in fish. Proc. Pak. Acad. of Sci.: B. Life Environ. Sci., 55(4):49-54. (**Impact factor = 0.11**)
- **44.**Moazama Batool, **Sajid Abdullah**, Muhammad Umer Ijaz, Safina Kousar, Mehroz 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 J. Zool. Suppl. Ser. (13). 74-79. *Impact Factor* (0.776)
- **45.**Nida Ismat, **Sajid Abdullah**, Khalid Abbas, Abdul Mateen, Wardha Hassan, Huma Naz and Syeda Andleeb. 2018. Studies on the Activity of Digestive Enzymes in *Labeo rohita* Fingerlings Fed with Formulated Feeds. Pakistan J. Zool. Suppl. Ser. (13). 233-237. *Impact Factor* (0.776)
- **46.** Anum Rafique, **Sajid Abdullah**, Khalid Abbas, Huma Naz and Wardha Hassan. 2018. Purification and Partial Characterization of Superoxide Dismutase from kidney of *Hypophthalmichthys molitrix* under Exposure of Metals Mixture. Pakistan J. Zool. 50(3): 831-836. *Impact Factor* (0.776)
- 47. Sana Rana, **Sajid Abdullah**, Huma Naz and Khalid Abbas. 2018. Characterization of Catalase from Carnivorous Fish, *Channa striata* Exposed to Binary Insecticide Mixture (Deltamethrin+Endodulfan). Pak J Agri. Sci., 31(4): 368-374. *Impact Factor* (0.618)
- 48. Wardah Hassan, Sajid Abdullah, Muhammad Afzal and Mumtaz Hussain. 2018. Assessment of acute metals toxicity in *Catla catla* through hematological and biochemical blood markers. *Pak. J. Agri. Sci.*, Vol. 55(2), 449-454. *Impact Factor* (0.618)
- **49.**Hamda Azmat, Muhammad Javed, **Sajid Adbullah**, Arshad Javid and Syed Makhdoom Hussain. 2018. Growth response of major carps rearead under chronic stress of chromium. J. Anim. Plant Sci., 28(2): 604-609. *Impact Factor* (**0.407**)
- 50. Yasmeen Batool, **Sajid Abdullah**, Huma Naz and Khalid Abbas. 2018. Sub-Lethal Effect of Waterborne Cadmium Exposure on Glutathione-S-Transferase and Total Protein Contents in Liver of Carnivorous Fish, *Wallago attu*. Pak. Acd. Sci. 55(2): 21-25.
- **51.**Nadia Nazish, Khalid Abbas, **Sajid Abdullah**, and Muhammad Anjum Zia. 2018. Microsatellite diversity and population structure of *Hypophthalmicthys molitrix* in hatchery populations of Punjab, Turkish Journal of Fisheries and Aquatic Sciences, 18, 1113-1122. (**Impact Factor= 0.553**)
- **52.**Zeenat Bano, **Sajid Abdullah**, Waqas Ahmad, Muhammad Anjum Zia and Wardah Hassan.2017. Assessment of Heavy Metals and Antioxidant Enzyme in Different Organs of Fish from Farm, Hatchery and Indus River of Pakistan. Pakistan J. Zool., 49(6), 2227-2233. *Impact Factor* (0.632)
- **53.** Huma Naz, **Sajid Abdullah**, Khalid Abbas and Muhammad Anjum Zia. 2017. Pesticides mixture toxicity; effects on superoxide dismutase activity in Indian major carps. *Pak. J. Agri. Sci.*, *Vol. 54(3)*, 607-611 *Impact Factor* (0.677)

- **54.** Naheed Bano, Muhammad Afzal, **Sajid Abdullah** and Muhammad Shahid 2017. The Potential Use of Citric Acid for the Improvement in Growth of *Labeo rohita*, Int. J. Agric. Biol., 19(2): 363-366. *Impact Factor* (0.822)
- **55.** Anjum Zia M., Qurat-ul-Ain, **Abudullah S.**, Abbas Kh, Ahmed I. 2017. Sublethal impacts of heavy metals on antioxidant enzymes and biochemical parameters in rohu (*Labeo rohita*) Iran J. Fish. Sci., 16(2): 668-683. *Impact Factor* (**0.446**)
- **56.**Tanveer Ahmed, **Sajid Abdullah**, Khalid Abbas and Muhammad Anjum Zia. 2016. Catalase enzyme response to chronic Pb+Cd metal mixture exposure, its purification and partial characterization from the kidney of freshwater fish, *Oreochromis niloticus*. Pakistan J. Zool., 48(6), 1733-1740. *Impact Factor* (**0.580**)
- 57. Tanveer Ahmed, Sajid Abdullah, Khalid Abbas, Muhammad Anjum Zia, Nadia Nazish, Syed Zakir Hussain Shah and Syed Muhammad Aun Naqvi. 2016. Purification and partial characterization of liver catalase from control and Pb+Cd metal mixture stressed *Oreochromis niloticus*. Pak. J. Agri. Sci., 53(2): 431-437. *Impact Factor* (0.609)
- 58. Mirfa Murtaza, **Sajid Abdullah,** Wardha Hassan, Khalid Abbas, Huma Naz and Muhammad Anjum Zia. 2016. Studies on amylase and lipase activity in fish fed wirh diet containing different feed ingredients. Punjab Univ. J. Zool., 31(2): 165-169.
- **59.** Wardha, H, **S. Abdullah**, K. Abbas, M. Batool and S. Yaqub. 2015. The effect of sublethal level of dietary copper and cadmium on the growth performance and oxidative stress in *Cirrhina mrigala*. Pak. J. Agri. Sci., Vol. 52(3), 789-794 *Impact Factor* (0.597)
- 60. Sultana, F., K. Abbas, Z. Xiaoyun, S. Abdullah, I. Qadeer and Razi ul Hussnain. 2015. Microsatellite markers reveal genetic degradation in hatchery stocks of *Labeo rohita*. Pak. J. Agri. Sci., 52(3), 775-781. *Impact Factor* (0.597)
- 61. Ahmad, T., S. M. A. Naqvi, S. Abdullah, K. Abbas, S. Z. H. Shah1 and M. A. Zia. 2015. Comparative proximate body composition of wild captured and farm cultured *Cirrhinus mrigala*. Pak. J. Agri. Sci., 52(1), 203-207. *Impact Factor* (0.597)
- 62. Gull-e-Faran, Muhammad Anjum Zia, Muhammad Shahid and **Sajid Abdullah.** 2015. Improved streptokinase production; UV irradiation of *Streptococcus equisimilis*. Professional Med. J. 22(5): 656-663.
- **63.** Batool, M., **S. Abdullah** and K. Abbas. 2014. Antioxidant enzymes activity during acute toxicity of chromium and cadmium to *Channa marulis* and *Wallago attu*. Pak.J.Agri.Sci, 51(4): 1117-1123. *Impact Factor* (1.25)
- 64. Batool, M., **S. Abdullah** and M. Javed. 2014. Behavioral intoxication of *Channa marulius* and *Wallago attu* during acute exposure of Cadmium and Copper. Pak. j. life soc. Sci., 12(1): 7-15.
- 65. Ameer, F., M. Javed, S. Hayat and S. Abdullah. 2013. Growth responses of *catla catla* and *labeo rohita* under mixed exposure of dietary and water-borne heavy metals viz. Cu, Cd and Zn. J. Anim. Plant Sci., 23(5):1297-1304. *Impact Factor*
- 66. Nazish, N., M. Noureen, A. Mateen and **S. Abdullah**. 2012. Effect of feedbsuplimentation in growth response of carps under the influence of ammonium nitrate. I.J.Vet.Sci., 1(1): 17-20.
- **67.** Shafiq, A., **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*. J. Anim. Plant Sci., 22(2): 425-430. *Impact Factor*
- 68. Hussain, M., S.M. Hussain, M. Afzal, A. Javid, **S. Abdullah**, S.A. Raza and M. Iqbal. 2011. Effect of low level of mineral phosphorus and medium level of nitrogen on planktonic productivity and increase in fish production. J. Anim. Plant Sci., 21(4):642-645. *Impact Factor*
- 69. Hussain, S.M., M. Javed, M. Afzal, **S. Abdullah**, A. Javid, T. Javid. M. Hussain and S.A. Raza. 2011. Growth performance of metal mixture stressed *Catla catla* in semi intensive pond culture system. Int. J. Agric. Biol., 13(6): 996-1000. *Impact Factor*

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- 76. **Abdullah**, **S**. and M. Javed. 2006. Studies on acute toxicity of metals to the fish, *Catla catla*. Pak. J. Bio. Sci., 9(9): 1605-09.
- 77. **Abdullah, S**. and M. Javed. 2006. Studies on 96-Hr LC₅₀ and lethal toxicity of metals to the fish *Cirrhina mrigala*. Pak. J. Agri. Sci., 43(3-4): 180-185
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- 79. **Abdullah, S.** and M. Javed. 2005. Studies on the growth performance of major carps under integrated semi-intensive culture system. I. J. Biol. Sci., 2 (2): 254-259.
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- 81. Ubaidullah, M., M. Javed and **S. Abdullah**.2004. Impact of waste disposal on the uptake and accumulation of heavy metals in planktonic biomass of the river Ravi. I. J. Agri. Biol., 6(4): 629-632.
- 82. Ubaidullah, M., M. Javed and S. Abdullah. 2004. Metals toxicity of the river Ravi and tributary waters. I. J. Biol. Sci., 1(1): 25-29.
- 83. Ubaidullah, M., M. Javed and **S. Abdullah**. 2004. Metals toxicity of sediments in the river Ravi and related effluents discharging tributaries. I. J. Biol. Sci., 1(1): 43-49.
- 84. **Abdullah, S.** and M. Javed and A. Iram. 2003. Bioaccumulation of iron in *Catla catla* from river Ravi. I. J. P. Sci., 2 (1): 54-58.
- 85. Aima, I., M. Javed and S. Abdullah. 2003. Relationships between physico-chemistry of water and metals toxicity in river Ravi I. J. P. Sci., 2 (1): 5-9.
- 86. **Abdullah**, **S**. and M. Javed and A. Iram. 2002. Bio-accumulation of zinc in *Catla catla* from river Ravi. I. J. P. Sci., 1 (4): 428-432.

Conference Proceedings/Abstracts

- Syeda Dua Zainab Shirazi, Sajid Abdullah, Mina Jamil, Sana Aziz. 2023. Evaluation of toxic effects of dioxin on hematology and serum biochemistry of grass carp. 6th International Conference on Applied Zoology (ICAZ-2023), The Applied Zoological Society of Pakistan & Department of Zoology, Government College University, Faisalabad, December 18-19, 2023 (O-35/ICAZ-2023).
- 2. Nayab kanwal, **Sajid Abdullah**, Mina Jamil. 2023. Studies on the changes in antioxidant enzyme activity induced by parathion in *Hypophthalmichthys molitrix*. 6th International Conference on Applied Zoology (ICAZ-2023), The Applied Zoological Society of Pakistan & Department of Zoology, Government College University, Faisalabad, December 18-19, 2023 (O-36/ICAZ-2023).
- 3. Sana Aziz, **Sajid Abdullah**, Rahat Andleeb, Nisar Ahmad Bhatti, Sidra Abbas, Mina Jamil. 2023. Evaluation of the toxicity induced by waterborne copper oxide nanoparticles

- (CuO-NPs) in Silver carp. 6th International Conference on Applied Zoology (ICAZ-2023), The Applied Zoological Society of Pakistan & Department of Zoology, Government College University, Faisalabad, December 18-19, 2023 (O-57/ICAZ-2023).
- 4. Amna Abbas, **Sajid Abdullah**, Dureshahwar, Kaynat Saeed, Mina Jamil. 2023. Effect of Organophosphate Pesticide on Glutathione S-transferase activity of *Labeo rohita*. 6th International Conference on Applied Zoology (ICAZ-2023), The Applied Zoological Society of Pakistan & Department of Zoology, Government College University, Faisalabad, December 18-19, 2023 (O-33/ICAZ-2023).
- Rana Aafaq Ahmad, Sajid Abdullah, Kaynat Saeed. 2023. Effect of Induced Pyrethroid on the Blood Parameters of *Cyprinus carpio*. 6th International Conference on Applied Zoology (ICAZ-2023), The Applied Zoological Society of Pakistan & Department of Zoology, Government College University, Faisalabad, December 18-19, 2023 (P-02/ICAZ-2023)
- 6. Dureshahwar, **Sajid Abdullah**, Shamir tayab hussain babar, and Muhammad Naveed. 2023. Toxicological Relevance of Diazinon (Organophosphate) on the Immune Competency of Major Carp. 6th International Conference on Applied Zoology (ICAZ-2023), The Applied Zoological Society of Pakistan & Department of Zoology, Government College University, Faisalabad, December 18-19, 2023 (P-22/ICAZ-2023).
- 7. Sana Aziz, **Sajid Abdullah**, Fayyaz Rasool, Danish Riaz. 2023. Assessment of zinc oxide nanoparticles induced toxicity in *Oreochrome niloticus*. International Fisheries and Aquaculture Conference (IFAC-2023). Institute of Zoology, University of the Punjab, Lahore. February 8-9, 2023 (IFAC-2023-FHD-P06).
- 8. Mina Jamil, **Sajid Abdullah**, Sana Aziz. 2023. Ecotoxicological impact of benzophenone-type uv filters as a sunscreen ingredient on *Labeo rohita*. International Fisheries and Aquaculture Conference (IFAC-2023). Institute of Zoology, University of the Punjab, Lahore. February 8-9, 2023 (IFAC-2023-FHD-P36).
- Rabia Ehsan, Sajid Abdullah, Sana Aziz, Mumaiza Mumraiz, Quratulain Sattar and Hafsa Ashfaq. 2023. Evaluation of oxidative stress caused by the acute exposure to antibiotics in rohu (*Labeo rohita*). International Fisheries and Aquaculture Conference (IFAC-2023). Institute of Zoology, University of the Punjab, Lahore. February 8-9, 2023 (IFAC-2023-FHD-P37).
- 10. Amna Mahmood, Khalid Abbas, **Sajid Abdullah**, Tanveer Ahmed, Huma Naz, Shamsa Kanwal and Ammara Mahmood. 2022. Microsatellite marker-based population genetic structure of Mozambique Tilapia (*Oreochromis mossambicus*) in River Chenab, Pakistan. 5th International Conference on Applied Zoology (ICAZ-2022), The Applied Zoological Society of Pakistan & Khwaja Fareed University of Engineering and Information Technology, Raheem Yar Khan, Pakistan. October 17-18, 2022 (O-65/ICAZ-2022).
- 11. Saddam Hussain, **Sajid Abdullah**, Kaynat Saeed, Mumaiza Mumraiz and Dureshahwar. 2022. Effects of Different Temperatures on the Body Composition of Common Carp (*Cyprinus carpio*). 5th International Conference on Applied Zoology (ICAZ-2022), The Applied Zoological Society of Pakistan & Khwaja Fareed University of Engineering and Information Technology, Raheem Yar Khan, Pakistan. October 17-18, 2022 (O-53/ICAZ-2022).
- 12. Maryam Afzal, **Sajid Abdullah**, Kaynat Saeed, Mumaiza Mumraiz and Dureshahwar. 2022. Effect of Waterborne Cadmium on the Glutathione Dependent Antioxidant Activity of Nile tilapia. 5th International Conference on Applied Zoology (ICAZ-2022), The Applied Zoological Society of Pakistan & Khwaja Fareed University of Engineering and Information Technology, Raheem Yar Khan, Pakistan. October 17-18, 2022 (O-52/ICAZ-2022).
- 13. Isham Zahra, **Sajid Abdullah**, Kaynat Saced, Mumaiza Mumraiz and Dureshahwar. 2022. Effect of Different Levels of Commercial Probiotics on Growth and Survival of Fish Silver Carp (*Hypophthalmichthys Molitrix*) Under Salinity Stress. The Applied Zoological

- Society of Pakistan & Khwaja Fareed University of Engineering and Information Technology, Raheem Yar Khan, Pakistan. October 17-18, 2022 (O-51/ICAZ-2022).
- 14. Rida Khalid, **Sajid Abdullah**, Dureshahwar, Mumaiza Mumraiz, and Kaynat Saeed. 2022. Effect of Dietary *Aloe vera* on Morphometric and Hematological Parameters of Nile Tilapia. The Applied Zoological Society of Pakistan & Khwaja Fareed University of Engineering and Information Technology, Raheem Yar Khan, Pakistan. October 17-18, 2022 (O-42/ICAZ-2022).
- 15. Asima Parveen, **Sajid Abdullah**, Dureshahwar, Kaynat Saeed and Mumaiza Mumraiz. 2022. Effect of Dietary Ginger Extract on Growth and Antioxidant Enzyme Activity of Common Carp. The Applied Zoological Society of Pakistan & Khwaja Fareed University of Engineering and Information Technology, Raheem Yar Khan, Pakistan. October 17-18, 2022 (O-41/ICAZ-2022).
- 16. Saba Aslam, **Sajid Abdullah** and Sana Aziz*. 2021. Oxidative stress in different size groups of *labeo rohita* exposed to chromium. 4th International Conference on Applied Zoology-2021, November 24th-25th, pp.33.
- 17. Sahar Saleem, **Sajid Abdullah** and Sana Aziz*, Fariha Latif. 2021. A Comparative Study on the Accumulation of Copper and Cadmium in different tissues (Gills, Liver, Kidney, Spleen and Muscle) of *Labeo rohita*. 4th International Conference on Applied Zoology-2021, November 24th-25th, pp.54.
- 18. Sidra Bano, **Sajid Abdullah**, Sana Aziz*, Dureshahawar, Mumaiz Mumraiz and Kaynat Saeed. 2021. Ecological impact of benzophenone type UV filter on the catalase and peroxidase activity in the Grass carp (*Ctenopharyngodon idella*). 4th International Conference on Applied Zoology-2021, November 24th-25th, pp.56.
- 19. Riaz, R., **S. Abdullah**, Sana Aziz, F. Latif. Hematological and behavioral study of common carp, *Cyprinus carpio* exposed to titanium nanoparticles. 1st International Conference Science, Technology, Engineering, Mathematics and Social Sciences 2021. STEMS034. March 30-31, pp. 53-54.
- 20. Masood, S., **S. Abdullah**, S. Aziz. Oxidative stress and behavioral responses of *Catla catla* exposed to titanium dioxide nanoparticles. 1st International Conference Science, Technology, Engineering, Mathematics and Social Sciences 2021. STEMS035. March 30-31, pp. 54-55.
- 21. Saleem, S., **S. Abdullah,** S. Aziz. Changes in catalase and peroxidase activity in fish common carp exposed to copper nanoparticles. 1st International Conference Science, Technology, Engineering, Mathematics and Social Sciences 2021. STEMS037. March 30-31, pp. 57-58.
- 22. Manzoor, S., N. Zahid, **S. Abdullah**, S. Aziz. Effect of waterborne nickel nanoparticles (Ni-NPs) on level of bioaccumulation and oxidative stress in tilapia. 1st International Conference Science, Technology, Engineering, Mathematics and Social Sciences 2021. STEMS039. March 30-31, pp. 59-60.
- 23. Dureshahwar, **S. Abdullah**, S. Aziz, M. Naveed and S. Shabbir. Effect of different dietary protein, lipid and carbohydrate levels on the growth performance and blood parameter of fish, *labeo rohita*. 1st International Conference Science, Technology, Engineering, Mathematics and Social Sciences 2021. STEMS043. March 30-31, pp. 63-64.
- 24. Saeed, K., **S. Abdullah,** S. Aziz, M. Naveed, Dureshahawar, M. Mumraiz and R. Naz. Studies on the growth and survival of tilapia fed with salt incorporated feeds. 1st International Conference Science, Technology, Engineering, Mathematics and Social Sciences 2021. STEMS093. March 30-31, pp. 118-119.
- 25. Waryam, N., **S. Abdullah,** S. Aziz and F. Latif. Patterns of Heavy Metal Accumulation in Different Organs of Bighead Carp (*Hypophthalmichthys nobilis*).40th Pakistan Congress of Zoology, March 10-12, 2020. CBGP-159. pp. 103.
- 26. Aziz, S., S. Rafi, M. Sagheer, S. Abdullah and F. Latif. Integrated Management of *Trogoderma granarium* using Neem Leaf Extract, Diatomaceous Earth and

- Entomopathogenic Fungus. 40th Pakistan Congress of Zoology, March 10-12, 2020. PC-82. pp. 156.
- 27. Nosheen, **S. Abdullah,** S. Aziz and F. Latif. The Effect of Acute Exposure of Ni and Zn on the Behavioral Responses and Haematological Parameters of Bighead Carp. 40th Pakistan Congress of Zoology, March 10-12, 2020. CBGP-160. pp. 103.
- 28. Zahid, T., **S. Abdullah,** S. Aziz and F. Latif. Heavy metals (Zn, Ni and Cu) pollution in Water, Planktons and Fish from Baloki headwork to Sidhnai barrage, River Ravi, Pakistan. 40th Pakistan Congress of Zoology, March 10-12, 2020. FEWFM-21. pp. 228.
- 29. Mumraiz, M., **S. Abdullah,** S. Aziz and F. Latif . Heavy metals viz. Zn, Ni and Cu levels in sediments and water from Baloki Headworks to Sidhnai Barrage in the River Ravi, Pakistan. 40th Pakistan Congress of Zoology, March 10-12, 2020. CBGP-163. pp. 105.
- 30. Amjad, M., N. Ehsan, **S. Abdullah,** S. Aziz and F. Latif. Diversity, abundance and niche overlap among earthworms of maize (*Zea mays*), rice (*Oryza sativa*) and millet (*Pennisetum glaucum*) crops of district Jhelum. 40th Pakistan Congress of Zoology, March 10-12, 2020. FEWFM-75. pp. 260-261.
- 31. 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*). Abstract pp. / International Fisheries and Aquaculture Conference-2019. Organized by University of Veterinary and Animal Sciences, Lahore. 30th to 31st January 2019. **IFAC-2019-FHD-40**.
- 32. 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). Abstract pp./ International Fisheries and Aquaculture Conference-2019. Organized by University of Veterinary and Animal Sciences, Lahore. 30th to 31st January 2019. **IFAC-2019-FHD-41**.
- 33. 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. Abstract pp./ International Fisheries and Aquaculture Conference-2019. Organized by University of Veterinary and Animal Sciences, Lahore. 30th to 31st January 2019. **IFAC-2019-FHD-42**.
- 34. Huma Naz, **Sajid Abdullah**, Khalid Abbas, Wardah Hassan, Moazama Batool, Shakeela Perveen and Sajida Mushtaq. Responses of oxidative stress dynamics to bifenthrine, chlorpyrifos and endosulfan in three economically important fish species *Catla catla*, *Cirrhina mrigala* and *Labeo rohita*. Abstract pp./ International Fisheries and Aquaculture Conference-2019. Organized by University of Veterinary and Animal Sciences, Lahore. 30th to 31st January 2019. **IFAC-2019-FHD-39**.
- 35. 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. Abstract pp. 39th PAKISTAN CONGRESS OF ZOOLOGY (International). Organized by Department Of Zoology, Islamia College University, Peshawar. March 4-6, 2019.
- 36. 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*. Abstract pp. 39th PAKISTAN CONGRESS OF ZOOLOGY (International). Organized by Department Of Zoology, Islamia College University, Peshawar. March 4-6, 2019.
- 37. 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.
- 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, Moazma 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 Moazma 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. Moazama Batool, **Sajid Abdullah**, Safina Kousar and Muhammad Umar Ijaz. Studies on the influence of heavy metals on SOD enzymes in the organs of fish *Channa marulius* and *Wallago attu*. Abstract pp.125. 6th International Fisheries Symposium and Expo-2107 "Invocative and Sustainable Aquaculture for Blue Revolution". Organized by Faculty of Fisheries and Wild Life UVAS, at Falttis Hotel, Lahore. 08-09 February, 2017. **IFSE-2017-E-13.**
- 42. Moazama Batool, **Sajid Abdullah** and Muhammad Umar Ijaz. **CBGP-221-**Oxidative stress biomarkers in assessing cadmium and lead toxicity in the *Channa marulius* and *Wallago attu*. Abstract pp.145. 37th Pakistan Congress of Zoology (International). Organized by Department of Zoology, GC University Faisalabad, 28th February to 2nd March, 2017.
- 43. Moazama Battol and **Sajid Abdullah. OP-41-**Accumulation of heavy metals and antioxidant enzymes as biomarkers in *Channa marulius* and *Wallago attu*. Abstract pp.53. "1st International Conference on Advancements in Biotechnology" held at GC Women University Faisalabad and AKHUWAT-Faisalabad Institute of Research Science and Technology, Pakistan. Organized by GC Women University Faisalabad and AKHUWAT-Faisalabad Institute of Research Science and Technology. 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. Abstract pp.118-119. 35th Pakistan Congress of Zoology (International). Organized by Zoological society of Pakistan, held at Centre of Excellence in Marine Biology, University of Karachi. 1-4th March, 2015.
- 45. Warda Hassan, **Sajid Abdullah**, Khalid Abbas, Huma Naz and Moazama Batool. Acute toxicity of water borne nikel and manganese mixture to the fish *C. idella*. Abstract pp. 122. 35th Pakistan Congress of Zoology (International). Organized by Zoological society of Pakistan, held at Centre of Excellence in Marine Biology, University of Karachi. 1-4th March, 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*. Abstract pp.121. 35th Pakistan Congress of Zoology (International). Organized by Zoological society of Pakistan, held at Centre of Excellence in Marine Biology, University of Karachi. 1-4th March, 2015.
- 47. Moazama Batool, **Sajid Abdullah** and Khalid Abbas. Acute Toxicity of cadmium chloride (CdCl₂.H₂O) on *Channa marulius* and *Wallago attu* and their behaviour responses. Abstract pp. 223-224. 33rd Pakistan Congress of Zoology (International). Organized by Zoological society of Pakistan, held at Pakistan Museum of Natural History, Islamabad. 2-4, April, 2013.
- 48. Moazama Batool, **Sajid Abdullah** and Sobia Nawaz. Studies on the activities of antioxidant enzymes in fish *viz. Labeo Rohita* and *Cirrhina Mrigala*. Abstract pp.71-72. 32nd Pakistan Congress of Zoology (International). Organized by Zoological society of Pakistan, held at Government College University, Lahore. 6-8 March, 2012.
- 49. **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. Abstract pp.72. 32nd Pakistan Congress of Zoology (International). Organized by Zoological society of Pakistan, held at Government College University, Lahore. 6-8 March, 2012.

- 50. Moazama Batool, **Sajid Abdullah** and Muhammad Javed. Acute toxicity of zinc to *Catla catla* and *Cirrhina mrigala*. Abstract pp.141. 31st Pakistan Congress of Zoology (International). Organized by University of Azad Jammu & Kashmir, Muzaffarabad. 19-21st April, 2011.
- 51. Moazama Batool, Muhammad Javed, **Sajid Abdullah** and Sikander Hayat. **FEWFM-31**-Response of *Catla catla, Labeo rohita* and *Cirrhina mrigala* during sub-lethal chronic exposure of iron. Abstract pp.166. 30th Pakistan Congress of Zoology (International). Organized by Department of Zoology, University of Agriculture Faisalabad. 2-4th, March, 2010.
- 52. Moazama Batool, Muhammad Javed, **Sajid Abdullah** and Sikander Hayat. Studies on limnological parameters of semi-intensive iron stressed fish culture ponds. Abstract pp. 4th National Symposium on Fisheries. Organized by Department of Fisheries Punjab and Pakistan Fisheries Society. 18 -19th, March 2009.

Research Reports:

- 1. Javed, M. and **S. Abdullah**. 2003. Studies on growth and bio- energetics of fish under heavy metal toxicity. 1st Annual report of the project No. Env. (62) submitted to the PSF Islamabad.
- 2. Javed, M. and **S. Abdullah**. 2004. Studies on growth and bio- energetics of fish under heavy metal toxicity. 2nd Annual report of the project No. Env. (62) submitted to the PSF Islamabad.
- 3. Javed, M. and **S. Abdullah**. 2005. Studies on growth and bio- energetics of fish under heavy metal toxicity. Final report of the project No. Env. (62) submitted to the PSF Islamabad.
- 4. Javed, M. **S. Abdullah** and S. Yaqub. 2008. Studies on tissue-specific metal bioaccumulation patterns and differences in sensitivity of fish to water- borne and dietary metals. 1st Annual report of HEC project No. (803) R&D pp89.
- 5. Javed, M. **S. Abdullah** and S. Yaqub. 2009. Studies on tissue-specific metal bio-accumulation patterns and differences in sensitivity of fish to water-borne and dietary metals. 2nd Annual report of HEC project No. (803) R&D pp91.

Research Grants/Funds:

| As PI/Co-PI | Project Title | Funds | Sponsoring Agency | Status |
|-------------|--|-------------------|----------------------|-----------|
| PI | Studies on acute and chronic toxicity of metals to fish Viz. <i>Channa marulius</i> and <i>Wallago attu</i> (2012-2013) | Rs. 54000 | URF- UAF | Completed |
| Co-PI | Studies on tissue-specific metal bio- accumulation patterns and differences in sensitivity of fish to water- borne and dietary metals. (2009-2011) | 3.668 million | HEC | Completed |
| Co-PI | Genetic characterization of major carps in natural and hatchery stock using molecular tools | 0.5 million | NRPU-HEC | Completed |
| Co-PI | Molecular Marker assisted monitoring of major Carps fishery stocks throughout Punjab for genetic enhancement (2013-2016) | 3.2725 million | HEC | Completed |
| Co-PI | Genetic screening of indigenous and Chinese carps for inbreeding, hybridization and introgression for improved broodstock management (2021-2024) | 2.90 million | HEC | Completed |

| Co-PI | Development of functional feed for <i>Labeo rohita</i> and <i>Oreochromis niloticus</i> , (2021-2024) | 4.451 million | NRPU- HEC | On-going 2021-2014 |
|-------|---|------------------|--------------|-----------------------|
| Co-PI | Prospects of Biofloc Technology for Tilapiaculture in Pakistan (2022-2025) | 5.529 million | ALP | On-going 2022-2025 |

Responsibilities

- Tutor Molana Shabbir Usmani-2
- Associate Hall Warden Warden Office PARS

Postgraduate Students Produced

| S. No. | Post Graduate Degree | As Supervisor | | As Member | |
|--------|----------------------|---------------|----------|-----------|----------|
| | | Completed | On-going | Completed | On-going |
| 01 | Ph.D | 07 | 05 | 12 | 06 |
| 02 | M.Phil | 225 | 20 | 150 | 36 |
| 03 | M.Sc | 210 | - | 30 | |

Ph.D. Students

| S.No. | Name of the Student | Year | Title of Thesis |
|-------|---------------------------------|-------------|--|
| 01 | Moazama Batool 2004-ag-483 | 2014 | Studies on acute and chronic responses of <i>Channa marulius</i> and <i>Wallago attu</i> to metals and their mixture. |
| 02 | Wardah Hassan 2008-ag-494 | 2017 | Assessment of DNA integrity, heamatology and serumbiochemistry in major carps under the influence of heavy metals |
| 03 | Huma Naz 2008-ag-493 | 2017 | Evaluation of biochemical and molecular changes in major carps exposed to pesticides mixtures |
| 04 | Sana Aziz 2013-ag-1842 | 2021 | Evaluation of toxicity induced by waterborne metal oxide nanoparticles in carps |
| 05 | Ammara Akhtar 2008-ag-507 | 2023 | The effect of dietary lipids levels on the feed utilization growth performance, body composition and serum metabolites of major carp |
| 06 | Dure Shahwar 2014-ag-8239 | On going | Ameliorative effects of carotenoids on growth and immunity of fish exposed to pesticides |
| 07 | Mumaiza Mumraiz 2017-ag-2933 | On going | In vivo assessment of toxicity mediated by waterbornemicroplastics in major carps |
| 08 | Kaynat Saeed 2014-ag-1736 | On going | Effect of different feed additives on the growth andhematology of major carps at various temperatures |
| 09 | Muhammad Atif 2002-ag-1309 | On going | Assessment of oxidative stress and histopathological changes as Biomarker of UV-filter Induced Toxicity in Major Carps |

| 10 | Mina Jamil 2019-ag-2121 | On going | Toxicological responses of <i>Labeo rohita</i> induced by polycyclic synthetic musk compounds |
|----|-----------------------------|-------------|---|
| 11 | Amna Abbas 2017-ag-862 | On going | Evaluation of Toxic Effect Mediated by Antibiotics in Major Carps |
| 12 | Minha Faran 2021-ag-1493 | On going | |

M.Phil. Students

| S.No | Name of the Student | Year | Title of Thesis |
|------|--------------------------------|------|---|
| 1. | Aalia Tabsum 2009-ag-1101 | 2011 | The effect of lead toxicity on antioxidant enzymes present in fish viz. <i>Catla catla, Labeo rohita</i> and <i>Cirrhina mrigala</i> . |
| 2. | Sumaira Yasmeen 2006-ag-379 | 2011 | Effect of induced chromium toxicity on antioxidant enzymes in fish, viz. <i>Catla catla</i> , <i>Labeo rohita</i> and <i>Cirrhina mrigala</i> . |
| 3. | Zeenat Bano 2010-ag-27 | 2012 | Studies on antioxidant enzymes in wild and farmed fish, <i>Cirrhinus mrigala</i> . |
| 4. | Wardah Hassan 2008-ag-494 | 2012 | The effect of sub-lethal level of dietary copper and cadmium on growth performance and oxidative stress in <i>Cirrhina mrigala</i> . |
| 5. | Ayesha Shafique 2008-ag-435 | 2013 | Studies on the antioxidant enzyme peroxidase in (Pb+Cr) stressed <i>Catla catla</i> |
| 6. | Huma Naz 2008-ag-493 | 2013 | Studies on the purification and characterization of superoxide dismutase in (Pb+Cr) exposed <i>Labeo rohita</i> |
| 7. | Tanveer Ahmad 2011-ag-893 | 2013 | Comparison of liver and kidney catalase (CAT) characterization in normal and (Pb+Cd) exposed <i>Oreochromis niloticus</i> |
| 8. | Shama Naqvi 2012-ag-753 | 2014 | Characterization of catalase from the liver of Catla catla exposed to sub-lethal concentration of copper. |
| 9. | Saima Zahoor 2012-ag-798 | 2014 | Comparison between cadmium stressed and unstredssed liver catalase characterization in <i>Cirrhina mrigala</i> . |
| 10. | Anum Rafique 2012-ag-805 | 2014 | Isolation, purification and partial characterization of superoxide dismutase (SOD) from the kidney of Silver carp (<i>Hypophthalmichthys molitrix</i>) |
| 11. | Ammara Akhtar 2008-ag-507 | 2015 | Catalase characterization in metal mixture (Pb+Cr) exposed <i>Labeo rohita</i> |
| 12. | Mirfa Murtaza 2013-ag-701 | 2015 | Studies on lipase and amylase activity in the <i>Hypophthalmichthys molitrix</i> and <i>Catla catla</i> fed with diet containing different feed ingredients |
| 13. | Anam Azam 2013-ag-700 | 2015 | Studies on the lipase and amylase activity in the <i>Ctenopharyngodon idella</i> fed with diet containing different feed ingredients |
| 14. | Tahira Saleem 2013-ag-945 | 2015 | Amylase activityin <i>Catla catla</i> and <i>Cirrhinus mrigala</i> in response to different feed ingredients |
| 15. | Abuzar Tabassum 2013-ag-825 | 2015 | Growth responses of major carps as affected by different doses of probiotic |
| 16. | Alia Mobeen 2013-ag-650 | 2015 | Studies in the feed conversion ratio and specific growth rate of Tilapia as affected by different probiotics |

| 17. | Amna Imtiaz 2013-ag-950 | 2015 | Rohu (<i>Labeo rohita</i>) fish as a biomarker to study the glutathione S Transferase in different organs i.e., liver, kidney and muscles. |
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| 18. | Aneela Jabeen 2013-ag-919 | 2015 | Studies on the lipase activity in liver and digestive tract of <i>Catla catla</i> fingerlings fed with different feed ingredients |
| 19. | Farzana Kouser 2013-ag-1013 | 2015 | Comparative study of Glutathione S-transferase (GST) activity in liver, gills and kidney of silver carp |
| 20. | Iram Tabassum 2013-ag-6172 | 2015 | Studies on the growth performance of <i>Cyprinus carpio</i> and <i>Cirrhina mrigala</i> as affected by different doses of probiotics |
| 21. | Khadija Shahzadi 2013-ag-574 | 2015 | The effect of aquatic pollutants on the <i>Catla catla</i> hepatic glutathione S-transferase |
| 22. | MunazaAhsan 2013-ag-1785 | 2015 | The effect of probiotics on the feed utilization and growth performance of <i>Ctenopharyngodon idella</i> and <i>Labeo rohita</i> |
| 23. | M. Naveed Asghar Shah 2013-ag-1184 | 2015 | Studies on the purification and characterization of glutathione S-transferase from <i>Catla catla</i> and <i>Labeo rohita</i> |
| 24. | Nida Ismat 2013-ag-918 | 2015 | Studies on the activities of digestive enzyme in <i>Labeo rohita</i> fingerlings fed with formulated feed |
| 25. | Rabia Mukhtar 2013-ag-1017 | 2015 | Studies on the growth coefficient and condition factor of <i>Cyprinus carpio</i> and <i>Hypophthalmichthys molitrix</i> fed with diet containing different levels of probiotic |
| 26. | Rabia Hayat 2013-ag-1008 | 2015 | Studies on the changes in glutathione-S-Transferase level in kidney and liver of grass carp |
| 27. | Usama Ahsan 2013-ag-702 | 2015 | The effect of different aquatic pollutants on the activity of Glutathione-S-Transferase in <i>Cirrhinus mrigala</i> |
| 28. | Zafar Abbas 2013-ag-1022 | 2015 | Effect of the probiotic on the growth performance of Chinese carps in intensive culture system |
| 29. | MaidaTariq 2014-ag-2721 | 2016 | Glutathione-S-transferase as a biochemical marker of aquatic pollution in <i>Wallago attu</i> sampled from three rivers |
| 30. | Shazia Kousar 2014-ag-2722 | 2016 | Studies on the thermodynamic characterization of glutathione S transferase in different organs of genetically improved farmed tilapia |
| 31. | Riffat Nazeer 2014-ag-1175 | 2016 | Comparison of catalase activity in major carps among three rivers |
| 32. | Hafiza Saba Rani 2014-ag-9320 | 2016 | Purification and characterization of catalase from different organs of genetically improved farmed tilapia |
| 33. | Shagufta Rasheed 2014-ag-1187 | 2016 | Isolation, purification and characterization of peroxidase enzyme in fish <i>Rita rita</i> |
| 34. | Umbreen Iram 2014-ag-1174 | 2016 | Comparison among three rivers for catalase activity in Wallago attu |
| 35. | Sahar Iqbal 2012-ag-641 | 2017 | Growth and immune response of silver carp fed with diet containing different probiotics |
| 36. | Razia Perveen 2014-ag-2137 | 2016 | Studies on biochemical changes in catalase enzyme in <i>Channa striata</i> captured from different natural sites |
| 37. | Saira Safdar 2014-ag-1417 | 2016 | The effect of food deprivation on the activity of peroxidase in different organs of <i>Labeo rohita</i> |
| 38. | Naveeda Wahab 2014-ag-1609 | 2016 | Evaluation of growth and immunological changes in grass carp fed by probiotics |

| 39. | Kishwer Younas | 2016 | Studies on the changes in catalase activity in <i>Rita rita</i> |
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| 40. | 2014-ag-636 Madiha zia | 2016 | sampled from rivers |
| 40. | Madina zia 2014-ag-1472 | 2016 | Starvation related changes in catalase activity of fish (<i>Labeo rohita</i>) |
| 41. | Zuhaa | 2016 | Probiotics as a growth promoter and immunostimulant |
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| 42. | Maria Khalid | 2016 | Comparative study of glutathione-S-transferase effect |
| | 2014-ag-8096 | | fresh water Rita rita |
| 43. | Sundos Khalid | 2016 | Starvation induced alteration in Glutathione-S- |
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| 44. | Saliha Anum | 2016 | Changes in antioxidant enzyme (Glutathione-S- |
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| 45. | Khadija Nawaz | 2016 | Glutathione S-transeferase as a biomarker of oxidative |
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| 46. | Anam Habib | 2016 | The effect of aquatic pollutants on the activity of |
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| 47. | Syeda Amna Batool | 2016 | Immunological response of grass carp to fasting |
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| 48. | Shabana Kousar | 2016 | Behavioral and hematological changes in tilapia induce |
| 49. | 2014-ag-1682 | 2016 | by starvation |
| 49. | Atiya Latif 2007-ag-550 | 2016 | Behavioral and immunological changes in <i>Cirrhinus</i> mrigala under starvation |
| 50. | Kiran Hafeez | 2016 | Effect of probiotics on the growth and immunological |
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| 51. | Bushra Rehman | 2016 | Comparative study on the catalase enzyme in the |
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| 52. | Ayesha Mubeen | 2016 | Immune response in common carp (Cyprinus Carpio) |
| | Gull 2014-ag-8546 | | fed with diet containing different probiotics |
| 53. | Naila Noreen | 2016 | Immunological response of <i>Labeo rohita</i> under fasting |
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| 64. | Qaisra Siddique | 2017 | Studies on the changes in Glutathione S-transferase |
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| 65. | Aisha Shabbir 2013-ag-6838 | 2017 | Studies on the haematological parameters of fish, <i>Labeo rohita</i> exposed to chlorpyrifos |
| 66. | Naila Naeem 2015-ag-321 | 2017 | The effect of acute and chronic exposure of pesticides (Chlorpyrifos and Bifenthrin) on fish behaviour and catalase activity |
| 67. | Mariam Rasheed 2015-ag-331 | 2017 | Chlorpyrifors and Bifenthrin effect on the hematological parameters of <i>Ctenopharyngoden idella</i> |
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| 69. | Shaza Mehboob | 2017 | Assessment of oxidative stress and genotoxic effect of |
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| 70. | Aqsa Mehbob | 2017 | Assessment of hematological and genotoxic effects of |
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| 71. | Faiza Muzaffar | 2017 | Changes in superoxide dismutase activity in |
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| 72. | Sana Mehmood | 2017 | The effect of pesticides mixture on hematological |
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| 73. | Meher-un-Nissa | 2017 | Bifenthrin+Chlorpyrifos mixture effect on glutathione- |
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| 74. | Muhammad Salman | 2017 | Tissue-specific antioxidant response (GST) of Cirrhina |
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| | Hussain Haider | | kidney of Cirrhina mrigala exposed to endosulfan |
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| 81. | Muhammad Farhan | 2018 | The effect of different dietary vitamin c and e level on |
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| 82. | Wajiha Adrsh | 2018 | Effects of different feeding rates on the growth and |
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| 84. | Aqsa Aslam 2014-ag-1634 | 2018 | Study the effect of different stocking densities on growth performance and profitability of Nile tilapia fry (<i>Oreochromis niloticus</i>) fry in semi-intensive fish culture |
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| 110. | Naeem Abbas 2019-ag-2176 | 2021 | The acute effect of iron oxide nanoparticles on antioxidant enzymes of <i>Labeo rohita</i> |
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| 112. | Sheikh Ali Abbas 2017-ag-820 | 2021 | Effects of copper nanoparticles on bioaccumulation pattern and its effects on antioxidant enzyme activity in Tilapia |
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| 116. | Saman Zulfiqar 2019-ag-2153 | 2021 | Effect of cobalt and zinc on the growth performance of vegetarian fish, Grass carp (<i>Ctenopharyngedon idella</i>) |
| 117. | Rafia Riaz 2017-ag-3833 | 2021 | Studies on bioaccumulation pattern and behavior of <i>Catla catla</i> exposed to cadmium in mthe onoculture production system |
| 118. | Maria Shahzad 209-ag-2152 | 2021 | Effect of chromium on anti-oxidative and immunological status of <i>Cirrhinus mrigala</i> |
| 119. | Nimra Naveed 2019-ag-2164 | 2021 | Hepatotoxicity of coper in <i>Cirhinus mrigala</i> through FTIR study. |
| 120. | Faisal Amin 2019- ag-2141 | 2021 | Evaluation of zinc and copper concentration in water and tissue of <i>Cyprinus carpio</i> |
| 121. | Sabiha Akam 2017-ag-732 | 2021 | The effect acute exposure of chromium on bioaccumulation pattern of bighead carp. |
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| 125. | Sidra Bano 2017- ag-864 | 2021 | Ecological impact of benzophenone type UV filter on the catalase and peroxidase activity in grass carp (Ctenopharyngodon idella) |
| 126. | Mina Jamil 2019- ag-2121 | 2021 | Ecotoxicological impact of Benzophenone -Type UV filters as sunscreen ingredient, on <i>Labeo rohita</i> |

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| 127. | Tayyaba Wazir 2019-ag-2132 | 2021 | Study of hematological profile and serum biochemistry of <i>Catla catla</i> through water-borne cadmium in |
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| 128. | Tehreem Fatima | 2021 | Bioaccumulation patterns in organs of Catla catla |
| | 2019-ag-2122 | | exposed to chronic exposure of heavy metals |
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| 133. | Kashmala Razzaq | 2021 | the Ctenopharyngodon idella and Hypothalmicthys |
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| 136. | Saddam Hussain | 2022 | Effect of different temperatures on body composition of |
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| 153. | Shantal Rafique | 2023 | Histoptathological study of antibiotics i.e. erythromycin |
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| 154. | Alia Akram | 2023 | The effect of hexachlorocyclohexane (HCH) on the |
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| 155. | Sana Siddique | 2023 | Beneficial effects of dietary Parsley extract in |
| | 2021-ag-1414 | | Oreochromis niloticus exposed to ciprofloxacin toxicity |
| 156. | Jameela | 2023 | Immunomodulatory and biochemical changes induced by |
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| 157. | Fariha Ashraf | 2023 | Studies on the sub-lethal exposure of camphor on the |
| | 2021-ag-1436 | | oxidative stress in <i>Labeo rohita</i> |
| 158. | Aiman Wazeer | 2023 | Effect of sulphamethoxazole on the growth and |
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| 159. | | 2023 | Effect of organophosphate pesticide on immune |
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| 160 | Rana Afaq Ahmad | 2023 | Effect of induced pyrethroid on the blood parameters of |
| 100. | 2021-ag-1538 | 2023 | Cyprinus carpio |
| 161 | Muhammad Irfan | 2023 | Growth performance of Nile tilapia by using probiotics as |
| 101. | 2021-ag-1474 | 2023 | feed additive |
| 162 | Junaid Iqbal | 2023 | Effect of <i>Lactobacillus acidophilus</i> on the growth and |
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| 163 | M. Zohaib Zulfiqar | 2023 | Toxicological effects of Melathion in <i>Labeo rohita</i> |
| 103. | 2021-ag-1544 | 2023 | Toxicological effects of Melaunon in Lubeo Tomua |
| 164 | Fareeha Ihsan | 2023 | Changes in Catalage and Superavide diamutage activity |
| 104. | 2021-ag-1491 | 2023 | Changes in Catalase and Superoxide-dismutase activity in <i>Cirrhinus mrigala</i> exposed to Trimethoprim. |
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| 103. | 2018-ag-1249 | 2023 | Studies on the changes in antioxidant enzyme activity induced by parathion in <i>hypophthalmichthys molitrix</i> |
| 166 | | 2022 | * |
| 166. | | 2023 | Oral administration of commercial probiotics on |
| 1.67 | 2021-ag-1574 | 2022 | hematological parameters of <i>Labeo rohita</i> |
| 167. | <i>J</i> | 2023 | Thermal tolerance and dissolved oxygen utilization of |
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| 168. | Laila Rubab | 2023 | Studies on the <i>Lactobacillus subtillis</i> and <i>Lactobacillus</i> |
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| 170. | • | 2023 | Evaluation of toxic effects of dioxine on hematology and |
| | 2018-ag-983 | 2025 | serum biochemistry of grass carp |
| 171. | | 2023 | Dose and time-dependent pathological and toxicological |
| | 2021-ag-1548 | | studies of xylene in freshwater fish, <i>Labeo rohita</i> |
| 172. | Minha Faran | | Studies on the antioxidative enzymatic biomarkers in |
| | 2021-ag-1493 | - 0 | common carp exposed to Bisphenol-A |
| 173. | Amina Qazi | 2023 | Changes in superoxide-dismutase and glutathione-s- |
| | 2021-ag-1554 | | transferase activity in <i>Ctenopharyngodon idella</i> exposed |
| 4 = 1 | | 2000 | to sulphadiazine |
| | Tahreem Nisar | 2023 | Effects of different levels of aloe vera extract on growth and |
| | 2021-ag-1482 | | survival of Mori (Cirrihinus mrigala) |
| | | | |

| 175. Natasha Zahid 2021-ag-1558 | 2024 | Changes in catalase and superoxide dismutase activity in Cirrhinus mrigala exposed to camphor |
|---|------|---|
| 176.Muhammad Ismail 2022-ag-1494 | 2024 | The effect of chronic exposure of cadmium and zinc on hematological parameters of <i>Cirrhinus mrigala</i> |
| 177. Maham Riaz 2022-ag-1519 | 2024 | Evaluation of toxic effects of benzophenone on histopathology of Major Carps |
| 178.Zainab Rizwan 2022-ag-1521 | 2024 | Beneficial role of caraway seed in growth performance and antioxidant status of Common Carp |
| 179.Zunaira Majeed 2022-ag-1522 | 2024 | Effect of commercial probiotics on proximate body composition of Grass Carp |
| 180. Kinza Noor 2022-ag-1523 | 2024 | Evaluation of toxic effects of ciprofloxacin on hematology and oxidative stress of <i>Cirrhinus mrigala</i> |
| 181 Ayesha 2022-ag-1536 | 2024 | Effect of ZnO nanoparticles on immunomodulatory parameter of <i>Cirrhinus mrigala</i> |
| Areeba Rafaqat 2022-ag- 1537 | 2024 | Studies on oxidative stress biomarkers in <i>Cirrhinus mrigala</i> exposed to sunscreen |
| Amra Muzzammal 2022-ag-1551 | 2024 | Dietary tryptophan requirement of <i>Catla catla</i> fingerlings based on growth and antioxidant enzyme activity |
| 184 Amna Rasheed 2022-ag-1555 | 2024 | Study on histopathological biomarkers in Common Carp exposed to xylene |
| 185 Nimra Nazir 2022-ag- 1561 | 2024 | Evaluation of toxic effects of sulfamethoxazole on oxidative stress and hematology of <i>Cirrhinus mrigala</i> |
| 186 Neelam Arshad 2022-ag-1562 | 2024 | Determination of bioaccumulation of ciprofloxacin in Thaila and Rohu |
| 187. _{Fatima Hassan} 2022-ag-1566 | 2024 | Evaluation of toxic effects of antibiotics in Catla catla |
| 188 Neha Iqbal 2022-ag-1574 | 2024 | Effects of dietary flaxseed oil supplementation on oxidative stress and hematology in <i>Labeo rohita</i> |
| 189 Shahid Abbas 2022-ag-1575 | 2024 | Effect of induced dioxin toxicity on the blood parameters of Hypophthalmichthys molitrix |
| 190 Minahal Fatima 2022-ag-1598 | 2024 | Studies on growth responses of <i>Hypophthalmichthys molitrix</i> during stress of water temperature |
| 191 Ayesha Ayub 2022-ag-1599 | 2024 | Response of antioxidant enzyme activity in <i>Catla catla</i> exposed to sublethal levels of organic UV filters |
| 192.Amna Ashfaq 2022-ag-1600 | 2024 | Effect of Black Cumin seed oil on haematological and biochemical parameters of Rohu (<i>Labeo rohita</i>) |
| 193 Ume Farwa 2022-ag-1601 | 2024 | Role of Oregano and Rosemary as feed additive to enhance antioxidant status of Silver Carp |
| 194 Afsheen Ajmal 2022-ag-1605 | 2024 | Dietary assessment of <i>Lactobacillus rhamnosus</i> probiotic on the growth performance of <i>Labeo rohita</i> |
| 195 Farheen Ajmal 2022-ag-1606 | 2024 | Beneficial effects of dietary probiotic mixture on the hemato- biochemical parameters of Nile Tilapia |
| 196 Maryiam Zafar 2022-ag-1619 | 2024 | Growth performance and body composition of <i>Cyprinus carpio</i> fingerlings under different levels of dietary protein |
| 197.Nida Ehsan 2022-ag-1644 | 2024 | Studies on the sub-lethal exposure of camphor on the hematology and serum biochemistry of Silver Carp |
| 198 Anam Shehzadi 2022-ag-1645 | 2024 | Effects of endosulfan on the growth and lysozymal activity of <i>Oreochromis niloticus</i> |

| Shumaila Rani 2022-ag-1646 | /11/4 | Toxicological impacts of sulfamethoxazole on oxidative stress and hematology of <i>Catla catla</i> |
|--|-------|--|
| Nasir Ahmad 2022-ag-1647 | ZUZ4 | Effects of enrofloxacin on biochemical parameters of <i>Labeo</i> rohita |
| Kaynat Aslam 2022-ag-1648 | /11/4 | Dose and time dependent toxicological studies of organic UV filters on major carps |
| Ayesha Aftab 2022-ag-1652 | | Toxicological impact of sulfamethoxazole on hematology and oxidative Stress in <i>Labeo rohita</i> |
| Muhammad Awais khan 2022-ag-1660 | | Effects of ciprofloxacin on hematology and oxidative Stress of Labeo rohita |

On going 3^{rd} Semester = 20 students **M.Sc Students**

2009 To 2015 Thesis = **30** completed 2016, 2017, 2018, 2019 Technical Reports = **152** completed

| Sr. No. | Name of Student | Year | Title of Thesis |
|------------|---------------------------|------|--|
| 1 | Sundas Naz | 2009 | Effect of chronic exposure of water-borne copper on the specific growth rate of fish <i>Cirrhina mrigala</i> |
| 2 | Aatikah Virk | 2009 | Effect of sub-lethal concentrations on water-borne metals on increase in fish weight and length. |
| 3 | Alia Tabbasam | 2009 | Effect on nickel toxicity on the growth performance of <i>Labeo rohita</i> . |
| 4 | Alia Nirjis | 2009 | Studies on the growth response of <i>Cirrhina mrigala</i> to sublethal cobalt concentration. |
| 5 | Atiya Latif | 2009 | Effect of water-borne cobalt on the feed intake, fcr and condition factor of fish. |
| 6 | Hafiza Tanzeela | 2009 | Effect of water-borne cobalt toxicity on the growth performance of <i>Catla catla</i> . |
| 7 | Wardah Hassan | 2010 | Acute toxicity of water borne nickel and manganese mixture to the fish, <i>Ctenopharyngodon idella</i> . |
| 8 | Ammara Riaz | 2010 | Effect of water borne and dietary cobalt sub-lethal toxicities on the growth performance of <i>Catla catla</i> . |
| 9 | Muhammad Zia ur Rehman | 2010 | Studies on 96-hr LC ₅₀ and lethal response of <i>Cirrhina</i> mrigala towards five water-borne metals (iron, zinc, lead, nickel and manganese) mixture. |
| 10 | Huma Naz | 2010 | Studies on the toxic effects of iron, zinc, lead and nickel mixture to the fish, <i>Cirrhina mrigala</i> . |
| 11 | Aysha Shifique | 2010 | Growth performance of <i>Cirrhina mrigala</i> as affect by the combined exposure of water-borne and dietary nickel. |
| 12 | Sobia Nawaz | 2011 | Studies on the activities of antioxidant enzymes in fish, viz. <i>Labeo rohita</i> and <i>Cirrhina mrigala</i> . |
| 13 | Faiza Sarfraz | 2011 | Growth responses of <i>Cirrhina mrigala</i> and <i>Labeo rohita</i> under chronic exposure of water-borne and dietary cobalt. |
| 14 | Sammrah Razaq | 2012 | Acute lethality of cadmium and chromium to <i>Channa marulius</i> . |
| 15 | Javeria Tabusam | 2012 | Acute toxicity of copper and lead to Channa marulius |
| 16 | Zermina Nasir | 2012 | Studies on growth and oxidative stress in <i>Labeo rohita</i> caused by dietary copper and cadmium. |
| 17 | Sobia Ahmad | 2012 | Studies on the antioxidant enzyme activities and growth performance in <i>Labeo rohita</i> exposed to chromium and cadmium. |
| 18 | Rabia Amin | 2012 | Effect of chronic exposure of cadmium and lead on the growth and antioxidant enzymes study in <i>Catla catla</i> . |

| 19 | Farah Naz | 2013 | Peroxidase characterization in <i>Cirrhinus mrigala</i> after the chronic exposure of copper. |
|----|----------------|------|---|
| 20 | Salma Saeed | 2013 | Isolation, partial characterization of peroxidase in lead and chromium exposed <i>Labeo rohita</i> . |
| 21 | Maryam Tariq | 2013 | Studies on the characterization of liver catalase in copper exposed <i>Cirrhinus mrigala</i> . |
| 22 | Uzma Sarwar | 2013 | Purification and characterization of liver catalase in lead and cadmium (Pb+Cd) exposed grass carp, <i>Ctenopharyngodon idella</i> . |
| 23 | Rafia Roshan | 2014 | Growth response of <i>Catla catla</i> fingerlings fed with diet containing different percentage of probiotics. |
| 24 | Sahar Iqbal | 2014 | Growth performance, antibacterial and immune response of Nile tilapia (<i>Oreochromis niloticus</i>) fingerlings by feeding with diets containing probiotics. |
| 25 | Zuhaa | 2014 | Growth response of <i>Cirrhinus mrigala</i> fingerlings fed with diet containing different nutritional additives. |
| 26 | Khadija Yousuf | 2014 | The effect of probiotics on growth performance and survival rate of <i>Labeo rohita</i> fingerling. |
| 27 | Kiran Hafeez | 2014 | Studies on the physico-chemical parameters of pond water used for grass carp (Ctenopharyngodon idella) growth as affected by probiotics. |
| 28 | Ayesha Saleem | 2014 | Study of bacterial flora in gills and buccal cavity of tilapia (<i>Oreochromis niloticus</i>) cultured in farms. |
| 29 | Arooj Samuel | 2015 | Studies on the effects of probiotics on the growth response of common carp, <i>Cyprinus carpio</i> |
| 30 | Zunara Tabasum | 2015 | The effect of different doses of probiotics on growth performance of grass carp (<i>Ctenopharyngodon idella</i>). |